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On Becoming an Experiential Educator: The Educator Role Profile

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Abstract

Background. Becoming an experiential educator involves **more than just being a facilitator or matching learning style with teaching style**. Experiential education is a complex relational process that involves balancing attention to the learner and to the subject matter while also balancing reflection on the deep meaning of ideas with the skill of applying them.

Aim. To describe a dynamic matching model of education based on **Experiential Learning Theory** and to create a self-assessment instrument for helping educators understand their approach to education.

Method. A dynamic matching model for **“teaching around the learning cycle”** describes four roles that educators can adopt to do so—**facilitator, subject expert, standard-setter/evaluator, and coach**. A self-assessment instrument called the **Educator Role Profile** was created to help educators understand their use of these roles.

Results. Research using the Educator Role Profile indicates that to some extent **educators do tend to teach the way they learn**, finding that those with concrete learning styles are more learner-centered, preferring the facilitator role; while those with abstract learning styles are more subject-centered preferring the expert and evaluator roles.

Conclusion. A model for the **practice of dynamic matching of educator roles, learner style, and subject matter** can aid in the planning and implementation of educational experiences. With practice, both learners and educators can develop the flexibility to

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use all educator roles and learning styles to create a more powerful and effective process of teaching and learning—in Mary Parker Follett’s words to, “. . . free the energies of the human spirit . . . the highest potentiality of all human association.”

Keywords

coach, dynamic matching model, educator roles, evaluator, experiential learning, experiential learning theory, facilitator, Kolb Learning Style Inventory 4.0, learning flexibility, learning relationships, learning style, standard-setter, subject matter expert, teaching style

As experiential, learner-centered education has gained widespread acceptance in the 21st century (Prince & Felder, 2006; Slavich & Zimbardo, 2012), increasing numbers of educators are considering or experimenting with experiential learning practices such as service learning (Bielefeldt, Dewoolkar, Caves, Berdanier, & Paterson, 2011; Brower, 2011), problem-based learning (Bethell & Morgan, 2011; Gurpinar, Bati, & Tetik, 2011), action learning (Francis et al., 2011), adventure education (Fuller, 2012; Timken & McNamee, 2012), and simulation and gaming (Schaefer et al., 2011; Shields, Zawadzki, & Johnson, 2011; Taylor, Backlund, & Niklasson, 2012).

Beyond these approaches commonly associated with experiential education, experiential learning theory (ELT) is being used extensively by experiential educators as a guide for practice in at least 30 fields and academic disciplines (A. Y. Kolb & Kolb, 2013, Chapter 7). The principles and concepts of experiential learning theory have been used widely to develop and deliver programs in K-12 education (McCarthy, 1996), undergraduate education (Mentkowski, 2000), and professional education (Boyatzis, Cowen, & Kolb, 1995; Reese, 1998).

In simulation and gaming work, debriefing has become increasingly important to enhance learning for game participants. Crookall (2010) emphasizes that “learning comes from the debriefing, not from the game. Debriefing is the processing of the game experience to turn it into learning” (p. 907). Since Donald Thatcher’s (1990) foundational article on debriefing using the experiential learning cycle, gaming educators have structured debriefing to help learners reflect on their experiences and observations in the game, share them with others, crystallize conclusions, and generalize implications for other settings.

The journey to become an experiential educator can be challenging, surprising, frustrating, and ultimately rewarding as the following examples illustrate:

- One teacher said, “Actually, teaching was easier before I learned about experiential learning. My main focus was to collect and organize my course material and present it clearly. I had never thought much about how the students were reacting and their thoughts about the material.”

