

# Adult Learning Orientations and Action Learning

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*Based on its ability to significantly increase the speed and quality of individual, team, and organizational learning, action learning has been used as a problem-solving and training tool in organizations all over the world. However, its theoretical base and relationship to adult learning orientations remains relatively unexplored. Through an extensive review of the literature, this article examines how each of the six critical components of an action learning program (namely, a problem or task, a group, the reflective inquiry process, power to take action, commitment to learning, and an action learning coach) incorporates and applies the five major adult learning orientations (behaviorist, cognitivist, humanist, social, and constructivist).*

**Keywords:** *action learning; adult learning; learning theory*

Action learning is a process and program used by a growing number of organizations and individuals around the world not only to resolve complex problems or challenges but also to develop the knowledge, skills, and values of individuals and teams. Action learning can become a powerful tool that increases significant, relevant, and long-lasting learning in relatively short periods of time (Marquardt, 1999; Marquardt & Berger, 2000; Pedler, 1997; Revans, 1980, 1982). The power of action learning is its wide-ranging application to both learning and action, to change at the individual, group, and organizational levels (Hii & Marquardt, 2000; Marsick, 1992). Practitioners and theorists from diverse disciplines such as business management science, psychology, group dynamics, sociology, engineering, political science, sociology, anthropology, political science, and higher education embrace its practical effectiveness (Yorks, O'Neil, & Marsick, 1999).

There exists, in the academic community, a propensity to create silos around specific learning theories or schools of adult learning. Often, competition between the theoretical stances develops, thereby generating an

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unnecessary tensions between orientations of adult learning concepts within those disciplines and identify areas where principles can benefit from representative sampling of the action learning research, publishing common ground for adult learning (behaviorist learning). The limitations of action learning theories in explaining learning uses theories of learning orientations as a compelling learning (Marquardt, in press).

We believe that action learning's use of a learning is as important as providing focus of the learning group to be more understanding. Although the learning process is well as to learn from

## Theoretical Framework

Two constructs of action learning and adult learning

### Action Learning

Action learning in the middle of the 20th century over the past year mines of Wales and nations of the world real people taking doing so. The alternative to solve the problem at minimal cost is learning into a 50-year a number of capture the essence

unnecessary tension. Although protecting the boundaries of the schools or orientations of adult learning allows for further development of the concepts within those orientations, it is also beneficial to have cross-pollination and identify areas of agreement. Distillation of similarities and shared principles can benefit us all. Thus, this discourse explains ways in which a representative sampling of theories supports the enduring and powerful nature of the action learning process. In fact, action learning creates a basis for establishing common ground among adult learning orientations. Clearly, some adult learning theories apply more than others in the analysis of action learning. The limitations appear as one analyzes the distinct elements of action learning. However, it is our purpose to highlight the usefulness of the theories in explaining the potency of action learning. Because action learning uses theories, principles, and practices of each of the five major adult learning orientations, action learning bridges these metatheories and offers a compelling learning opportunity for individuals, teams, and organizations (Marquardt, in press).

We believe that a high level and quality of learning is generated by action learning's use of a diverse array of learning theories. Working on the learning is as important as working on the problem or challenge. In fact, the overriding focus of action learning is the learning, which is necessary for the group to be more effective in problem solving and applying their understanding. Although the group is working on the challenge via the action learning process, it simultaneously develops its internal capacity to learn as well as to learn how to learn (Marsick & O'Neil, 1999).

## Theoretical Framework

Two constructs form the theoretical framework of this article: action learning and adult learning.

### Action Learning

Action learning is a methodology developed by Revans in England in the middle of the 20th century that has continued to gain popularity worldwide over the past years. Since Revans first introduced action learning in the coal mines of Wales and England in the 1940s, there have been multiple variations of the concept, but all forms of action learning share the elements of real people taking action on real problems in real time and learning while doing so. The attraction of action learning is its unique power to simultaneously solve difficult challenges and develop people and organizations at minimal costs to the institutions. Revans never operationalized action learning into a standard approach (Marsick & O'Neil, 1999), but over the years a number of individuals have developed approaches and models that capture the essence and critical elements that make action learning suc-

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successful (Dilworth, 1998; Marquardt, 1999; Mumford, 1991; Pedler, 1997; Weinstein, 1995).

We selected the Marquardt approach because it captures the essential components of the process originally proposed by Revans (as cited in Marquardt, 1999), has been effectively implemented worldwide in hundreds of organizations such as Boeing, Caterpillar, Fairfax Public Schools, Samsung, U.S. Department of Agriculture, Mauritius Business School, and Nokia (Coughlan, 2002; Global Institute for Action Learning, 2003; Marquardt, in press; Shelton, 1999), and frequently has been cited as a key approach for understanding action learning (Bannan-Ritland, 2001; Coughlan et al., 2002; Dotlich & Noel, 1998; Rossett, 1999; Salopek, 1999; Yorks et al., 1999).

Marquardt's approach (1996, 1999) to action learning is built around six components: (a) a problem or challenge of importance to the group; (b) a group also known as a "set" of four to eight members, ideally from diverse backgrounds and/or parts of the organization; (c) a process that emphasizes questions and reflection; (d) the commitment to take action on strategies developed; (e) commitment to learning at the individual and team level; and (f) an action learning facilitator (or coach) who focuses on and ensures that time and energy are devoted to capturing the learning and improving the skill level of the group (Marquardt, 1996, 1999, in press).

