

The Learning Way—Learning from Experience as the Path to Lifelong

Learning and Development

“...to learn from life itself and to make the conditions of life
such that all will learn in the process of living.”

John Dewey
Democracy and Education

by

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To appear in Manuel London (Ed.)
Oxford Handbook of Lifelong Learning

Abstract

Lifelong learning requires the ability to learn from life experiences. This chapter describes the theory of experiential learning whereby knowledge is generated from experience through a cycle of learning driven by the resolution of dual dialectics of action/reflection and experience/abstraction. We provide an overview of stylistic preferences that arise from patterns of choosing among these modes of learning, as well as the spaces in which learning occurs. Movement through these modes and spaces link one experience to the next creating a learning spiral that guides growth and development through a lifetime. Lifelong learning is also shaped by an individual's learning identity, the extent to which one believes he or she *can* learn, and learning relationships, connections that promote movement through the learning spiral. Strategies for enhancing the learning process are provided for each of these topics.

Keywords: experiential learning, learning style, learning space, learning identity, learning relationships, adult development

*Not to be cited or quoted prior to publication. A revised version of this working paper will appear in the *Oxford Handbook of Lifelong Learning*. We welcome any comments and suggestions you may have about the paper at amp67@case.edu or dak5@msn.com .

The Learning Way—Learning from Experience as the Path to Lifelong Learning and Development

The Challenges of Lifelong Learning

Since its emergence as a catchy alliterative slogan in the 1970's lifelong learning has steadily moved from an inspiring aspiration to a necessary reality. The transformative global, social, economic, and technological conditions that were envisioned forty years ago have come to fruition in a way that requires a fundamental rethinking of the relationship between learning and education. From a front-loaded, system-driven educational structure dominated by classroom learning, we are in the process of transitioning to a new reality where individual learners are becoming more responsible for the direction of their own learning in a multitude of learning environments that span their lifetime. This transition parallels other self-direction requirements that have been placed on individuals by the emergence of the global economy such as responsibility for one's own retirement planning and health care. As Olssen has noted, "In this sense lifelong learning is a market discourse that orientates education to the enterprise society where the learner becomes an entrepreneur of him/her self...Ultimately lifelong learning shifts responsibility from the system to the individual whereby individuals are responsible for self-emancipation and self-creation. It is the discourse of autonomous and independent individuals who are responsible for updating their skills in order to achieve their place in society" (2006, p. 223).

The challenge of lifelong learning is not just about learning new marketable skills in an ever-changing economy. It is about the whole person and their personal development in their many roles as family member, citizen, and worker. While the individual is primarily responsible for his or her learning, it occurs in an interdependent relationship with others. Olssen continues, "Self organized learning certainly has a place in this scenario. But also essential are the twin values of freedom and participation as embodied, for instance, in Dewey's pragmatism, where learning rests on a mode of life where reason is exercised through problem-solving where the individual participates and contributes to the collective good of society and in the process constitutes their own development. The learner is engaged in a process of action for change as part of a dialogic encounter rather than as a consequence of individual choice" (p. 225). This definition of lifelong learning as ongoing human development extends the learning endeavor beyond the walls of a formal classroom.

To navigate on this new journey of lifelong learning the most important thing for individuals to learn is how to learn. Experiential learning theory (ELT) provides this roadmap by helping learners understand how learning occurs, themselves as learners and the nature of the spaces where learning occurs. With this awareness, learners can live each successive life experience fully – present and mindful in the moment. We call this approach to lifelong learning "The Learning Way." The learning way is about approaching life experiences with a learning attitude. The learning way is not the easiest way to approach life but in the long run it is the wisest. Other ways of living tempt us with immediate gratification at our peril. The way of dogma, the way of denial, the way of addiction, the way of submission and the way of habit; all offer relief from uncertainty and pain at the cost of entrapment on a path that winds out of our control. The learning way requires deliberate effort to create new knowledge in the face of

uncertainty and failure; and opens the way to new, broader and deeper horizons of experience. The learning way honors affective experience in tandem with cognition, acknowledging that, ultimately, learning is intrinsically rewarding and empowering. It is not a solitary journey but is sustained and nurtured through growth fostering relationships in one's life.

In this chapter we describe how ELT research can help learners on their journey of lifelong learning. We examine the key concepts of the theory—the cycle of learning from experience, learning styles, learning spaces, the spiral of learning and development, learning identity and learning relationships— and their application to lifelong learning and development. For each concept we provide strategies that individuals can use to enhance their lifelong learning process.

Experiential Learning Theory

Experiential learning theory draws on the work of prominent 20th century scholars who gave experience a central role in their theories of human learning and development - notably William James, John Dewey, Kurt Lewin, Jean Piaget, Lev Vygotsky, Carl Jung, Paulo Freire, Carl Rogers and others (figure 1) - to develop a dynamic, holistic model of the process of learning from experience and a multi-dimensional model of adult development. ELT is a dynamic view of learning based on a learning cycle driven by the resolution of the dual dialectics of action/reflection and experience/abstraction. It is a holistic theory that defines learning as the major process of human adaptation involving the whole person. As such, ELT is applicable not only in the formal education classroom but in all arenas of life. The process of learning from experience is ubiquitous, present in human activity everywhere all the time. The holistic nature of the learning process means that it operates at all levels of human society from the individual, to the group, to organizations and to society as a whole. Research based on ELT has been conducted all around the world supporting the cross-cultural applicability of the model.¹

 Insert Figure 1 about here

ELT integrates the works of the foundational experiential learning scholars around six propositions that they all share:

Learning is best conceived as a process, not in terms of outcomes. Although punctuated by knowledge milestones, learning does not end at an outcome, nor is it always evidenced in performance. Rather, learning occurs through the course of connected experiences. As Dewey suggests, "...education must be conceived as a continuing reconstruction of experience: ... the process and goal of education are one and the same thing" (1897, p. 79).

All learning is re-learning. Learning is best facilitated by a process that draws out the learners' beliefs and ideas about a topic so that they can be examined, tested and integrated with new, more refined ideas. Piaget called this proposition constructivism—individuals construct their knowledge of the world based on their experience.

Learning requires the resolution of conflicts between dialectically opposed modes of adaptation to the world. Conflict, differences, and disagreement are what drive the learning process. In the process of learning one is called upon to move back and forth between opposing modes of reflection and action and feeling and thinking.

Learning is a holistic process of adaptation. Learning is not just the result of cognition but involves the integrated functioning of the total person—thinking, feeling, perceiving and behaving. It encompasses other specialized models of adaptation from the scientific method to problems solving, decision making and creativity.

Learning results from synergetic transactions between the person and the environment. In Piaget’s terms, learning occurs through equilibration of the dialectic processes of assimilating new experiences into existing concepts and accommodating existing concepts to new experience. Following Lewin’s famous formula that behavior is a function of the person and the environment, ELT holds that learning is influenced by characteristics of the person and the learning environment.

Learning is the process of creating knowledge. ELT proposes a constructivist theory of learning whereby social knowledge is created and recreated in the personal knowledge of the learner. This stands in contrast to the “transmission” model on which much current educational practice is based where pre-existing fixed ideas are transmitted to the learner.

The Cycle of Experiential Learning ELT defines learning as “the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience” (Kolb, 1984, p.41). The ELT model portrays two dialectically related modes of grasping experience—Concrete Experience (CE) and Abstract Conceptualization (AC) -- and two dialectically related modes of transforming experience—Reflective Observation (RO) and Active Experimentation (AE). Experiential learning is a process of constructing knowledge that involves a creative tension among the four learning modes that is responsive to contextual demands. This process is portrayed as an idealized learning cycle or spiral where the learner “touches all the bases”—experiencing, reflecting, thinking, and acting—in a recursive process that is sensitive to the learning situation and what is being learned. Immediate or concrete experiences are the basis for observations and reflections. These reflections are assimilated and distilled into abstract concepts from which new implications for action can be drawn. These implications can be actively tested and serve as guides in creating new experiences (Figure 2).