- A gaming educator stressed, “. . . the courage to let the simulation flow, whether the students are making a mess of it or not, or making wrong or unwise decisions. He or she must learn not to interfere . . . It should be said from experience that this role, which combines that of manager/organizer, facilitator, and learner, is a very difficult one to assume. It can, in the early stages . . . be very threatening but it is, in the end, very effective and fulfilling” (Thatcher, 1990, p. 271).
- An experienced teacher reported, “I was beginning to get really bored presenting the same material year after year. Experiential learning has opened up conversations with the students about their experience and ideas and now I am actually learning new things along with them.”
- A professor at university in the Middle East contacted us on our website saying that he had read the articles on experiential learning there and was seeking advice about how to apply these ideas in his university. He described how students and faculty alike followed the traditional lecture, memorize, and test process with little participation, questioning, or independent inquiry. “I worked up the courage to experiment with Dewey’s ideas about participation in my class, but to my dismay, after 20 minutes, I found myself drifting back into the lecture mode where students seemed more comfortable.”
- An organization behavior professor at an undergraduate college adopted a textbook based on experiential learning (Osland, Kolb, Rubin, & Turner, 2007) using the experiential exercises in it to experiment with teaching experientially. Initially, students were hesitant with the new format that involved students working in learning groups, discussing pre-class work in preparation for in-class exercises. However, as the semester progressed, the professor noticed that the students’ outlook dramatically improved. They became more engaged in the exercises. The professor noted, “I was able to act as their guide to learning the material, which they then took ownership of.” She describes students’ involvement in the experiential exercises as enabling them to more fully understand key concepts, such that sometime later, the students would recall the experiences and their learning with ease.

In this article, we propose a framework based on ELT (D. A. Kolb, 1984; A. Y. Kolb & Kolb, 2013) called the Educator Role Profile (ERP) that provides a holistic, dynamic, relationship-based approach to becoming an experiential educator. We begin with an analysis of prescriptions from the educational literature for the experiential educator, followed by a description of ELT and the ERP framework that shows how limitations of these prescriptions can be addressed. Next, the creation of the ERP self-assessment instrument is described along with psychometric reliability and validity data. Finally, we show how educators can use a dynamic matching model of teaching around the learning cycle, shifting their educator role to adapt to learning style and learning content.

Facilitation and Matching as Guides for the Experiential Educator

The educational literature offers confusing, contradictory, and misleading guidance for those who seek to change their role as an educator and become an experiential educator. In particular, both advocates and critics foster two widespread characterizations of experiential, learner-centered education that are inadequate:

1. Experiential education requires that the educator adopt a non-directive facilitator teaching style to help learners learn from direct experiences.
2. To be learner-centered requires matching teaching style with the learner's learning style.

Although both of these characterizations contain some truth, they offer over-simplified advice for those who wish to apply experiential learning principles in the complex, personal, and deeply human teaching/learning relationship.

The Experiential Educator as Facilitator

Experiential learning is often posed as a sharply contrasting approach to traditional education where a teacher is a subject matter expert who transmits information and knowledge to the student. This “outside-in” approach is contrasted with the “inside-out” approach of experiential learning that seeks to tap the internal interest and intrinsic motivation of learners and building on their prior knowledge and experience. The educator's role is to facilitate this process of “drawing out” (the root meaning of the word educate) by creating a hospitable safe space for learners to reflect on and make meaning from their experiences. Facilitators believe that learners can learn on their own and that their role is to remove obstacles and create conditions where learners can do so. Their role is not to instruct, provide answers and personal advice, or tell people what they should learn.

The process of facilitation has deep intellectual roots in the “trainer” role of Lewin's group dynamics training (see D. A. Kolb, 1984, Chapter 1), Carl Rogers' (1951) non-directive approach to counseling, and inductive approaches to teaching based on Piaget's constructivism (Prince & Felder, 2006). For example, Heim (2012) articulates the five basic principles of Rogers' approach and applied them to small group facilitation in the humanities:

- A *non-directive approach to leadership* that facilitates learners to take responsibility for their own learning.
- Setting a *growth promoting climate* that is psychologically safe.
- Non-judgmental *facilitation* that patiently accepts the group where it is.
- *Reflective listening* that restates what a person is saying in order to understand its meaning.
- *Positive regard* that values and respects the learners and their contributions.