### Adult Learning

Adult learning (andragogy) is concerned with how adults learn, recognizing that a number of factors influence how adults learn differently from children (pedagogy). Knowles (1970, 1984) identified several assumptions relevant to adult learning; namely, the adult learner is self-directing; adults' experiences make them rich resources for one another; readiness to learn can be triggered by effective role models; adults enter an educational activity with a life-centered, task-centered, or problem-centered orientation to learning; and the more potent motivators for adults are internal, such as self-esteem, recognition, better quality of life, self-confidence, and self-actualization.

Over the past century, a number of learning orientations and theories have emerged (Ormond, 1999). Merriam and Caffarella (1991) categorized the theories into five schools, each with distinctive, although sometimes overlapping, perspectives and approaches to learning. Swanson and Holton (2001) concurred with these categorizations but labeled them "adult learning orientations" or "metatheories." Although other categorizations of adult learning theories exist (Hergenhahn, 1988), we selected Merriam and Caffarella's approach because of its broad scope, inclusiveness, positive

review (McKeim, 1999; Swanson, 1999). The five orientations

- **Cognitivist:** Cognitive processes of learning. People believe that learning occurs through the input from the environment.
- **Behaviorist:** Learning is a function of environmental conditions. Operant conditioning: (a) reinforcement; (b) punishment; (c) extinction. Learning occurs through practice and repetition.
- **Humanist:** Learning is a process of self-actualization. Abraham Maslow's hierarchy of needs. Emphasis on the individual's self-actualization through learning.
- **Social Learning:** People learn through observation and modeling. People can learn from others through mentoring and coaching. Learning is a social process. People learn through observation and modeling. Learning is a social process. People learn through observation and modeling.
- **Constructivist:** Learning is a process of constructing knowledge. That individuals construct their own knowledge through experience and reflection. Emphasis on the individual's construction of knowledge through experience and reflection. Context is important in learning.

In some cases, more than one orientation may be described by a single orientation. For example, Merriam and Caffarella (1991) described the learning theory of Carl Rogers as a humanist learning theory. Swanson and Holton (2001) described the learning theory of Carl Rogers as a humanist learning theory. Swanson and Holton (2001) described the learning theory of Carl Rogers as a humanist learning theory.

review (McKenna, 1992), and the concurrence of other scholars (Ormond, 1999; Swanson & Holton, 2001).

The five orientations or schools can be described as follows:

- *Cognitivist*: Cognitivists focus on how humans learn and understand using internal processes of acquiring, understanding, and retaining knowledge. Cognitivists believe that humans are capable of insight, perception, and attributing meaning. Learning occurs when humans reorganize experiences, thereby making sense of input from the environment.
- *Behaviorist*: The behaviorists focus on learning through control of the external environment. The emphasis is on changing behavior through processes such as operant conditioning. Behaviorists believe that learning is built on three assumptions: (a) changed behavior indicates learning, (b) learning is determined by elements in the environment; (c) repetition and reinforcement of learning behaviors assist in the learning process (Merriam & Caffarella, 1991). The behaviorist approach to learning manifests itself in, for example, competency-based education and skills training.
- *Humanist*: Humanists, whose main proponents were Carl Rogers (1983) and Abraham Maslow (1968), focus on development of the whole person and place emphasis on the affective domain. This orientation views individuals as seeking self-actualization through learning and being capable of determining their own learning.
- *Social Learning*: Social learning focuses on the social context in which people learn (i.e., how they learn through interacting with and observing other people). People can learn from imitating others (thus the importance of role models and mentoring). Social learning occurs when the culture of the organization is passed on to new employees, teaching them how to be effective in that organization. Social cognitive theory (SCT) distinguishes itself from social learning theory to the extent that Bandura wanted to distance himself from the behaviorists (Stone, 1998). An interesting and relevant aspect of SCT is the "vicarious capability" that takes place through observational learning (Bandura, 1977, 1986, 1989) and appears in our analysis under the topic of the action learning set.
- *Constructivist*: Constructivism stresses that "all knowledge is context bound and that individuals make personal meaning of their learning experiences through internal construction of reality" (Swanson & Holton, 2001, p. 157). This orientation emphasizes the importance of changing oneself and the environment. Learning is context-bound and may be problem-based. Self-directed learning and reflective practice are key manifestations of this orientation.

In some cases, these theories may overlap and the theoreticians may appear in more than one orientation. Disputations about placement, inclusions, and omissions may occur. Those listed here are representative of the categories as described by Merriam and Caffarella (1991). Some theorists appear in more than one orientation. For example, the self-directed/autonomous learning theorist Candy (1991) is listed both as a humanist and a constructivist. Self-directed learning represents a humanist approach because it is part of the whole person's development to take control over his or her own learning; it represents a constructivist viewpoint because an autonomous learner must be able to make

his or her own meaning of what he or she learns and not to rely on another to do so. The distinctions between the orientations become necessary when addressing the definitions of the humanist and constructivist orientations. Whereas both focus on the individual's perspective in the learning effort, the humanist focuses on personal acts to fulfill potential and the constructivist focuses on the individual's view of reality and construction of meaning and knowledge from experience (Swanson & Holton, 2001).

### Research Questions

The quest for increased, faster, and more relevant learning drives practitioners and theoreticians to examine potential learning methodologies. Because of its success, action learning generates widespread interest about its learning ingredients from academic, business, and public organizations. Action learning has been primarily linked with adult learning theories such as the action/reflection approach (Marsick, Cederholm, Turner, & Pearson, 1992; Yorks et al., 1999), work-based or situated learning (Gregory, 1994), and problem-based learning (Marquardt, 1999). Action learning has never been examined relative to each of the five learning orientations. It is the purpose of this article to examine the literature and identify ways in which action learning conforms to and satisfies the premises of each of these five major orientations.