 Insert Figure 2 about here

In their theories of experiential learning, William James and Paulo Freire describe their views about the integration of these of the concrete/abstract and action/reflection dialectics. William James proposed radical empiricism as a new philosophy, reality and mind which resolved the conflicts between 19th century rationalism and empiricism, the philosophies of idealism and materialism. For James, everything begins and ends in the continuous flux and

flow of experience. His philosophy of radical empiricism was based on two co-equal and dialectically related ways of knowing the world: "knowledge of acquaintance" based on direct perception and "knowledge about" based on mediating conception. In radical empiricism, direct perception has primacy since all concepts derive their validity from connection to sense experience. Concepts, however, have priority in controlling human action because they often enable us to predict the future and achieve our desires. James (1977) draws attention to the importance of this co-equal relationship when he says,

We thus see clearly what is gained and what is lost when percepts are translated into concepts. Perception is solely of the here and now; conception is of the like and unlike, of the future, and of the past, and of the far away. But this map of what surrounds the present, like all maps, is only a surface; its features are but abstract signs and symbols of things that in themselves are concrete bits of sensible experience. We have but to weigh extent against content, thickness against spread, and we see that for some purposes the one, for other purposes the other, has the higher value. Who can decide off-hand which is absolutely better to live and to understand life? We must do both alternately, and a man can no more limit himself to either than a pair of scissors can cut with a single one of its blades. (p. 243)

While the conceptualizing/experiencing dialectic described by James is recognized by the Brazilian educator Paulo Freire, by stressing the importance of naming one's own experience in dialogue with others, he and other critical theorists give primary emphasis to praxis, the transformative dialectic between reflection and action--reflection informed by action and action informed by reflection. He writes powerfully about the dynamics of this dialectic:

As we attempt to analyze dialogue as a human phenomenon... Within the word we find two dimensions, reflection and action, in such radical interaction that if one is sacrificed -even in part -the other immediately suffers.... When a word is deprived of its dimension of action, reflection automatically suffers as well; and the word is changed into idle chatter, into verbalism, into an alienated and alienating 'blah'.... On the other hand, if action is emphasized exclusively, to the detriment of reflection, the word is converted into activism. The latter action for action's sake negates the true praxis and makes dialogue impossible. (1993, p. 75-78)

Learning style. Learning style describes the unique ways that individuals spiral through the learning cycle based on their preference for the four different learning modes - CE, RO, AC, & AE. Because of one's genetic makeup, particular life experiences, and the demands of the present environment, a preferred way of choosing among these four learning modes is developed. The conflict between being concrete or abstract and between being active or reflective is resolved in patterned, characteristic ways. Previous research (Kolb 1984) has shown that learning styles are influenced by culture, personality type, educational specialization, career choice, and current job role and tasks.

Much of the research on ELT has focused on the concept of learning style using the Kolb Learning Style Inventory (KLSI) to assess individual learning styles (Kolb 2007). While individuals who took the KLSI show many different patterns of scores; nine consistent styles

have been identified based on individuals' relative preferences for the four learning modes (Eickmann, Kolb, & Kolb 2004; Kolb & Kolb, 2005a&b; Boyatzis & Mainemelis, 2000). Four of these style types emphasize one of the four learning modes—Experiencing (CE), Reflecting (RO), Thinking (AC) and Acting (AE) (Abby, Hunt & Weiser 1985; Hunt 1987). Four others represent style types that emphasize two learning modes, one from the grasping dimension and one from the transforming dimension of the ELT model—Diverging (CE & RO), Assimilating (AC & RO), Converging (AC & AE) and Accommodating (CE & AE). The final style type balances all four modes of the learning cycle—Balancing (CE, RO, AC & AE), (Figure 3).

ELT argues that learning style is not a psychological trait but a dynamic state resulting from synergistic transactions between the person and the environment. This dynamic state arises from an individual's preferential resolution of the dual dialectics of experiencing/conceptualizing and acting/reflecting. "The stability and endurance of these states in individuals comes not solely from fixed genetic qualities or characteristics of human beings: nor, for that matter, does it come from the stable fixed demands of environmental circumstances. Rather, stable and enduring patterns of human individuality arise from consistent patterns of transaction between the individual and his or her environment... The way we process the possibilities of each new emerging event determines the range of choices and decisions we see. The choices and decisions we make to some extent determine the events we live through, and these events influence our future choices. Thus, people create themselves through the choice of actual occasions they live through." (Kolb 1984: 63-64).

 Insert Figure 3 about here

Learning spaces. If learning is to occur, it requires a space for it to take place. In ELT this space exists in the experience of the learner and is formed both by objective factors such as the physical setting and time available for learning and by subjective factors such as learning preferences and expectations. The idea of learning space builds on Kurt Lewin's field theory and his concept of life space. For Lewin, person and environment are interdependent variables where behavior is a function of person and environment and the life space is the total psychological environment which the person experiences subjectively. To take time as an example, in many organizations today employees are so busy doing their work that they feel that there is no time to learn how to do things better. This feeling is shaped by the objective conditions of a hectic work schedule and also the expectation that time spent reflecting will not be rewarded. Teachers objectively create learning spaces by the information and activities they offer in their course; but this space is also interpreted in the students' subjective experience through the lens of their learning style.

The nine learning's styles discussed above correspond to regions of a learning space that may or may not be present in any learning experience. Fazey and Marton (2002) have argued that learning leads to understanding with greater retention and transfer when an "experiential space of variation" is created through repeated practice from different perspectives and under different conditions. This space of variation can be portrayed as the number of learning regions that a person engages in the learning process. Another popular way of representing this idea is a

learning pyramid where learning retention is increased from 20% when one learning mode is engaged to 90% when all four modes are engaged (Reese, 1998; Dale, 1969). Although we have seen no studies that have assessed these retention percentages by learning mode empirically, Specht and Sandlin (1991) have showed that retention of accounting concepts after six weeks was 84% for students in a course taught using a learning method that followed the experiential learning cycle and only 46% in a course taught using the traditional lecture method.

Learning spaces are nested in the social system such that the wider social environment can influence learners' experience of a learning space. Urie Bronfenbrenner (1977, 1979) defines the ecology of learning/development spaces as a topologically nested arrangement of structures, each contained within the next. The learner's immediate setting such as a course or classroom is called the *microsystem*, while other concurrent settings in the person's life such as other courses, the dorm or family are referred to as the *mesosystem*. The *exosystem* encompasses the formal and informal social structures that influence the person's immediate environment, such as institutional policies and procedures and campus culture. Finally, the *macrosystem* refers to the overarching institutional patterns and values of the wider culture, such as cultural values favoring abstract knowledge over practical knowledge, that influence actors in the person's immediate *microsystem* and *mesosystem*.

The socially embedded nature of the learning space is further elaborated in situated learning theory (Lave & Wenger, 1991). Like ELT, situated learning theory draws on Vygotsky's (1978) activity theory of social cognition for a conception of social knowledge that conceives of learning as a transaction between the person and the social environment. Situations in situated learning theory, like life space and learning space, are not necessarily physical places but constructs of the person's experience in the social environment. These situations are embedded in communities of practice that have a history, norms, tools, and traditions of practice. Knowledge resides, not in the individual's head, but in communities of practice such as a trade or profession. Learning is thus a process of becoming a member of a community of practice through legitimate peripheral participation (e.g. apprenticeship). Situated learning theory enriches the learning space concept by reminding us that learning spaces extend beyond the teacher and the classroom. They include socialization into a wider community of practice that involves membership, identity formation, transitioning from novice to expert through mentorship and experience in the activities of the practice, as well as the reproduction and development of the community of practice itself as newcomers replace old-timers.

Strategies for Lifelong Learners: Learning Style and Spaces.

An understanding of one's unique learning preferences and capabilities and the match between these and the demands of learning tasks can increase learning effectiveness. This awareness allows the lifelong learner to develop the capacity for all four learning modes, become more flexible in navigating a learning space, and take charge of his or her learning space.