Nonetheless, facilitation has been derisively characterized by critics of experiential learning as programs of “the blind leading the blind” led by “facipulators” who pursue hidden power agendas. The role of facilitator is often parodied with phrases like “What I hear you saying” or dodging questions with “What do you think?”

A more serious scholarly critique by Kirschner, Sweller, and Clark (2006) argues that minimal guidance techniques—discovery learning, problem-based learning, inquiry learning, constructivist learning, and experiential learning—are not effective educational strategies. Their argument is purely a cognitive one based on research on long- and short-term memory suggesting that “If nothing has changed in long term memory, nothing has been learned” (Kirschner et al., 2006, p. 77). They present guided learning as the most efficient way to enter information into long-term memory while minimal guidance techniques present a heavy working memory cognitive load that is detrimental to learning. Their cognitive critique of minimal guidance techniques is not particularly persuasive because they do not consider contemporary neuroscience research on learning that has a more positive view of the value of non-directive facilitation of active learning; such as Zull’s (2002, 2011) analysis of brain structure and the experiential learning cycle or research on the importance of episodic versus declarative memory (Knapp & Benton, 2006; Tulving, 1972, 1983).

More importantly, they do not consider an issue that advocates of experiential learning consider to be a major benefit of the facilitator approach to education: motivation to learn which answers the question, “Why should I learn this?” (McCarthy, 1996, 2000). The term “unguided learning” does not exactly convey the commitment and caring that many facilitators put into “turning students on” to learning. These shortcomings notwithstanding, the article reviews a number of empirical studies that lend support to the blind leading the blind characterization of facilitation. These studies show that novice and intermediate learners may lack the learning strategies and proper schemas to integrate new information into their prior knowledge and thus learn less in minimal guidance situations while high aptitude learners learn as much or more in the minimal guidance versus guided situations.

The simple notion that to become an experiential educator, one must become a non-directive facilitator who eschews lectures, evaluation, and advice is an oversimplification of the complexities of the educator/learner relationship. The techniques of facilitation such as debriefing learning experiences, drawing out and building on the prior knowledge of learners, and facilitating a climate of trust and open communication are, but one facet of a holistic process of learning from experience that also includes expert knowledge input, evaluation, and coaching on learning strategies.

Matching Teaching Style and Learning Style

Another over-simplified prescription for the would-be experiential educator is that they should match their teaching style and methods to the learning styles of the learner. With the emerging popularity of learner-centered education in the early 1970s, the concept of learning style became a popular way to recognize the uniqueness of the individual learner. This multi-dimensional learner uniqueness is evidenced by the fact

that, since Kolb coined the term in the late 1960s to distinguish styles of learning from experience from cognitive styles (D. A. Kolb, Rubin, & McIntyre, 1971), there are by now nearly 100 established learning style frameworks and assessments. They assess a wide spectrum of human individuality—cognitive styles, preferences for sense modalities, Jungian personality types, study strategies, instructional preferences, preferences for learning alone in groups, and so on. The theory base and research evidence for these different learning style frameworks vary widely. For these reasons, it is not a good idea to lump these distinct approaches together in one general concept of learning style as is the tendency of most contemporary reviewers. Scott, for example, decries this diversity of approaches to individuality in learning. “To speak of ‘learning styles’ is thus an attempt to shoehorn an eclectic mix of theories into one category in which they patently do not fit” (Scott, 2010, p. 6). She then proceeds to do exactly that in her critique of the ineffectiveness of the concept in general.

That being said, with the exception of the Kolb Learning Style Inventory (KLSI) based on ELT, the learning style models do share a couple of general characteristics. They see learning styles as fixed traits or personality characteristics. Scott, citing Dweck (2008), argues that this is an entity approach to ability that promotes stereotyping and labeling rather than a process approach that emphasizes developmental potential and contextual adaptation. Also, surprisingly, none are based on a comprehensive theory of learning. The dimensions of individuality that they assess are hypothesized to influence learning, but how the dimension connected to the learning process is not made explicit. An individual may prefer to work alone or in a group, but how is this preference related to learning?