In this conceptual analysis of the literature, we sought to answer the following two questions:

- What do theorists from each of the five learning orientations say about learning relative to the six components of action learning?
- How does action learning utilize the principles and theories of each of the five orientations of adult learning?

### Method

To pursue this study, the authors identified a suitable action learning process to use as a baseline for analysis and Marquardt's approach was selected. Second, the literature was examined for groupings that represent a more inclusive, metatheory approach to adult learning. The five orientations or schools identified by Merriam and Caffarella (1991) and Swanson and Holton (2001) served as the basis for this review, in which at least 15 to 20 sources including and in addition to those cited by the above authors were examined for each orientation.

Marquardt's (1996, 1999) six elements of action learning were identified as the action learning approach against which we would compare each of the components of the five schools of learning. Our research unveiled a wide range and depth of existing relationships between the constructs of the

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schools and the six elements of action learning. We conducted a search in ABI/Inform of both current and past literature (1986-2003) within peer-reviewed journals. Finally, we incorporated our analysis and synthesis of the literature for both the action learning and adult learning constructs in Table 1. This chart summarizes how key theories and principles within each of the five orientations support the six key components of action learning.

Two limitations of the analysis resulted from the literature review. First, the placement of a particular theory, practice, or principle into a particular orientation revealed some commonalities or overlap among the orientations, just as there are theorists (e.g., Dewey, Bandura, Knowles, and Kolb) who are identified within different orientations. Final placement was determined by what the literature indicated was most consistent and faithful to the principles of that metatheory. For example, Cooperider, Sorensen, Yaeger, and Whitney's (2001) book on appreciative inquiry frequently references their constructivist stance; however, the impact of appreciative inquiry is its effect on self-actualization of the humanist orientation. Second, some orientations appeared more supportive of the action learning process than others. In particular, the behaviorist orientation appears underrepresented. This is because of the marginal relevance of this school to the elements of action learning. The behaviorist orientation supports a rather mechanistic approach to andragogy and is therefore less applicable to method of action learning than it is in, for instance, the technical training realm. There are isolated aspects of behaviorism that support the action learning approach. Throughout the article, when there is an apparent lack of supportive citations, it is because there is limited application of that orientation to the action learning process.

### Connections Between Action Learning Components and Adult Learning Orientations

In this section, we list Marquardt's six action learning components and then provide examples of theories within each of the adult learning orientations that support the principles and practices of that action learning component. Table 1 provides a synopsis of our literature survey and analysis.

#### Focus on Problem, Task, or Challenge

Action learning is built around a problem, project, or challenge, the resolution of which is of high importance to an individual, team, and/or organization. The problem should be significant, be within the responsibility of the team or individual to resolve, and provide opportunity for learning (Revans, 1982). It is one of the fundamental beliefs of action learning that we learn best when undertaking some action on which we reflect and from which we subsequently learn.

*(text continues on p. 415)*

TABLE I: Action Learning Components and Adult Learning Orientations

Action Learning Components	Adult Learning Orientations			
	Cognitivist	Behaviorist	Humanist	Social Learning
1. Focus on problem, task, or challenge	Argyris, Bruner, Gagne, Hergenhahn, Kolb, Mead, Schön, Bandura	Mager, Skinner, Thorndike, Hull, Tolman	Candy, Cooperider et al., Knowles, Maslow, Rogers	Bandura, Dewey, Lave & Wenger, Lindeman, Rotter
Important and critical to person, team, and/or organization	Problem is trigger for internal mental process of learning	Problem as external stimulus	Self-directed learners can perceive a problem as a learning opportunity	Immediacy and practicality encourages learning
Feasible and within authority and/or responsibility of group	Two types of problems—solved and unsolved		Learning orientation is problem-centered and contextual	Social interaction and collaboration to address problem
2. Diverse, small group (or set)	Each contributes individually	Small group provides the environment for learning	Individual contributions promote self-actualization	Situated learning environments transfer to real life
Diverse perspectives	Value of diversity and perspectives	Pressure from group (and learning coach) to observe norms	Support and caring for group members enhances human development	Interacting and observation of others in a social context is a basis for modeling
May be from outside as well as within organization	Individual behaviors indicate shared cognitive understanding of objects or activities			Legitimate peripheral participation
				Observational learning
				Communities-of-practice (COPs)

3. Reflective inquiry process

Focus on questions before solutions

Successful in team or organization

Espoused theories vs. theories in use

Double and triple-loop learning occur

Reflective inquiry helps

Rules for the process

Questions cause synapses of brain to be more open to learning

Open to and seeks others' perspectives

Appreciative inquiry (Questions: what can be shared?)

Questioning generates doubt which spurs reflective thinking

Reflection generates reflective inquiry

Construction of meaning from experience

Observations and performance are critical

Generalizing

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 Dyse perspectives   
 May be from outside   
 as well as within   
 organization   
 Individual behaviors   
 indicate shared cognitive   
 understanding of   
 objects or activities   
 Pressure from group   
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 coach) to observe   
 norms   
 Support and caring for   
 group members   
 enhances human   
 development   
 Observational learning   
 Legitimate peripheral   
 participation   
 Unfamiliarity may cause   
 transformative learning,   
 enables challenging   
 assumptions   
 Communities-of-practice   
 (COPs)