Develop the capacity to engage in all four learning modes. Overall learning effectiveness is improved when individuals are highly skilled in engaging all four modes of the learning cycle. Those who use the KLSI to assess their learning style often decide that they wish to develop their capacity to engage in one or more of the four learning modes, either to improve an

underdeveloped mode or to increase capability in a mode that is particularly important for their learning tasks. Because of the dialectic relationships among the learning modes, containing the inhibiting effects of opposing learning modes can be as effective in getting into a mode as actively trying to express it. Another way to develop in the learning modes is to develop the skills associated with them. The Learning Skills Profile (Boyatzis and Kolb 1991, 1992, 1995) was created to help learners assess the learning skills associated with the four modes of the learning cycle—interpersonal skills for CE, information skills for RO, analytic skills for AC and action skills for AE.

A. Developing the capacity for experiencing (CE). Experiencing requires fully opening oneself to direct experience. The thinking mode, being too much “in your head,” can inhibit the ability to sense and feel in the moment. Engagement in concrete experience can be enhanced by being present in the moment and attending to direct sensations and feelings. Presence and attention are particularly important for interpersonal relationships. Interpersonal skills of leading, building and maintaining relationships, and giving and receiving help aid in the development and expression of the experiencing mode of learning.

B. Developing the capacity for reflecting. Reflection requires space and time for it to take place. It can be inhibited by impulsive desires and/or pressures to take action. It can be enhanced by the practices of deliberately viewing things from different perspective and exercising empathy. Stillness and quieting the mind foster deep reflection. Information skills of sense-making, information gathering and information analysis support the development and expression of the reflecting mode of learning.

C. Developing the capacity for thinking. Thinking requires the ability to represent and manipulate ideas in your head. It can be distracted by intense direct emotion and sensations as well as pressure to act quickly. Engagement in thinking can be enhanced by practicing theoretical model building and the creation of scenarios for action. Analytical skills of theory building, quantitative data analysis and technology management can aid in the development and expression of the thinking mode of learning.

D. Developing the capacity for action. Acting requires commitment and involvement in the practical world of real consequences. In a sense it is the “bottom line” of the learning cycle, the place where internal experiencing, reflecting and thinking are tested in reality. Acting can be inhibited by too much internal processing in any of these three modes. Acting can be enhanced by courageous initiative-taking and the creation of cycles of goal-setting and feedback to monitor performance. Action skills of initiative, goal-setting and action-taking can aid in the development and expression of the acting mode of learning.

Increase your learning flexibility. The flexibility move from one learning mode to the other in the learning cycle is important for effective learning. The Adaptive Style Inventory (ASI--Boyatzis & Kolb, 1993) was developed to help individuals assess their learning flexibility. Mainemelis, Boyatzis and Kolb (2002) found that individuals who balance AC/CE and AE/RO have greater adaptive flexibility in their learning as measured by the ASI. Individuals with high

adaptive flexibility are more self-directed, have richer life structures, and experience less conflict in their lives (Kolb, 1984). Recently Moon (2008) found that ASI flexibility was related to sales performance and Akrivou (2008) showed that it moderated the move from self-complexity to self-integration in adult development.

Customize your learning spaces. When embarking on a course of learning it is useful to consider the learning spaces where this learning will happen and to customize these spaces for yourself based on your learning style and the particular subject matter of your learning. When teachers plan their courses, they may or may not explicitly consider the kind of learning spaces they are creating and the appropriateness of these spaces for the students in their course and/or for the material being taught. For example, John and Tanya Reese (1998) created “Connecting with the Professor” workshops to help law students bridge the differences between the learning spaces created by law school professors and their own learning space preferences resulting from their individual learning style. Recognizing that law school professors were unlikely to change their course and learning style, they worked with students to develop the learning skills needed to succeed in the learning spaces created by their professors.

Another strategy is to supplement the learning space that is given with other spaces that suit your style. For example, a person who learns best by diverging may want to form a group of classmates to talk about the material in the course, or a thinking style person may want to prepare in advance by reading about material to be covered in the training session.

The Spiral of Learning and Adult Development

In ELT adult development occurs through learning from experience. This is based on the idea that the experiential learning cycle is actually a learning *spiral*. When a concrete experience is enriched by reflection, given meaning by thinking and transformed by action, the new experience created becomes richer, broader and deeper. Further iterations of the cycle continue the exploration and transfer to experiences in other contexts. In this process learning is integrated with other knowledge and generalized to other contexts.

Zull (2002) explained a link between ELT and neuroscience research, suggesting that the spiraling process of experiential learning is related to the process of brain functioning: “...concrete experiences come through the sensory cortex, reflective observation involves the integrative cortex at the back, creating new abstract concepts occurs in the frontal integrative cortex, and active testing involves the motor brain. In other words, the learning cycle arises from the structure of the brain” (p. 18). Humberto Maturana (1970) also arrived at the concept of a spiral when he searched for the pattern of organization that characterizes all living systems. He concluded that all living systems are organized in a closed circular process that allows for evolutionary change in a way that circularity is maintained. He called this process *autopoiesis*, which means “self-making,” emphasizing the self-referential and self-organizing nature of life. Applying the autopoiesis to cognition, he argued that the process of knowing was identical to autopoiesis, the spiraling process of life (Maturana & Varela, 1980).

As these researchers suggest, the organization of the mind can be viewed as networks of *autopoietic* learning spirals which are embodied in the neuronal networks that cover the surface

layer of the neo-cortex. These neuronal networks are strengthened and enlarged by spirals of learning recursively cycling through these major regions of the neo-cortex. An aesthetic representation of this idea can be found in representations of the Buddha that show his hair coiled in tiny spirals of insight that culminate in enlightenment (Figure 4).

 Insert Figure 4 about here

The ELT developmental model (Kolb, 1984) follows Jung's theory that adult development moves from a specialized way of adapting toward a holistic integrated stage that he calls individuation. The model defines three stages: (1) *acquisition*, from birth to adolescence where basic abilities and cognitive structures develop; (2) *specialization*, from formal schooling through the early work and personal experiences of adulthood where social, educational, and organizational socialization forces shape the development of a particular, specialized learning style; and (3) *integration* in mid-career and later life where non-dominant modes of learning are expressed in work and personal life. Development through these stages is characterized by increased integration of the dialectic conflicts between the four primary learning modes (AC-CE and AE-RO) and by increasing complexity and relativism in adapting to the world. Each of the learning modes is associated with a form of complexity that is used in conscious experience to transform sensory data into knowledge such that development of CE increases affective complexity, of RO increases perceptual complexity, of AC increases symbolic complexity, and of AE increases behavioral complexity (Figure 5). These learning modes and complexities create a multi-dimensional developmental process that is guided by an individual's particular learning style and life path.

 Insert Figure 5 about here

A study by Clarke (1977) of the accounting and marketing professions illustrates the ELT developmental model. The study compared the learning styles of cross-sectional samples of accounting and marketing students and professionals in school and at lower, middle and senior level career stages. The learning styles of marketing and accounting students were similar, being fairly balanced among the four learning modes. Lower level accountants had convergent, abstract and active learning styles, and this convergent emphasis was even more pronounced in middle-level accountants, reflecting a highly technical specialization. The senior level accountants, however, became more accommodative in learning style integrating their non-dominant concrete learning orientation. Clark found a similar pattern of development in the marketing profession. Gypen (1981) found the same move from specialization to integration in his study of the learning styles of a cross-sectional sample of social work and engineering university alumni from early to late career. "As engineers move up from the bench to management positions, they complement their initial strengths in abstraction and action with the previously non-dominant orientations of experience and reflection. As social workers move from direct service into administrative positions they move in the opposite direction of the engineers." (1981: ii)

Notice that in both studies the transitions to non-dominant learning modes in later life stages are associated with changes in the work environment. Development appears not to be solely a function of individual factors alone, but of the transaction between the person and his or her environment. For example, engineers who move from the “bench” into management may become more integrated because of the demands of the interpersonal and unstructured management role. However, choosing to move into the management position required individual development in interest and talent to do so.

It is also important to note that these cross-sectional studies do not offer proof of the sequential development through stages predicted in Jung’s model. This would require longitudinal studies of individuals showing that they must first be in a specialized developmental stage before proceeding to the integrative stage. In fact, in spite of their theoretical similarity, elegance and plausibility, we are aware of no empirical evidence for stage-related development in any of the theories of adult development. This evidence is lacking in both the psychoanalytic models of Erikson and Loewinger and the Piaget inspired theories of King and Kitchner, Kegan, or Perry.