Willingham (2005) provides an example of the problems that a trait-based learning style measure that is not related to a theory of learning faces with the matching teaching and learning style approach. The VAK measures individual differences in preferences for visual, auditory, and kinesthetic sense modalities. Although reliable individual differences exist in preference/ability for these modalities, “For the vast majority of education, vision and audition are usually just vehicles that carry the important information teachers want students to learn.” However, the process of learning usually involves storing information in memory in terms of meaning, independent of any modality. His review of studies that match sensory modality with instruction concludes, “We can say that the possible effects of matching instructional modality to a student’s modality strength have been extensively studied and have yielded no positive evidence.”

The idea that to be learner-centered means that educational methods should be tailored to meet the unique needs of the learner makes so much sense that research for these specific aptitude/treatment interactions or ATI’s predates the concept of learning style by many years beginning with Cronbach in 1957. Their comprehensive review of ATI research 20 years later (Cronbach & Snow, 1977) found few significant ATI’s which they attributed to inadequate treatments and methodologies. Nonetheless, researchers persisted in the ATI search and ultimately have identified at least one ATI that has been somewhat reliability replicated, namely, that high ability students perform better in low structure learning environments than in highly structured teaching

situations while the reverse is true for low ability students. They perform better in high structure versus low structure learning environments. However, some ambiguity exists in the ability/structure research as Kirschner et al. (2006) were able to argue that strong guidance was as beneficial as minimal guidance for high aptitude learners.

In a recent widely publicized article, Pashler, McDaniel, Rohrer, and Bjork (2008) apply the ATI methodology to assess evidence for the application of learning style concepts in educational practice. In fact, they devote most of the article to proper ATI research design and interpretation of regression interaction terms, including sections that review of ATI studies and PTI (personality/treatment interactions), both of which they begin by saying are “a separate issue from the validity of learning style measures” (Pashler et al., 2008, p. 113).

Their review of learning style research involved “scouring the literature,” which they describe as “vast” including “several thousand articles and dozens of books” for learning style articles which meet the ATI design and crossover interaction criteria they defined. Although their article is sub-titled concepts and evidence, their review of concepts is limited to publisher websites and marketing brochures rather than scholarly articles describing the many learning style frameworks. Screening research that met their criteria resulted in four studies—one with positive results (which they discounted for other reasons) and three that met the screening criteria, but reported insignificant crossover interactions. Two of the latter studies compared visual versus auditory modalities and one used the Felder Index of Learning Styles. They actually found one other study with positive ATI crossover interaction by Bostrom, Olfman, and Sein (1990) that used the KLSI showing that concrete learners performed better with analogical models while abstract learners performed better when trained with conceptual models. It is not clear why this positive study was only included in a footnote. They conclude the results of their rigorous screening by saying “these negative results, in conjunction with the virtual absence of positive findings, lead us to conclude that *any application of learning styles in classrooms is unwarranted*” (p. 112, emphasis added).

This sweeping conclusion is clearly unwarranted given the approach taken to evaluate the learning style literature. While their analysis does show the lack of any robust positive effect on performance of matching educational treatments with learning style, the learning style literature includes many other applications of learning style in the classroom. Critics including Perini and Silver (Varlas, 2010) argue that style assessments have other uses:

. . . In our experience, learning-style assessments have proven to be wonderful tools for promoting conversations about learning, building teachers’ and students’ metacognitive capacities, increasing student engagement, and helping teachers find hooks into content for struggling students. We’ve also found benefits for differentiation: teachers who assess their own and students’ styles are typically more willing and able to implement a wide variety of instructional strategies in their classrooms . . . Along with Bernice McCarthy and David Kolb, and supported by Robert Sternberg’s research, we’ve long argued that teaching to the full range of styles is far better and more consistently leads

to higher achievement across grade and content levels than confining students to a single style of instruction. (p. 2)