**3. Reflective inquiry process**

Focus on questions before solutions   
 Seek to understand as well as to advocate   
 Seek wide systems perspectives to problem and strategies   
 Seek to learn as well as to act   
 Espoused theories vs. theories in use   
 Double and triple-loop learning occur   
 Reflecting on patterns and reflecting deeply   
 Relating new information to existing   
 Rules for the process   
 Questions cause synapses of brain to be more open to learning   
 Prevents domination of any individual   
 Allows all to participate   
 Open to and seeks others' perspectives   
 Appreciative inquiry (questions what can be changed)   
 Questioning generates doubt which spurs reflective thinking   
 Reflection generates perplexity; survey of solutions   
 Questions build group cohesion; the foundation for dialogue   
 Construction of meaning from experience   
 Observations and perspectives are critical   
 Sensemaking   
 Others' challenges may change perspective   
 Premise-reflection

**4. Power to take action**

Action is necessary to determine value of strategies   
 Action provides opportunities for additional learning   
 Reflection-in-action   
 Actively involved in learning process   
 Action should be within the learner's control   
 Take immediate and practical action   
 Role of conscientism   
 Learning is significant when relevant   
 Learning is acquired through doing   
 There is no true learning without action   
 Enactive mastery   
 Application of knowledge to new situations   
 Action may cause perspective transformation   
 Concrete experience   
 Enactment creates an environment   
 Conscientization

**5. Commitment to individual, team, and organizational learning**

All members are expected to learn   
 and apply learnings   
 Knowledge, skills, attitudes, and values learned   
 Duero-learning or metacognition   
 Focus on internal process of acquiring, understanding, and retaining information   
 Learning to check adequacy of knowledge   
 Detect and correct errors   
 Committed to skill development and producing behavioral change   
 Time set aside for learning   
 Learning involves the whole person— affective and cognitive   
 Seek to become self-actualized   
 Responsibility for own learning   
 Self-initiated, self-directed learning   
 Learning comes from reflection on deep experiences by those committed to personal control over action to rectify the problem   
 Commitment to learning comes with involvement with others   
 Construction of knowledge by each person   
 Cumulative nature of learning committed to individually constructed models of reality   
 Presuppositions questioned



Action Learning Components		Adult Learning Orientations				
	Cognitivist	Behaviorist	Humanist	Social Learning	Constructivist	
6. Action learning coach/facilitator Focuses on the learning rather than the task Assures that norms are being followed	Structure the content and learning activity to acquire information	Guides learning: creates operant conditioning of desirable behaviors	Supports individual ability to determine content, application, and importance of learning Allows learners to identify what they have done well	Models behavior of questioning Guides the group in learning from others Is not an external locus of control	Helps members make meaning of their learning both through questioning and reframing process and by challenging assumptions Collaborates	

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If the problem or its context is unfamiliar, additional learning opportunities emerge. The problem or project gives the group meaningful, relevant work. It creates a hook for experimentation using stored knowledge.

Thus, the conundrums of action learning are to be problems, to excite the interest of the participants in what they cannot see rather than enhance their skill in elaborating what they can see already. The project task must therefore be open-ended. . . inter-departmental and of serious concern to those who offer it. (Revens, 1980, p. 292)

It is no accident that a significant problem serves as the impetus for the action learning process. Each of the orientations of adult learning acknowledges the importance of a presenting problem in a learning situation. For the behaviorists, the problem is the external stimulus that begins the learning process. The cognitivists perceive the problem as the trigger for the internal mental process of learning. The problem can only exist in two states: unsolved and solved (Hergenhahn, 1988). According to the cognitivist Argyris (1991), "The key to any educational experience designed to teach senior managers how to reason productively is to connect the program to real business problems" (p. 107). The introduction of a problem, therefore, begins the learning process. Humanists view the problem as an opportunity for self-directed learning; essentially, the problem presents itself as a self-directed learning project or situation when a person perceives a need for information, identifies an appropriate learning resource, and undertakes an activity that allows the learning to take place (Confessore & Confessore, 1992, p. 8). In the school of social learning, the problem emerges as something under the learner's locus of control. Its immediacy and practicality generates the learning opportunity (Dewey, 1916). Constructivists promote the situated cognition aspect of learning. Brown and Duguid (1991) emphasized that learning needs to take place in an authentic context. The setting and applications should be realistic for the learner to apply the acquired knowledge. When the problem is real, relevant, and current within the workplace of one of the set members, as in the case of action learning, the learning is more likely to transfer to real-life problem solving. Freire (1973) also highlighted the problem-posing aspect of learning. Problem posing involves making a taken-for-granted situation problematic and raising questions about its validity. The learners—or, in the case of action learning, the set members—assist in questioning the presuppositions of the set member who owns the problem. If the problem is crucial enough and the action learning process thorough enough, Mezirow (1998) would label the problem a "disorienting dilemma." A disorienting dilemma is the precursor to transformative learning.

### **A Diverse Small Group (or Set)**

To optimally solve the problem and create as much learning as possible, action learning occurs within a group, called a set, which is composed of

four to eight individuals. Ideally, the makeup of the group should be diverse so as to maximize various perspectives and to obtain fresh viewpoints (Dilworth & Willis, 2003; Marquardt, 1999; Revans, 1980). Depending on the type of action learning problem, groups can be composed of individuals from across functions or departments. In some situations, groups are comprised of individuals from other organizations or professions: for example, the company's suppliers or customers. Revans (1980) described the set as follows: "The central idea of this approach to human development . . . is today that of the set, or small group of comrades in adversity, striving to learn with and from each other as they confess their failures and expand on their victories" (p. 16). In another article, *The Golden Jubilee of Action Learning*, Revans (1988) stated, "The ultimate power of a successful [group] lies not in the brilliance of its individual members but in the cross-fertilisation of its collective abilities" (p. 8).