For both of these reasons, in our recent work we have considered development in a way that is more context specific, less age related and non-hierarchical. ELT describes registrative, interpretative and integrative levels of consciousness and three modes of adaptation - performance, learning and development (Boyatzis & Kolb, 2000) - which individuals will enter into at different times and situations depending on their life circumstances (Table 1). While these modes may be typical of the acquisition, specialization and development ELT developmental stages, there may be many exceptions in individual cases. Thus, a young person who has been primarily in a performance mode may transition into a period in the development mode “to figure out what to do with his life” or an older person in the development mode may return to the performance mode to work on a project of importance.

 Insert Table 1 about here

Progress toward development is seen as increases in the complexity and sophistication of the dimensions associated with the four modes of the learning cycle— affective, perceptual, symbolic and behavioral complexity - and the integration of these modes in a flexible full cycle of learning. The concept of deep learning describes the developmental process of learning that fully integrates the four modes of the experiential learning cycle—experiencing, reflecting, thinking and acting (Jensen & Kolb, 1994; Border, 2007). Deep learning refers to the kind of learning that leads to development in the ELT model.

Development toward deep learning is divided into three levels. In the first level learning is registrative and performance-oriented, emphasizing the two learning modes of the specialized learning styles. The second level is interpretative and learning-oriented involving three learning modes, and the third level is integrative and development-oriented involving all four learning modes in a holistic learning process. In his foundational work, *Learning from Experience*

toward *Consciousness*, William Torbert (1972) described these levels of learning as a three-tiered system of feedback loops; work that has been extended by Chris Argyris, Donald Schön, Peter Senge and others in the concepts of single and double loop learning.

The traditional lecture course, for example, emphasizes first level, registrative learning emphasizing the learning modes of reflection and abstraction involving little action (often multiple choice tests that assess registration of concepts in memory) and little relation to personal experience. Adding more extensive learning assessments that involve practical application of concepts covered can create second level learning involving the three learning modes where reflection supplemented by action serve to further deepen conceptual understanding. Further addition of learning experiences that involve personal experience such as internships or field projects create the potential for third level integrative learning (cf. Kolb `1984, Chapter 6). As a counter example, an internship emphasizes registrative learning via the modes of action and experience. Deeper interpretative learning can be enhanced by the addition of activities to stimulate reflection such as team conversation about the internship experience and/or student journals. Linking these to the conceptual material related to the experience adds the fourth learning mode, abstraction and integration though completion of the learning spiral.

Strategies for Lifelong Learners: Spiral through Development.

The pervasiveness of the spiral as a symbol of learning and renewal throughout the history of civilization is a testament to the power of the *autopoietic* life force that it represents. To follow the learning way is to embrace fully the life force of learning in every one of us. The recursive, ongoing spiraling process of self-making makes each living moment an opportunity for new beginnings and creations, fueling the awareness of ourselves as learning beings.

Practice makes perfect. Little of importance is learned in one sitting. For example the expertise literature shows that practice is a major factor in expertise development (Ericsson & Charness, 1994). Practice is not just the amount of time doing something, so experience with something alone is not a good predictor of performance. Practice involves comparison with a mental model or explicit outcome (Keeton, Sheckley & Griggs, 2002). In *Mastery*, George Leonard describes the master's journey as a path that follows a recurring cycle of brief spurts of progress followed by dips of performance and a plateau of performance that is slightly higher than before where nothing seems to be happening until the next spurt. For many this path, particularly the long plateaus, proves frustrating and efforts to learn and develop are abandoned. Leonard advises, "To put it simply, you practice diligently, but you practice primarily *for the sake of practice itself*. Rather than being frustrated while on the plateau, you learn to appreciate and enjoy it as much as you do the upward surges. (1991: 17)

Exercise appropriate time framing. The learning spiral describes the process of learning as a recursive progression through the learning cycle over time. A key to learning success is the establishment of the appropriate time frame expectation for its achievement. The most common time framing error is the expectation of a "quick fix" and instant mastery. When it doesn't happen the learning effort is abandoned. Learning to control one's weight is perhaps the best example. To embark on a "Lose 10 pounds in 10 days" diet is to limit oneself to one turn through the learning cycle; while weight control is a long-term process with spirals of learning around

many issues (calorie intake, exercise, etc.) and many contexts. The inertia of old habits takes time to change and setbacks and failures are inevitable. By framing the learning process correctly as one that will happen with slow progress over time, quitting and fixed self attributions can be avoided.

Self-making and the development of interest. The spiral of learning is applicable not only to the development of specific skills and subject matter, but it also applies to self development in general. Self development proceeds through the identification and development of a person's interests. It occurs through an ongoing spiral of learning that refines, deepens and extends an initial interest in something. The spine of the learning spiral represents interest in James's spiral of interest-attention-selection which, as he says using another metaphor, is "the very keel on which our mental ship is built." We attend to those things which draw our interest and select those experiences which allow our interests to be explored and deepened in a continuing spiral of learning. John Dewey, James' colleague, describes the developmental aspects of this process, "I believe that interests are the signs and symptoms of growing power. I believe that they represent dawning capacities ... showing the state of development which the child has reached (and) the stage upon which he is about to enter" (1897, p. 79). To trust these signs of growing power and nurture the growth of one's interests is to follow the learning way.

Learning Identity

A learning identity lies at the heart of the learning way. People with a learning identity see themselves as learners, seek and engage life experiences with a learning attitude and believe in their ability to learn. Having a learning identity is not an either-or proposition. A learning identity develops over time from tentatively adopting a learning stance toward life experience, to a more confident learning orientation, to a learning self that is specific to certain contexts and ultimately to a learning self-identity that permeates deeply into all aspects of the way one lives their life. This progression is sustained and nurtured through growth producing relationships in one's life.

In ELT the concept of learning identity is based on the works of Carl Rogers and Paulo Freire. For both of these foundational scholars of experiential learning, people who see themselves as learners are those who trust their direct personal experiences and their ability to learn from them. Their primary focus is not on immediate performance or goal achievement but on the ongoing process of learning from these experiences. Instead of desiring some fixed goal, they prefer the excitement of being in the process of potentialities being born.

In his classic paper on how values are learned Carl Rogers emphasized the central role of experiencing in the learning process of the mature person: "He uses his experiencing as a direct referent to which he can turn in forming accurate conceptualizations and as a guide to his behavior." The process of learning values is, "fluid and flexible...highly differentiated...the locus of evaluation is within the person... There is also involved in this valuing process a letting oneself down into the immediacy of what one is experiencing, endeavoring to sense and to clarify all its complex meanings." (1964, p.163-164) Echoing William James' radical empiricism, he emphasizes that experiencing includes not only direct sensations and emotions but prior concepts: "For there is involved in the present moment of experiencing the memory traces of all the relevant learnings from the past. This moment has not only its immediate

sensory impact, but it has meaning growing out of similar experiences in the past” (p.164). He contrasts this approach of a mature learning person with fixed values formed through introjections acquired in youth in order to please loved ones: “These conceived preferences are either not related at all, or not clearly related, to his own process of experiencing. Often there is a wide discrepancy between the evidence supplied by his own experience and these conceived values. Because these conceptions are not open to testing in experience, he must hold them in a rigid and unchanging fashion” (162).

In a very different context, Paulo Freire also has emphasized the critical role that learning centered on one’s own personal experience plays in forming a learning identity. In *Pedagogy of the Oppressed* he describes his literacy work with Brazilian peasant farmers helping to liberate them from a self-identity formed through internalized oppression, the incorporation and acceptance by individuals within an oppressed group of the prejudices against them—“So often do (the oppressed) hear that they are good for nothing, know nothing and are incapable of learning anything—that they are sick, lazy and unproductive—that in the end they become convinced of their own unfitness” (1970, p.49). His method for achieving the personal and social transformations necessary to escape this negative, fixed self-identity was to facilitate the creation of critical consciousness in these farmers through his version of the experiential learning cycle which he called *praxis*, “reflection and action on the world in order to transform it.”