Strangely enough, even Pashler and colleagues (2008) seem to agree to some extent:

Furthermore, it is undoubtedly the case that a particular student will sometimes benefit from having a particular kind of course content presented in one way versus another. One suspects that educators' attraction to the idea of learning styles partly reflects their (correctly) noticing how often one student may achieve enlightenment from an approach that seems useless for another student. (p. 116)

They then go on to say,

There is, however a great gap from such heterogeneous responses to instructional manipulations—whose reality we do not dispute—to the notion that presently available taxonomies of student types offer any valid help in deciding what kind of instruction to offer each individual. (Pashler et al., 2008, p. 116)

Integrating Scientific Knowledge and Practical Experience

The apparent contradiction in the quotations above is puzzling. They say that it is “undoubtedly the case” that educators “correctly” notice and respond to learning style differences in their students, but say that learning style taxonomies do not “offer any valid help in deciding what kind of instruction to offer each individual.” Pashler gives one clue in an interview that is given to the *Chronicle of Higher Education* (Glenn, 2009):

Lots of people are selling tests and programs for customizing education that completely lack the kind of experimental evidence that you would expect for a drug. Now maybe the FDA model isn't always appropriate for education—but that's a conversation we need to have. (p. 1)

He as well as the other authors whom we have reviewed so far embrace a paradigm for educational improvement that is based on the randomized controlled trial “gold standard” of research in the natural sciences.

Yet the treatments in education are not uniform pills, but instruction carried out by unique teachers in relationship with equally unique students, influenced by a wide variety of contexts. The findings of scientific research must be implemented by educators integrating scientific knowledge and practical experience. Edelbring (2012) describes this process with a quotation from John Dewey (1929):

Dewey argues against educational science providing recipes to educators, and furthermore reinforces the artistry responsibility of the teacher to use available science in conjunction

with situational knowledge: “It is very easy for science to be regarded as a guarantee that goes with the sale of goods rather than as a light to the eyes and a lamp to the feet.” (p. 15)

... knowledge is therefore not aimed at being *directly* applied in practice, but interpreted and enriched by the person taking part of it. The richness is produced when readers (such as educators and other researchers) understand the results from both the perspective they were created in and from their own culture of practice. The perspective of the researcher and readers coincide towards a pragmatic end in an enriching process similar to the fusion of experiences of the author and reader in interpreting cultural understanding of texts (Gadamer, 1975, 2004). (p. 18)

Experiential Learning Theory

We have described the limitations of the facilitator role alone or teaching by matching teaching style and learning style as guides for becoming an experiential educator. Experiential Learning Theory (ELT) provides a comprehensive framework to guide the experiential educator in enhancing learning and development. The ELT concepts of the learning cycle and learning style suggest what might be called a dynamic matching model of “teaching around the learning cycle” where learners regardless of their style are sometimes matched with the learning activity and are sometimes challenged to stretch themselves to use a less preferred style. In this approach, educators must adapt their role to help learners move around the cycle—moving from Facilitator, to Subject Matter Expert, to Standard-Setter and Evaluator, and to Coach.

ELT draws on the work of prominent 20th century scholars—notably John Dewey, Kurt Lewin, Jean Piaget, Lev Vygotsky, William James, Carl Jung, Paulo Freire, Carl Rogers, and Mary Parker Follett (Figure 1). They all gave experience a central role in their theories of human learning and development, developing a holistic model of the experiential learning process and a multi-dimensional model of adult development. Several also played central roles in the development of inquiry methods that integrate scientific knowledge with practitioner experience as described above. William James and John Dewey founded the philosophy of pragmatism and Gestalt theorists Kurt Lewin and Mary Parker Follett developed action research.

ELT as described in *Experiential Learning: Experience as the Source of Learning and Development* (D. A. Kolb, 1984) is built on six propositions that are shared by these scholars.