All five orientations of adult learning recognize the importance of the group in the learning process. For the cognitivists, who view learning as an internal process, the set input and feedback is the external stimuli for the internal process (Gagne, 1965). Given this description, reliance on the action set as part of the process appears to contradict the cognitive orientation of adult learning. However, the apparent disconnect is offset by the fact that all are expected to learn and contribute individually in the processes of working on an individual's problem or project (Marquardt, 1999). The diversity of the group and different perspectives present input for the individual's thinking process. Not only does individual learning occur but team learning does as well. Thus, the cognitivists see individual behaviors within a group as sharing cognitive understanding of objects or activities (Mead, 1934).

The set is the learning "environment" for the behaviorists. Because the individuals within the group are committed to the process and positive involvement, their willingness to listen and learn makes them an active part of the learning environment and optimizes the power of learning in a group. When the small group establishes its own norms, the group exerts pressure for conformance to those agreed-on norms.

The humanists' goal of autonomous self-actualization initially might appear to be incompatible with a group-learning situation. Self-actualization is the desire to become more of what one is, to become everything that one is capable of becoming (Maslow, 1968). Another way to state it is that the individual who strives for self-actualization seeks to maximize his or her own potential. In action learning, the individual can acknowledge her value through her ability to contribute to the group. Because no question is considered wrong, the success of contributions are easily felt. In addition, the caring and support for group members emphasizes the human element of the

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### Reflective In

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learning process. Working on another person's problem frees the set member to be unselfish.

Those who belong to the social learning orientation believe that learning thrives in the milieu of an action set. The members bring varying levels of familiarity to the problem or context of the problem, thereby generating social learning. Learning requires social interaction, collaboration, and participation. Legitimate peripheral participation (Lave & Wenger, 1990) occurs within these sets when the facilitator models the questioning and reflection behaviors. The set participants observe those behaviors modeled. The set, as a context for legitimate peripheral participation, can generate learning because the action learning process relies on observation of the facilitator's modeled reflective practice and collaboration with set members to come to a common understanding of the problem. Social cognitivists believe that observational learning (Bandura, 1986, 1989) occurs within the set as participants observe the behavior of the facilitator and set members and develop new ideas of how a new behavior is formed. They may examine the modeling of the questioning process presented by the facilitator as well as the actions and behavior of the other set members as they address their individual problems.

The constructivist orientation asserts that the group constructs its own norms that are needed for self-maintenance. This is clearly done at the outset of any action learning set when norms are established. The process of social construction occurs within an action learning set because the group creates a shared comprehension of the problem even though there is conflicting data that confuses comprehension. The shared comprehension and the resolve for specific action emerge from the questioning by set members and storytelling by the member presenting the problem. Mezirow (1991) noted that the presentation of unfamiliar problems, people, and settings (such as those presented by the diverse set participants) can create transformative learning. In addition, the emerging body of literature regarding communities-of-practice (COPs) incorporates many of the principles of action learning (Brown & Campione, 1990; Brown & Duguid, 2000; Wenger, McDermott, & Snyder, 2002). COPs, like action learning groups, are "often more fluid and interpenetrative than bounded, often crossing the restrictive boundaries of the organization to incorporate people from the outside" (Brown & Duguid, 1991, p. 49). Revans (1980) spoke directly to the nature of the set as a type of community of practice in his use of the term "collective learning system" (p. 110). COPs can develop from the action learning set.

### Reflective Inquiry Process

By focusing on the right questions rather than the right answers, action learning addresses what one does not know as well as what one does know

(Mumford, 1995). Action learning tackles problems through a process of first asking questions to clarify the exact nature of the problem, reflecting and identifying possible solutions, and only then taking action. Action learning employs the following formula:  $L = P + Q + R$ , where Learning = Programmed Knowledge (i.e., knowledge in current use, in books, in one's mind, in organization's memory, lectures, case studies, etc.) + Questioning (fresh insights into what is not yet known) + Reflection (recalling, thinking about, pulling apart, making sense, trying to understand) (Revans, 1980, 1982). Questions are seen as a powerful tool for creating a common goal, strengthening listening, coalescing groups, increasing the learning (the synapses of our brains actually change to capture more learning when encountering questions), and ensuring dialogue.

In *Action Learning: New Techniques for Management*, Revans (1980) described his work with the National Coal Board. It was in his contact with that industry that he developed the reflective inquiry approach. He suggested sidestepping the learned experts in favor of having the middlemen resolve their own problems. Part of the well-documented success of this effort came from the thesis that "action learning shows its strength not in finding the answers to questions that have already been posed (the role of experts) but in finding the questions that need to be answered (the role of leaders)" (p. 118).

The cognitivists emphasize locus of control within the individual. The focus is on the learner's mental processes. For the cognitivist, problem solving is a critical way to acquire knowledge. Argyris and Schön (1978) illuminated the value of questioning and reflection in the learning process when examining contradictions between espoused theories and theories in use. Double-loop learning occurs when one questions his own premises, and triple-loop is questioning one's learning process, thus resulting in learning how to learn. The value is in the questioning process. Reflecting on action occurs during the action learning reflective inquiry process. The greatest value occurs to the learners when they are reflecting deeply and looking for patterns in behavior or knowledge or process. Part of the reflection process also includes relating new information to previously learned information. This can occur when the learner questions his/her structural or fundamental assumptions. The reflective process can take place during action or after the action has taken place (Schön, 1983).