Freire argues that traditional education also promotes a form of internalized oppression and a non-learning identity. It is based on a “banking concept” where all-knowing teachers deposit ideas in students’ minds to be received uncritically, mechanically memorized and repeated. He offers the alternative of “problem-posing education” that empowers a learning self-identity. It is based on a democratic relationship between student and teacher that begins with the here and now experience of students’ lives and encourages the *praxis* of critical reflection and action to improve their lives.

Fixed vs. Learning Identity. If there is a starting point for learning from experience it must be in the belief that I *can* learn and develop from my life experiences. In our many years of sharing results from the KLSI with thousands of people, we have discovered to our surprise that not only do most people not understand their unique way of learning; many have not thought about what learning is and themselves as learners. More people than we imagined do not think of themselves as learners at all and have what psychologist Carol Dweck calls a “fixed” view of themselves, in varying degrees believing that they are incapable of learning. At the extreme, if a person does not believe that they can learn they won’t. Learning requires conscious attention, effort and “time on task”. These activities are a waste of time to someone who does not believe that they have the ability to learn.

Carol Dweck (Molden & Dweck, 2006) has studied the “lay theories” that people hold about themselves and others. In particular she and her colleagues have examined the differences between those who see their abilities and attributes as fixed and static and those who believe that they can incrementally learn and change themselves. Those individuals who believe that they can learn and develop have a *learning identity*. The learner faces a difficult challenge with a “mastery response” while the person with a fixed identity is more likely to withdraw or quit. Learners embrace challenge, persist in the face of obstacles, learn from criticism and are inspired

by and learn from the success of others. The fixed identity person avoids challenge, gives up easily, avoids criticism and feels threatened by the success of others. Not surprisingly, students with a learning identity, regardless of their tested intelligence, are more successful in school than those with a fixed identity.

It is possible to develop a learning identity. Research studies have shown that educational interventions can influence the development of a learning identity. Blackwell, Trzesniewski and Dweck found that eight 25 minute classes for 7th graders focused on the message that “learning changes the brain by forming new connections and that students are in charge of this process” (2007:254) led to increased classroom motivation and reversed a decline in grades experienced by the control group. Similarly, Good, Aronson and Inzlicht (2003) found that an incremental learning intervention led to significant improvements in adolescents’ achievement test scores and Aronson, Fried, and Good (2002) found that such teaching led to higher grades among college students.

Another example in higher education has focused on the difficult problem of mathematics anxiety and the sense of inferiority many students feel when required to take remedial mathematics education. Hutt (2007) implemented an experiential “learning to learn” course focused on transforming students’ math learning identity from one of anxious inferiority (“I don’t do math”) to one of confident self efficacy (“I can totally do math”) as well as improving students’ math learning performance in developmental mathematics courses. Results from this research showed that the experiential course content and the teachers’ conscious attention to unconscious processes in the learning space, combined with the students’ reflections on their learning experiences and self talk, had a positive impact on learning. Students’ mathematics anxiety was reduced, with students in the course feeling safer, more confident and efficacious about themselves as learners. Students in the “learning to learn” course performed a letter grade better than controls in their developmental math course. Students’ learning style preferences played an interesting role in the findings. Typically in mathematics courses, students with an abstract “thinking” learning style preference, which tends to match that of their instructor’s teaching style, perform better than students with other learning styles. This learning style difference was erased for students in the experiential course where students of all learning style preferences earned better grades than controls. Hutt maintains that change from a fixed to learning self-identity requires a safe learning space characterized by unconditional positive regard (Rogers, 1951) from the teacher. This space reduces defensive behavior and allows persons to experience themselves as learners in a new way.

Becoming a learner, someone who can say with confidence, “I am a learner” is not accomplished overnight. One’s self-identity is deeply held and defended against experiences that contradict it. For the vast majority of us, our self-identity is a combination of fixed and learning beliefs. We may feel that we are good at learning some things like sports and not good at others like mathematics. Dweck and her colleagues argue that lay theories are domain specific, e.g. one can believe that intelligence is fixed and morality is learned (Levy, Plaks, Hong, Chiu, & Dweck, 2001). Every success or failure can trigger a reassessment of one’s learning ability; thus, learning identity is continuously reformulated through experience.

Lifelong Learning Strategies: Learning Identity

Certain characteristics reinforce a fixed self (negative self-talk, avoidance of risk and failure, and being threatened by the successes of others), whereas others build a learning self (trusting one's ability to learn from experience, seeking new experiences and challenges, persistence, learning from mistakes and using other's success as a source of learning). To develop your learning identity we suggest below some ways to overcome your fixed self characteristics and improve your learning identity characteristics, thus tipping the balance toward becoming a learner.

Trust the process of learning from experience. For both Paulo Freire and Carl Rogers it is embracing the process of learning from experience that tips the balance from a fixed to a learning self-identity.

A. Trust your experience - Place experience at the center of your learning process, making it the focal point of your choices and decisions. This does not mean that you shouldn't learn from experts or the experience of others since this advice is also part of your experience. The key is to own your choice of what you learn and validate it in your experience. When you do this you take charge of your learning and your life.

B. Trust the learning process - Avoid an excessive focus on the outcomes of immediate performance and focus instead on the longer term recursive process of learning by tracking your performance progress over time. Rarely is a single performance test a matter of life and death, and to treat it as such only reinforces a fixed identity. Every performance is an occasion for learning and improvement in future performances.

Reassess your beliefs about how you learn and what you are good at. It is important to consciously reflect on and choose how you define yourself as a learner. Often people are unaware of the way in which they characterize themselves and their abilities. Jim, one of respondents retells how he successfully freed himself from a fixed perception of self and embraced his new identity as a learner. Being primarily an active learner, he was hesitant about accepting a new position which required competency in abstract skills:

This was a dream job for any true Assimilator, but not for a 40 year old Accommodator who started early in this new career with "negative self-talk". Fortunately for me though, I am able to positively embrace change and learned that I do have intellectual flexibility. So I was able to take this opportunity and instead of generating pain, I was able to generate a bounty of knowledge for myself.

Monitor the messages you send yourself. Pay attention to your self-talk. Saying to yourself, "I am stupid." or, "I am no good at ..." matters and reinforces a negative fixed identity; just as saying, "I can do this" reinforces a positive learning identity. Beware of internalized oppression. Some of these messages are introjections from others that you have swallowed without careful examination.

Redefine your relationship to failure. No one likes to fail but failure is an inevitable part of doing something new. Thomas Edison provided a role model for the learning response to

failure when he said “Failure is the most important ingredient for success.” James Dyson, the inventor of the Dyson vacuum cleaner and founder of Dyson, Inc, sees Edison as a role model saying he “achieved great success through repeated failure. His 10000 failures pale in comparison to his 1093 US patents. Each one of Edison’s inventions, from the Dictaphone to the light bulb came from his inability to give up” (Yang, 2008, p. 28).

Failures can also help focus your priorities and life path on your talents and strengths. In her commencement address to the 2008 graduates of Harvard University, J. K. Rowling described the low period in her life after graduation, which was marked by failure on every front, and talked about its benefits: “...failure meant a stripping away of the inessential. I stopped pretending to myself that I was anything other than what I was, and began to direct my energy into finishing the only work that mattered to me. Had I succeeded at anything else, I might never have found the determination to succeed in the one arena where I believed I truly belonged. I was set free because my greatest fear had been realized and I was still alive, and I still had a daughter whom I adored, and I had an old typewriter and a big idea.” (Rowling, 2008, p.56)

Control emotional responses to learn from failure. Failures, losses and mistakes provoke inevitable emotional responses. Yet it is important to learn to control emotional reactions that block learning and feed into a fixed identity. Golfers who slam their club and curse themselves and the game after a bad shot lose the opportunity to coolly analyze their mistake and plan for corrections on the next one.

Balance your success/failure accounts. Most of us remember our failures more vividly than our successes. For example, as teachers both of us tend to focus on the one or two negative remarks in our course ratings and ignore the praise and positive reactions. “Negative experiences have lasting negative effects *primarily* when they affect an individual’s beliefs” (Blackwell, Trzesniewski, & Dweck, 2007, p. 259-260). Sometimes it is useful to make an inventory of learning strengths and successes to balance your accounts.