1. Learning is best conceived as a process, not in terms of outcomes.
2. All learning is re-learning.
3. Learning requires the resolution of conflicts between dialectically opposed modes of adaptation to the world.
4. Learning is a holistic process of adaptation to the world.
5. Learning results from synergetic transactions between the person and the environment.
6. Learning is the process of creating knowledge.

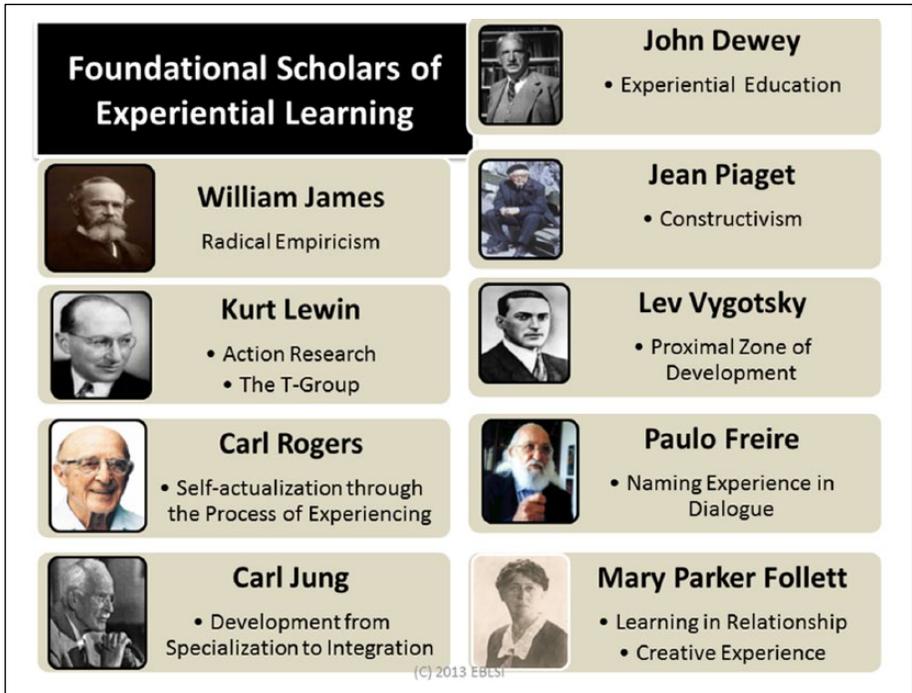


Figure 1. Foundational scholars of experiential learning.

Experience and the Learning Cycle

In order to appreciate the central role that experience plays in experiential learning, it is particularly important to understand the philosophical foundations of ELT in William James' philosophy of radical empiricism. James laid the groundwork for pragmatism by proposing radical empiricism as a new philosophy of reality and mind, which resolved the conflicts between 19th-century rationalism and empiricism as expressed in the philosophies of idealism and materialism. For James, everything begins and ends in the continuous flux and flow of experience. In short, experience is all we have—"we start with the supposition that there is only one primal stuff or material in the world, a stuff of which everything is composed . . . we call that stuff 'pure experience'" (James, 1912, p. 4). In this formulation, the duality between the mind and the physical world is resolved because both are experienced, but with different characteristics.

James may have been the first of many of the foundational ELT scholars to propose a central and widely known concept in ELT, the experiential learning cycle. Drawing on the foundational scholars, the experiential learning cycle has been formalized in ELT as a dynamic view of learning driven by the resolution of the dual dialectics of action/reflection and experience/abstraction. Learning is defined as "the process

whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience” (D. A. Kolb, 1984, p. 41). Grasping experience refers to the process of taking in information, and transforming experience is how individuals interpret and act on that information. 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). Learning arises from the resolution of creative tension among these four learning modes. This process is portrayed as an idealized learning cycle or spiral where the learner “touches all the bases”—experiencing (CE), reflecting (RO), thinking (AC), and acting (AE)—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. While the learning cycle describes an idealized stepwise progression around the cycle beginning with a concrete experience to reflection, conceptualization, action and back to another concrete experience; in reality, learners may proceed to engage the learning modes in different ways based on their learning style and context and educators may choose not to begin with a concrete experience.