Behaviorists endorse the action learning reflective process insofar as there are rules to the interaction that generate observable learning responses (Mager, 1988). The questions themselves cause synapses of brain to be more open to learning and ideas that in turn results in changes in the dynamics of listening and problem solving. The rules of the reflective process prevent domination by any individual and require everyone to listen in order to participate and establish an environment conducive to learning (Marquardt,

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1999). The guidelines for the reflective process establish conditions that enable learning. The reflective process is underrepresented by behaviorism, which assesses learning by the external evidence of changed behavior or improved performance (Mager, 1988) and would not acknowledge the internal processes that occur during reflection.

The humanist orientation elevates the individual's value. Cooperider et al. (2001) emphasize questioning and reflection because they focus on what is positive and what can be changed. Humanists are open to and seek others' perspectives to seek what is unique in the situation and to personally benefit from a deeper understanding. Appreciative inquiry asks the question: What can be changed? The appreciate inquiry process (Cooperider et al., 2001, p. 25) involves appreciating or evaluating the best of what is, envisioning what might be, dialoguing about what will be, and envisioning what will be. This perspective uses the above steps as the approach to the reflective inquiry process, and it begins with a question.

Two features distinguish reflective thinking, according to Rotter (1992), who is of the social learning orientation. First, reflective thinking involves a state of doubt, hesitation, perplexity, and mental difficulty. Rather than threaten self-efficacy, these force the learner to generate creative alternatives that preserve self-efficacy. Self-efficacy is maintained because the person being questioned is simply encouraged to look at different possibilities. Second, reflective thinking involves an act of searching, hunting, and inquiring to find material that will resolve the doubt as well as settle and relieve the perplexity. The questioning by set members enables this process. Dewey (1933) described the general features of a reflective experience to include feelings of perplexity, confusion, and doubt (i.e., recognition of a problem), making a conjectural anticipation (i.e., establishment of a tentative hypothesis) and performing a careful survey (which occurs through examination, inspection, exploration, and analysis). Finally, the questions build a foundation for dialogue that is basic to social learning.

The constructivist seeks personal meaning from experiences; this meaning emerges through the action learning questioning process as details and angles of the problem surface, and assumptions and practices are challenged. Sensemaking (Weick, 1995) occurs within this component of action learning insofar as it considers past, present, and future actions; it occurs along with identity construction; it is a social process (in this case, taking place in an action set); and sensemaking depends on extracted cues from the environment (which could be probes in the form of questions from other set members). In addition, the act of inquiring about a person's perspectives can cause them to rethink and initiate new perspectives. Deep transformative learning can occur when people question and reflect on the premises for their decisions and actions (Mezirow, 1991). The member with the problem, as well as the set members, make observations and inquiries. These

observations and inquiries may generate changes in perspective (Kolb, 1984).

### Power to Take Action

For action learning advocates, 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 (Pedler, 1997). Revans (1988) stated that "responsible experience alone is the true motivator, the impartial witness and the final judge of meritorious learning" (p. 11). Members of the action learning group must have the power to take the action themselves or be assured that their recommendations will be implemented. Action enhances learning because it provides a basis and anchor for the critical dimension of reflection described in the above section. Most importantly, one action is worth many hours of discussion (Revans, 1980).

Cognitivists agree that the learner should be actively involved in the learning process. Learning can occur if we think about what we are doing (reflection-in-action) while we are doing it (Schön, 1983). Action for action's sake is not enough for the cognitivist, who believes that you must also consider and reflect on your actions. The learning must also be "within the learner's control" (Merriam & Caffarella, 1999, p. 256). Taking personal action is exerting control. This fits together with the action learning approach, which requires a commitment to take action (Marquardt, 1996). The action cannot be arbitrary; it must be considered before executed.

Behaviorists believe that learning involves the need to take immediate and practical action. According to Thorndike et al. (1928), the actions taken at this stage represent connectionism: when a learner's responses to stimulus lead to satisfying after-effects. If changes in behavior indicate learning, the decisive actions taken at this point in the action learning effort demonstrate that learning has taken place (Skinner, 1971).

On the other end of the spectrum, for the humanist, learning is significant when it is relevant and important to the individual. This is very subjective and may not be observable. The resolution to take action (resulting from the action learning process) is what makes learning relevant. Learning is that which helps the individual to be self-actualized, and such learning is acquired through doing (Rogers & Freiberg, 1994). Man is the measure of all things, and the actions taken by a man can be the measure of the man. Through action, the individual realizes his or her own potential; this cannot be done through simply acquiring knowledge.

The social learning theorist believes that there is no true learning without action and that action should be observed. The set participants who do not own the problem can learn vicariously through observing other's actions and the consequences (Bandura, 1986). Enactive mastery places the focus

on experienced success in actual or simulated performance. Action solidifies learning and propels the learning process forward. Social learning theorists, therefore, emphasize the relevance of learning through experience and the application of knowledge gained to a new situation. Dewey (1916) noted the need for adults to have learning connected to doing. There is broad-based support for the action component of learning within the social learning orientation. Lindeman (1926) stated, "Active participation in interesting affairs furnishes proper stimulations for intellectual growth" (p. 89).

Mezirow (1991), of the constructivist orientation, identified two levels of action that he calls reflective action. The lower or less critical level of reflective action focuses on content (what) and process (how). Premise reflection, which is the higher form of reflective action, enables a perspective transformation and is concerned with why we perceive, think, feel, or act as we do. Weick (1979, p. 5) used the term enactment to imply taking action, "creating the environment." Enactment may be an outcome of the resolution to take action. Freire (1973) further contributed to the constructivist perspective with the introduction of the "conscientization" concept, which includes a deepening awareness on the part of the individual of his or her capacity to transform reality through action taken. Kolb (1984) explained that testing of concepts in new environments through concrete experiences can result in learning.