Risk losing. Winning is not everything and too great a focus on it can block learning. Joel Waitzkin in *The art of learning* provides a handbook of his meta-cognitive learning based on his process of becoming first a chess master and then a martial arts champion. He emphasizes the importance of losing in order to learn how to win:

If a big strong guy comes into a martial arts studio and someone pushes him, he wants to resist and push the guy back to prove that he is a big strong guy. The problem is that he isn’t learning anything by doing this. In order to grow, he needs to give up his current mindset. He needs to lose to win. The bruiser will need to get pushed around by little guys for a while, until he learns to use more than brawn. William Chen calls this *investment in loss*. Investment in loss is giving yourself to the learning process. (Waitzkin, 2007, p. 107).

Learning Relationships

ELT draws on Lev Vygotsky’s socio-cultural theory of development to describe learning as a social process. ELT is process of knowledge creation by which social knowledge is created

and recreated in the personal knowledge of the learner. All learning is, at some point, rooted in shared meanings and knowledge that is transformed by the individual. Vgotsky's (1981) 'general genetic law of cultural development' explains the distinction between interpersonal and intrapersonal aspects of learning. The theory suggests that learning occurs first between people in an environment of social exchange and then within an individual as he or she makes sense of the interaction. The first exchange is laden with socio-cultural artifacts whose meanings are the products of our human history. These artifacts, such as language and number systems, provide tools for learning and are simultaneously reproduced through the social process. The second level of interpretation allows for individual agency in making sense of one's perceptions about the environment. In this way, learning is social not only in terms of human interaction, but also in terms of taking place in a socio-cultural context which offers cognitive artifacts for use in the learning process.

The socio-cultural approach to experiential learning places primary importance on learning relationships in the zone of proximal development. ELT defines learning relationships to be connections between one or more individuals that promote growth and movement through the learning spiral, ultimately inspiring future learning and relationship building. A connection is constituted by an interaction or series of interactions, which build toward a deeper relationship. Similar to Fletcher and Ragins' (2007) description of the development of a mentoring relationship through a series of small 'episodes,' learning relationships evolve as learning interactions increase in quality and frequency. Each interaction carries with it a sentiment, or emotional charge, which sets the tone for learning. Interactions characterized by compassion, respect and support build the trust and positive emotional resources necessary to create space for learning – even when learning is challenging.

Hunt (1987) suggests that a learning spiral is shared between individuals in human interaction. People relate to one another in a pattern of alternating 'reading' and 'flexing' that mirrors the experiential learning process. When one person is *reading* – receiving feedback (CE) and formulating perceptions (RO) – the other person is *flexing* – creating intentions based on those perceptions (AC) and acting on them (AE). As the exchange continues, their modes of experiencing shift back and forth. However, many interactions take place without mindful awareness of perception and intention creating a sequence of feedback and action which bypasses key steps in the learning process. Those who seek to support the learning process, such as counselors and therapists, can activate modes of experiencing in others by asking key questions that draw out different learning responses (Abbey, Hunt, & Weiser, 1985).

Interactions are the building blocks of a relationship. In relational-cultural theory (RCT), Miller & Stiver (1997) suggest that relationships that foster growth are formed through a series of interactions that are characterized by mutual empathy and empowerment. These interactions, or connections, need not always be positive, but they must include reciprocal engagement of both thought and emotion. Our research suggests that there is no minimum number of interactions for a learning relationship to take form. When asked who has recently impacted their learning growth and development, some learners told stories of a recent acquaintance making a positive impact on their learning journey. Others, however, were impacted by long-standing, close relationships with individuals such as a spouse, sibling, or mentor. What was common to all of the stories is that learners expressed a baseline level of positive feelings or perceptions of the

other, even when the content of the interaction was not positive. According to RCT, it is this tone that arises from mutual empathy and empowerment, and creates the conditions for mutual growth. Under these conditions, individuals experience an increase in their vitality; ability to take action; clarity about themselves and their relationship; sense of self-worth; and desire to form more connections (Miller & Stiver, 1997).

The desire to form future connections is a theme in Dewey's distinction between good experience and bad experience. He held that good experience carries forward into new experiences whereas bad experience cuts off future experience in much the same way abuse causes a child to withdraw. This also holds true for relationships. As suggested by RCT, learning relationships inspire a learner to seek new experience and build new relationships. One of our interviewees, Cynthia, provided an example of generative power of learning relationships. She shared a story of a friend, Alexis, who helped her make sense of being cut from an applicant pool for a position. The conversation with Alexis helped her transform an unfortunate circumstance into a learning experience and opened her to the possibility of future learning relationships:

“By sharing that with [Alexis] and talking about it, keeping it in an optimistic frame of mind and laughing, it’s like it started opening up all these other doors. Then two weeks later, this person sits next to me and gives me all that information that the job wasn’t what it looked like on paper. And then when I get off the plane she taps me on the shoulder, and asks if I have a business card. She said ‘keep in touch, you just never know.’ And that would have never happened [if it hadn’t been for my conversation with Alexis]. The conversation with Alexis left it in a very positive frame. If I had gone the other route, then when I sat down next to that woman, I might have had a very different conversation. And she wouldn’t have asked me for my business card and in turn given me hers.”

Learning relationships include not only the traditional teaching relationships that immediately come to mind, but opens the realm of relationships to any connection that occurs between two or more people. These relationships could be between peers, near peers, or even in reverse roles, such as parent-as-learner and child-as-teacher. In contrast to learning relationships (LR's), we acknowledge that certain relationships hinder lifelong learning in various ways. For example, some relationships reinforce a fixed identity and others create a codependency that does not allow for flexibility in the learning modes. Although this also impacts lifelong learning, a discussion of such dysfunctional relationships is beyond the scope of this chapter. Instead, we focus on learning relationships that promote and enhance one's ability to learn throughout a lifetime.

How Learning Relationships Support Learning. Learning relationships promote growth and movement through the learning spiral in a manner that resembles forms of social support, which have positive effects on physical and psychological well-being. Social support has been studied in many areas such as mental health (Buschmann & Hollinger, 1994), social networks (Ibarra, 1992), and mentoring (Kram & Hall, 1989). Langford, Bowsher, Maloney, & Lillis (1997) analyzed multiple conceptualizations of the social support and created a typology of four of its attributes. These attributes include emotional support (caring, empathy, and love),

instrumental support (tangible resources), informational support (help with problem-solving), and appraisal support (information for self-evaluation). This framework has been adapted to describe four ways learning relationships foster movement through the experiential learning spiral as expressed in interviews with adult learners in a master's degree program. Interestingly, the attributes correspond to the four primary learning modes in the experiential learning cycle (table 2).

 Insert Table 2 about here

Support for Feeling. When a LR provides support for the feeling mode of learning (CE), it enhances the affective dimension of learning by providing positive emotional or expressive benefits. This type of support puts learners in a positive emotional state that opens them to direct experience and bolsters their emotional well-being to be able to persist in the face of adversity. Frederickson's (1998) 'broaden and build' theory of positive emotions provides an explanation for this. *Broaden* in this theory refers to the notion that positive affect and positive emotion are higher order adaptive mechanisms that enable individuals to expand their attention, cognition and behavior response - particularly in comparison to the narrowing effects of negative affect. The psychological benefits of positive experiences are then stock-piled (*build*) to create a reservoir from which individuals draw in future circumstances. This enables learners to more fully grasp experience and provides them with the emotional fortitude to persist through challenge.

In an example from our research, Jeff described how an expression of care and support from his employer created the mental conditions for a powerful learning experience:

I asked for permission [to attend the training] from my boss's boss. She said 'Yes - we see you as an emerging leader in the organization and we want to support your growth so we'll find a way to get you there.' No one had ever told me what she told me at that point - that they wanted to invest in my development. So, it was that recognition and their willingness to send me to this training and pay for the expenses that I was primed to learn. I was feeling appreciated and valued. The mindset was right to learn.

Support for Reflecting. Feedback relevant to self-evaluation and identity construction offers support for the reflecting mode of learning (RO). This type of support encourages self-appraisal and enhances perceptual complexity. Of particular importance is the impact of this support on learning identity. Like other aspects of self-identity, learning identity is strongly influenced by one's important relationships. Learning identity is determined not by past learning successes and failures alone but by the self attributions about these successes and failures that a person makes. These attributions are influenced by learning relationships.