The implication of the philosophy of radical empiricism for ELT and the experiential learning cycle is that it is not only the Concrete Experience mode of learning that is experiential; all modes of the learning cycle are experiences. Both modes of grasping experience—Concrete Experience and Abstract Conceptualization and both modes of transforming experience—Reflective Observation and Active Experimentation—are part of the experiential learning process. Many use the term experiential learning to refer to exercises and games used to involve students in the learning process. However, a classroom lecture may be an abstract experience, but it is also a concrete one, when, for example, a learner admires and imitates the lecturer. Likewise a learner may work hard to create an abstract model in order to make sense of an internship experience or experiential exercise. From the learner’s perspective, solitary reflection can be an intensely emotional concrete experience and the action of programming a computer can be a highly abstract experience. In their formulation of transformational teaching, Slavich and Zimbardo (2012) describe the multi-dimensional importance of experience in learning:

. . . experiential lessons provide students with an opportunity to experience concepts firsthand and, as such, give students a richer, more meaningful understanding of course concepts and of how they operate in the real world . . . they enhance the affective quality of the course content. This occurs both when students are engaged in solving problems that are part of the activities and when they are analyzing, sharing, discussing, and reflecting on their personal reactions . . . it can significantly improve students’ memory for concepts insofar as the information gets stored in autobiographical memory . . . experiential lessons have the ability to shape students’ beliefs about learning and about

the self . . . they can lead to significant personal insights, including a greater awareness of one's personally held perspectives—as well as an improved awareness of other people's experience—with the possibility to enhance these attributes through critical reflection. (p. 26)

Learning Styles and the Learning Cycle

Learning style describes the unique ways individuals spiral through the learning cycle based on their preference for the four different learning modes—CE, RO, AC, and 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. Learning style is not a fixed personality trait, but more like a habit of learning shaped by experience and choices—it can be an automatic, unconscious mode of adapting or it can be consciously modified and changed. The stability of learning style arises from consistent patterns of transaction between individuals and learning situations in their life. This process is called accentuation—the way we learn about a new situation determines the range of choices and decisions we see, the choices and decisions we make influence the next situation we live through and this situation further influences future choices. Learning styles are thus specialized modes of adaptation that are reinforced by the continuing choice of situations where a style is successful (D. A. Kolb, 1984).

The Kolb Learning Style Inventory 4.0 (A. Y. Kolb & Kolb, 2011, 2013) brings a new integration of learning styles with the learning cycle through the expansion of learning style types from 4 to 9 and the introduction of the concept of learning flexibility—the extent to which an individual adapts his or her learning style to the demands of the learning situation. The new learning cycle model integrates the styles around the learning cycle emphasizing that learning requires different styles at different stages of the learning process. Figure 2 illustrates the revised learning cycle model.

The nine styles as they move around the cycle are described below:

The Initiating style: Initiating action to deal with experiences and situations.

The Initiating style is characterized by the ability to initiate action in order to deal with experiences and situations. It involves active experimentation (AE) and concrete experience (CE).

The Experiencing style: Finding meaning from deep involvement in experience. The Experiencing style is characterized by the ability to find meaning from deep involvement in experience. It draws on concrete experience (CE) while balancing active experimentation (AE) and reflective observation (RO).

The Imagining style: Imagining possibilities by observing and reflecting on experiences. The Imagining style is characterized by the ability to imagine possibilities by observing and reflecting on experiences. It combines the learning steps of concrete experience (CE) and reflective observation (RO).