#### **A Commitment to Individual, Team, and Organizational Learning**

Solving organizational problems provides immediate, short-term benefits to the company. The greater, longer term, multiplier benefit, however, is twofold. First, there is the learning gained by group members, and second, there is the resulting application of the group's learning on a system-wide basis throughout the organization. Revans (1980) pointed this out in his own experience with the British Coal Board, as follows:

Any organization ought to be able to learn from its own everyday experience, simply by asking itself what it thinks it is try to do, what is preventing it from doing it, and what measures it might take to overcome its problems and to move nearer to its goals. (p. 108)

These steps require a commitment to the future. Action learning, in asking these questions, has greater value strategically for the organization than the immediate tactical advantage of early problem correction (Dilworth, 1998). In action learning, the commitment to learning is as important as the action. Action learning places equal emphasis on accomplishing the task and on the learning/development of individuals and organizations. All five metatheories exhibit a commitment to learning, although demonstrated in different ways.



Cognitivists view the commitment to learning as a commitment to learning "how" to learn, also called deuterio-learning or metacognition (Argyris, Putnam, & Smith, 1985; Schön, 1983). In the learning process, the cognitivist focuses on the internal process of acquiring, understanding, and retaining information. This form of learning involves use of mental associations in which the learner actively relates incoming information to a previously acquired psychological frame of reference or schemata. The mental associations are then reflected in overt behavior changes. Cognitivists perceive knowledge acquisition as an active process. There is a commitment to learning to check adequacy of your own knowledge (Bruner, 1965). Evidence of the cognitivists' commitment to learning is the belief in grooming personal skills of reflection and dialogue (Schön, 1983), searching for the learning intent to match its outcome, and the belief that learning occurs by detecting and correcting errors (Argyris, 1982).

Conversely, the behaviorists focus not on internal processes but rather emphasize external, performance-based skill development and behavioral change (Skinner, 1971). Evidence of the behaviorists' commitment to learning is demonstrated through a commitment to changed behavior and time set aside for learning how to change behavior. Their uncompromisingly methodical approach to training development through needs assessment, design, development, delivery, and evaluation (Mager, 1988) requires an extreme and disciplined commitment to learning. The fact that these methods have met with measured success and continual use is a tribute to that commitment.

Humanists view learning as most effective when it involves the whole person—both the affective and cognitive aspects. The goal for the humanist is a quest for self-actualization. This can occur because humanists believe man has a natural potentiality to learn (Rogers & Freiberg, 1994). The humanist's commitment to learning is evidenced by the individual taking responsibility for his or her own learning. The manifestation of a commitment to learning is in self-initiated learning that involves the whole person (Candy, 1991), which is the most pervasive and lasting form of learning. Therefore, humanists view the action-learning problem as an individual, self-directed learning effort, and the commitment to that effort emerges from a desire to learn better ways to deal with the problem presented.

Social learning theorists believe that significant learning can only come from reflection on deep experiences. Self-regulation and self-efficacy contribute to the anticipated consequences and outcomes that are the transformation of existing knowledge into new knowledge. Rotter (1992) explained that change occurs only when one has a sense of personal control over one's life. In the action learning process, the learner has absolute control of his or her course of action on the problem. Expectancy of a positive outcome (Bandura, 1986) can create greater learning. Learners in the action

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learning set are expected to take control over the problem that they present (Marquardt, 1996) and that precondition generates the expectancy of a positive outcome. Set members can also generate a social influence on the individual member's commitment to learning because they are highly dependent on each other for the process to work.

Constructivists embrace a very individualized process of knowledge construction and share a belief in the cumulative nature of learning. Because the individual learner is the focus of the action learning process (even though it occurs in a group or set) and the learning builds with each new questioning/reflecting session, that expectation dovetails with the constructivist viewpoint. Ways in which presuppositions have come to constrain the way we perceive, understand, and feel about the world (Freire, 1973) are highlighted by the action learning questioning process: each new session unveils new presuppositions. A constructivist believes that each individual's knowledge of the world is based on one's constructed models of reality, which are adopted from one's culture and then adapted to the individual's use. Consequently, the individualized nature of the action learning process provides a logical medium for knowledge construction to take place.

### Action Learning Facilitator

The action learning facilitator establishes the pace to assure sufficient time for group members to reflect on the problem-solving and strategy-development experience and to capture the learning. An action learning facilitator (also referred to as a coach or set advisor) may be a working group member (possessing familiarity with the problem being discussed) or an external participant (not necessarily understanding the problem content or organizational context but possessing action learning facilitation skills) (Marquardt, 1996, 1999, in press). She helps group members reflect on how they listen, how they may have reframed the problem, how they give each other feedback, how they are planning and working, and what assumptions may be shaping their beliefs and actions. The facilitator also helps participants focus on what they are achieving, what they are finding difficult, what processes they are employing, and the implications of these processes (Marquardt, 1999). Facilitators use educational rather than psychological means to develop intrapersonal and interpersonal domains. Some push for a deeper understanding of assumptions, values, and beliefs that contribute to the way in which individuals and systems have come to understand them (O'Neil, 1996, 1999). The facilitator differs from a more traditional version by focusing on learning (especially double- and triple-loop learning), questions (especially why), and the applicability of learning to practice. An action learning facilitator must have the wisdom and self-restraint to let the participants learn for themselves and from each other. Revans (1980) high-

lighted the unique (and often underrated) role of the facilitator when he made the statement, "The clever man will tell you what he knows; he may even try to explain it to you. The wise man encourages you to discover it for yourself" (p. 9). That statement describes the role of the facilitator.