For example, Mary described her struggle to decide whether or not to bring up a negative dynamic she observed emerging in a workgroup. She was concerned that she was over-thinking the situation, based on feedback she'd received in the past of others saying "*quit thinking about*

it so much.” She wrote about the situation in a class paper and the feedback she received prompted further reflection:

One of the things Professor Smith wrote in my paper, she said Divergers – because they tend to sit back – they do observe more and they are the type that sometimes will be the ones to bring that type of stuff up. And that actually made me feel a lot better.

This small amount of feedback enabled Mary to challenge an old self-concept that her dominant learning style was wrong or undesirable and replace it with a new understanding of herself as a learner. Evaluations or observations from others, particularly those in a role of authority, can influence learning identity in unexpected and subtle ways. Dweck (2000) has shown that teachers who reward students for successful learning by praising them for being “smart” actually promote a fixed identity and less expenditure of study effort (“I don’t need to study because I am smart.”). On the other hand, teachers who praise effort promote persistence in the face of adversity and resilience to failure in the learning process.

Support for Thinking. Some LR’s offer new ways of thinking, conceptualizing, or solving problems. These LR’s offer support for the thinking mode of learning (AC) and develop symbolic complexity and reasoning capability in the learner. Vygotsky’s (1978) ‘zone of proximal development’ holds that other people are fundamental to cognitive growth and development. Specifically, ZPD refers to the potential for learning that exists between a learner and someone who is more capable. A learner who cooperates with someone slightly more advanced in an area will be able to perform that cognitive function alone one day. Likewise, Lave and Wenger’s (1991) situated learning theory suggests that learning occurs in a social context as a newcomer moves toward central participation in a community of practice. Participation within the structure of social activity locates the newcomer nearest those who are most influential in their learning – their peers, near-peers, and, finally, their masters. The opportunity to engage with others to problem-solve and complete tasks necessary for the operation of the community creates the conditions for learning to occur.

One learner explained how her more experienced supervisor helped her trouble-shoot a sale:

There was a deal I was working on with a client and I hit a couple snags where situations came up that I didn’t know what to do with them. I went to my boss and said, ‘I’ve hit a wall. I’ve done everything I knew I could do and now I’m at a point where I need your help and your expertise.’ He didn’t take it and do it. He coached me through the process, step by step. And rather than just saying we need to do x, y, and z to solve the problem, he asked why is this happening?... Because of his assistance, I was able to get it done and move forward. And now I have a little bit more experience and have a bit better sense of what happens in these situations.

In a group-based example, an international student explained her experience of drawing upon team members to help her verbalize her ideas and improve her command of the English language:

My way to contribute to a flourishing idea was to just throw words out there, because [my teammates] had experienced the same thing out in the [field]. Somebody would say 'yea, Gloria, that makes sense' and they would crystallize the idea. And that was my way to have them verbalize what I was thinking. That was my mechanism of putting together how I would speak out that which I had in myself. And I think that played a double role for me because it helped me and helped the group as a whole to [analyze the] data.

Support for Doing. Support for the 'doing' mode of learning can be described as instrumental in that this type of support provides tangible resources that move learners to action. These relationships help learners perform, experiment, and take risks. Literature on mentoring suggests that 'instrumental' support is related to performance and promotion outcomes, as opposed to other benefits of mentoring outcomes such as psychosocial growth (Ibarra, 1992). Examples of such resources provided by learning relationships include financial assistance to participate in formal education programs, information about new learning opportunities, and technological advice.

As an illustration, we return to our story of Jeff. In the previous section, his boss's emotional support changed his affective state in a manner that opened him up to learning. However, the manner in which he came to know about the training opportunity is an example of support for doing:

I was flying back to Dallas from Los Angeles last August and met this guy on a plane who was sitting next to me. He was an OD consultant and turned out to be my neighbor in Dallas. He said 'have you ever heard of Appreciative Inquiry?' We talked about it during the plane ride and he [suggested] we go out for lunch when we got back to Dallas. And we did, a week later. He told me all about his consulting work in AI and by that point I was like 'wow, this really has a lot of potential.' He said he was doing this training in DC in a few weeks with another big AI practitioner through the National Training Laboratories. I said I don't think my organization can pay to send me there. It's \$3,000. He said just ask.

In another example, Brian's brother provided support for doing both by helping him select courses and by giving him money to attend a semester of class when he lost his job:

My brother has always been an enabler by saying 'Brian, you should continue with your education. People can take anything they want from you, but they can't take your education.' [When I decided to go back to school at age 38, I asked for his help because he had been a Dean for years.] He drove from Chicago to Pittsburgh and said 'ok, here's the game plan. You're going to take this class, that class, and that class. Drop this. Go over here and move on this. Report back, we'll get together next year and do it again.'

Three years later when Brian needed financial support to continue on to his master's degree, his brother said "you've gotten a fellowship award in honor of our dad. In dad's memory, here's the money you need. Your bill will be paid. And it was paid, which was very affirming."

Although four types of support for learning are neatly described here, clear distinctions are not always present in lived experience because any given learning relationship can impart multiple forms of support. Nor is support for learning always intentional. For example, several learners described simply observing another person's behavior in a particular context as support for thinking because it offered them a new option for responding to a similar situation in the future. It is likely that informal learning relationships begin quite mindlessly – a sequence of feedback and action as Hunt put it – and become increasingly purposeful as the relationship deepens. A constellation of deep learning relationships forms a web of support for lifelong learning. Higgins & Kram (2001) called these constellations “developmental networks” in reference to the multiple individuals who offer developmental assistance to one's career.

Lifelong Learning Strategies: Learning Relationships.

Be aware of the learning identity contagion. Engage in relationships that support the development of a positive learning identity and avoid those people and situations that make you feel bad about yourself and incapable of learning. Learning identity may be contagious in the sense that those who have a learning identity tend to create relationships that stimulate it in others and those with fixed identities also act in ways that pass on fixed views of others. For example, those with a fixed versus incremental view of themselves show greater stereotype endorsement, perceive greater out-group homogeneity, and show greater intergroup bias and more biased behavior toward out-group members. They are more susceptible to the fundamental attribution error—believing that others actions indicate the “kind” of person they are; underestimating the influence of situational factors on their behavior (Levy et al., 2001). One of our respondents describes how this contagion may be passed on through generations:

I can recall stories of my Father describing a childhood in which he was shown very little love and was repeatedly told he was stupid. He was told that he wouldn't understand things. To this day, my Grandmother still says to him that she will tell him [confidential things] when he is old enough to understand. He is 63 years old. As a child, I remember my Father's dislike for any kind of game. On the rare occasion when he would play, he got angry and frustrated if he didn't do well and often quit. I now know that my father developed a “fixed” self-concept around learning. He was told he was stupid and wouldn't understand and therefore, in his mind, he was and didn't. He also criticizes educated people, which I can now link to the fixed self-identity. This fixed self- concept has implications beyond his attitude towards games – it impacted my learning development. As a child, I often heard my father ask me “what were you thinking?” when I did something wrong. I believe that contributed to the lack of confidence I have with my decision-making.

Appreciate the diversity of your interactions for their potential to contribute to your learning. Individuals who have diverse interactions are likely to experience support for all modes of learning through one or more relationships. Every connection holds the potential for learning and you never know who will positively contribute to your learning. Always be open to learning from others, regardless of their status relative to yours.

Realize your impact on others. Be mindful in your daily connections with others. You are also contributing to their learning experience.

Future Directions

We have reviewed the current state of research in experiential learning – the cycle of learning from experience, learning styles, learning spaces, the spiral of learning and development, learning identity and learning relationships – in order to provide a guide for living life by the ‘learning way.’ In conclusion, we offer directions for future research in lifelong learning. First, individuals encounter different learning challenges as they journey through life and career stages. Inquiry into this area could address such questions as *how do strategies for learning from experience vary in different life stages* and *what are the opportunities and pitfalls of learning in times of transition?* Second, a growing body of evidence demonstrates that individuals’ metacognitive processes – their thinking about their own thinking – impact their ability to effectively learn from experience (Kolb & Kolb, 2009). Further research into processes such as the effect of one’s learning identity on their openness to experience can help us better understand *how metacognition monitors and controls the learning process*. Drawing on the importance of interpersonal processes in developing a learning identity, a third research direction is *what role do relationships play in developing metacognitive capacity?* Finally, as alluded to earlier in the chapter, relationships can affect learning for better or for worse. Inquiry into individuals’ relationship constellations could help *learners recognize and manage relationships* that are dysfunctional for learning. This could also empower learners to build networks of *positive learning relationships in their multiple life contexts*. Each of these avenues of research builds upon ELT to enhance one’s ability to learn from life experience.

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Figure 1. Foundational Scholars of Experiential Learning



Figure 2. The Experiential Learning Cycle

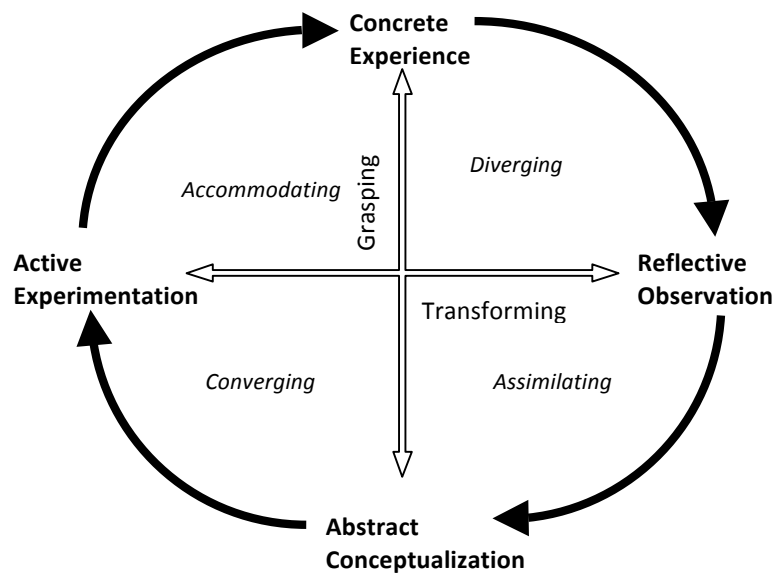


Figure 2. Experiential Learning Cycle

Figure 3. Nine Learning Styles and Learning Spaces

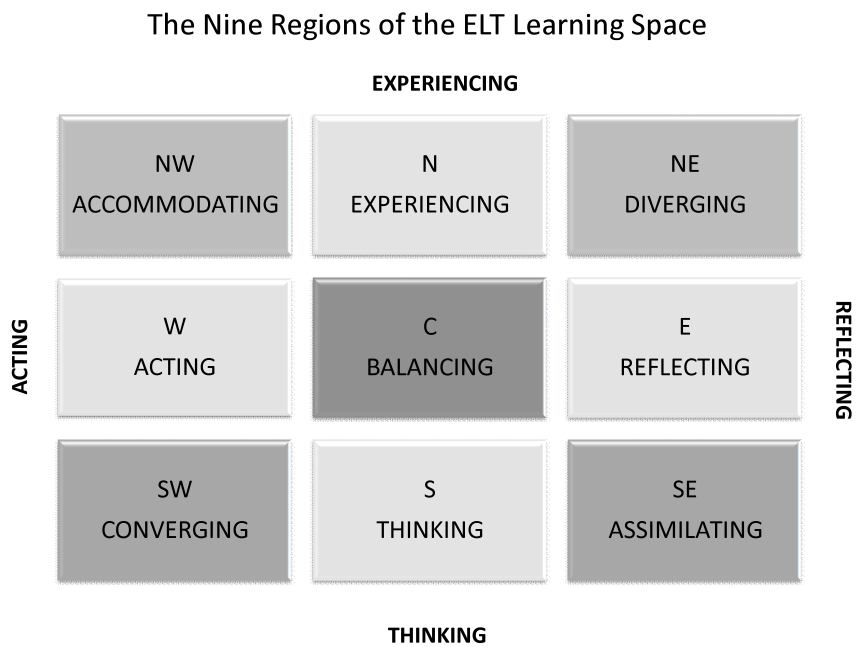


Figure 4. Buddha with Spirals of Insight



Figure 5. Experiential Learning Theory of Growth and Development

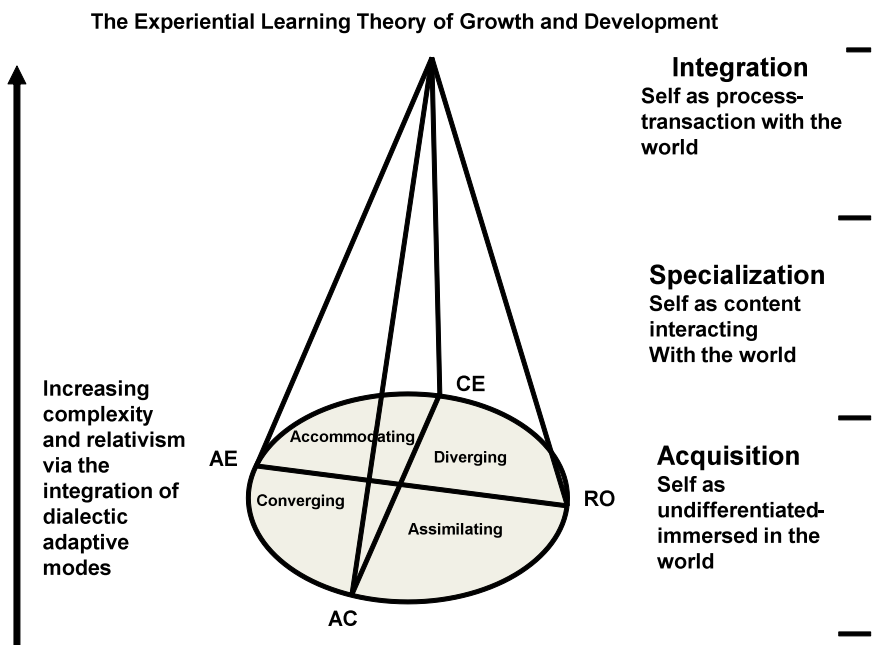


Table 1. ELT Stages of Development with Associated Levels of Consciousness and Modes of Adaptation

	<i>Direction of Development →</i>		
Stage of Development	Acquisition	Specialization	Integration
Level of Consciousness	Registrative	Interpretive	Integrative
Mode of Adaptation	Performing	Learning	Developing

Table 2. Support for Lifelong Learning Offered through Learning Relationships

Type of Support	Description / Function	Examples
Feeling/CE (Emotional/Expressive)	Imparts positive affect: caring, empathy, trust, respect, love, liking, confidence, appreciation	Willingness to listen and empathize; Offering words of support
Reflecting/RO (Appraisal)	Imparts information relevant to self-evaluation & construction of a learning identity	Providing feedback; asking about or sharing observations for reflection
Thinking/AC (Informational)	Assists in problem-solving	Helping to identify problems, analyze, conceptualize & reason.
Doing/AE (Instrumental)	Imparts tangible resources in support of future learning opportunities	Providing financial assistance; Providing information (a learning opportunity, book, etc)

Notes

¹Since its first statement in 1971 (Kolb, 1971; Kolb, Rubin & McIntyre, 1971), there have been many studies using ELT to advance the theory and practice of experiential learning. Since ELT is a holistic theory of learning that identifies learning differences among academic specialties, it is not surprising to see that ELT research is highly interdisciplinary, addressing learning and educational issues in many fields. An analysis of the 1004 entries in the 1999 ELT bibliography (Kolb, Boyatzis, and Mainemelis, 2001) shows 207 studies in management, 430 in education, 104 in information science, 101 in psychology, 72 in medicine, 63 in nursing, 22 in accounting and 5 in law. About 55% of this research has appeared in refereed journal articles, 20% in doctoral dissertations, 10% in books and book chapters, and 15 % in conference proceedings, research reports, and others. Research on ELT has increased dramatically in recent years. The 2009 Experiential Learning Theory Bibliographies (Kolb & Kolb, 2008a & b) include over 3000 entries.