The action learning facilitator clearly embodies aspects of each of the five orientations of adult learning. Cognitivists emphasize the intentionality of learning to optimize its affects. It is the responsibility of the action learning facilitator, during the facilitation process, to assist in structuring the action learning process. He does this by intentionally assisting group members in the process of reflecting on how they listen, reframing the problem, providing feedback, examining the planning and working sessions, and examining assumptions. None of these activities demonstrate the knowledge or value of the facilitator per se because the focus is on enabling the learning of the set members. For the cognitivist, the learning facilitator is critical because he or she intentionally focuses on the learning process.

The presence of a facilitator aligns with the behaviorists' belief in operant conditioning. The facilitator creates operant conditioning in terms of expected behavior during each session. The presence of the facilitator causes members to behave in a manner conducive to learning: For example, if statements are made rather than questions, they know the facilitator will intervene. Set members know the facilitator will be asking for what they have learned so they will be subconsciously thinking about how to respond to such a question. The facilitator conducts the action learning meeting in such a way as to encourage desired behavior and discourage undesirable behavior (Skinner, 1971).

For humanists, the action learning facilitator is present to engender the development of the whole person rather than to stand in the way of that process. The role of the facilitator is not to deliver information but rather to guard the process. The facilitator does not judge but asks the members to determine for themselves what they have done well and how they can improve as a team and as individuals. In this role, the facilitator enables the self-actualization of the set members.

The role of the facilitator for those in the social learning orientation is one of modeling and guiding toward new behaviors (Bandura, 1977). The facilitator models desired behavior through the questioning process. Interjections on the part of the facilitator should take the form of a question rather than a command. By fashioning questions intentionally, the facilitator demonstrates the behavior to the set members. Also, facilitators model the importance of learning from each other as he or she adapts to the agreed-on norms established by the set. He or she does not become an external locus of control (Rotter, 1954, 1992); rather, his or her role is to help the learners to learn from each other.

Constructivists would support the role of the facilitator as one who "facilitates and negotiates meaning with the learner" (Merriam &

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Caffarella, 1999). In the action learning set, the facilitator enables the group members to make meaning of their learning by helping the participants both with the process (asking questions, reframing, providing feedback) and by challenging assumptions. The facilitator's actions are collaborative and thought-provoking rather than directive (Mezirow, 1991). The coach ensures that the members individually and the group as a whole identify how they will be able to apply their new values and learning in the workplace and in the community.

## Conclusions and Recommendations

Action learning is a powerful learning tool because its six components interweave and incorporate a wide and diverse range of the principles and theories of the various orientations of adult learning. Although some of the components may be more aligned to one school than another, taken in their entirety, action learning has the amazing capacity to utilize and synergize a wide array of diverging as well as complementary forces.

The action learning process serves as a bridge between the different adult learning orientations, rather than a wall. Action learning manifests features of all the different adult learning orientations addressed above. This overview points to the power and applicability of the action learning process in many different learning environments.

Action learning stimulates different levels of learning. For instance, action learning generates learning as an individual as well as within a group and on an organizational level. It is consistently powerful across the different levels of analysis. Action learning principles, such as questioning/ reflection, can be applied at an interpersonal, within-group, between-groups, or organizational level.

The use of the action learning coach provides an impetus for focusing the learning at the front end and facilitating the learning at the back end of the process. The flexibility of the action learning coach's role conforms to a variety of facilitator descriptions within each of the orientations of adult learning. One interesting aspect of the facilitator role is the requirement that he or she diminish his or her role as the action set matures. The ultimate goal of the action set facilitator is to develop the facilitation and questioning/ reflecting skills in the set members so that they eventually take over these processes. Once again, it is this flexibility of the facilitator's role that attracts the proponents of different schools of learning to this aspect of the action learning process.

Rather than highlighting the differences between the orientations of learning, action learning accents the basic commonalities. Logistically, this is pointed out in the authors (such as Kolb, Dewey, and Knowles) who can be placed in more than one orientation of adult learning. The schools of adult learning need not be mutually exclusive. One example of the shared assump-

tions of the schools of adult learning is that adults learn differently than children (Knowles, 1970). An example of the way action learning emphasizes that fact is the step entitled the "commitment to take action" (Marquardt, 1999). The requirement to commit to action assumes a learner autonomy and responsibility that is atypical of child learners. This element assumes that the adult learner's level of authority is commensurate to the task. Autonomy and responsibility of this nature are characteristics only possible at an adult level; they cannot be presumed to exist among children.

As a part of their commitment to maximizing learning in the workplace and the classroom, human resource development (HRD) professionals and educators should seek more opportunities to apply action learning. In addition, we should continue to search for ways in which other learning approaches/methodologies can better use action learning. The adult learning orientations corroborate the effectiveness of action learning.

### Contributions to HRD

This conceptual analysis and synthesis of how the theories and principles of the five different adult learning orientations contribute to the learning power of action learning provides a number of important contributions to the HRD profession. The power and success of learning that occurs within the action learning process can be clearly attributed to the fact that it incorporates so many different and disparate theories of learning. Action learning, because of its flexibility and power, can be applied in a variety of ways and settings. Action learning can be tried within a variety of mediums, not just in a face-to-face environment. The online implications of this powerful tool remain relatively unexplored. Action learning can change the way that the HRD professional perceives himself or herself. The very application of the facilitator principles within any work context strengthens the learning possibilities and enhances the facilitation skills of the HRD professional. The power of the questioning/reflection approach has been demonstrated. The HRD professional who implements the questioning/reflection approach to challenges or problems (both at the individual and corporate level) enhances his or her own effectiveness in the workplace.

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