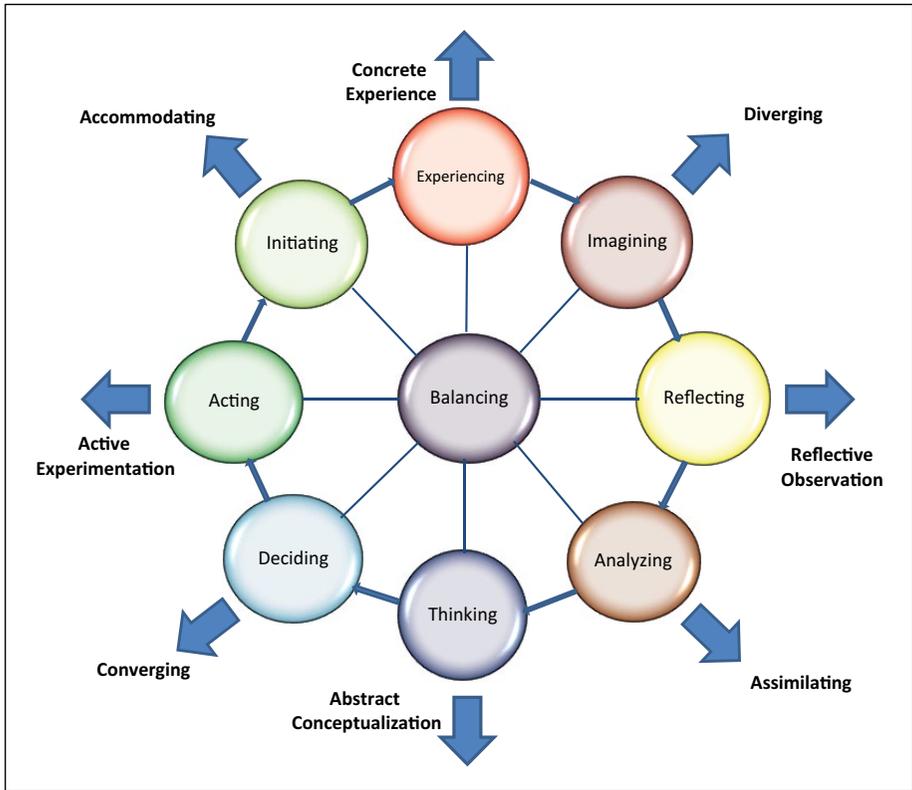


Figure 2. The nine learning styles and the four dialectics of the learning cycle.

The Reflecting style: Connecting experience and ideas through sustained reflection. The Reflecting style is characterized by the ability to connect experience and ideas through sustained reflection. It draws on reflective observation (RO) while balancing concrete experience (CE) and abstract conceptualization (AC).

The Analyzing style: Integrating ideas into concise models and systems through reflection. The Analyzing style is characterized by the ability to integrate and systematize ideas through reflection. It combines reflective observation (RO) and abstract conceptualization (AC).

The Thinking style: Disciplined involvement in abstract reasoning and logical reasoning. The Thinking style is characterized by the capacity for disciplined involvement in abstract and logical reasoning. It draws on abstract conceptualization (AC) while balancing active experimentation (AE) and reflective observation (RO).

The Deciding style: Using theories and models to decide on problem solutions and courses of action. The Deciding style is characterized by the ability to use theories and models to decide on problem solutions and courses of action. It combines abstract conceptualization (AC) and active experimentation (AE).

The Acting style: A strong motivation for goal directed action that integrates people and tasks. The Acting style is characterized by a strong motivation for goal directed action that integrates people and tasks. It draws on active experimentation (AE) while balancing concrete experience (CE) and abstract conceptualization (AC).

The Balancing style: Adapting by weighing the pros and cons of acting versus reflecting and experiencing versus thinking. The Balancing style is characterized by the ability to adapt; weighing the pros and cons of acting versus reflecting and experiencing versus thinking. It balances concrete experience, abstract conceptualization, active experimentation, and reflective observation.

These nine KLSI 4.0 learning styles further define the experiential learning cycle by emphasizing four dialectic tensions in the learning process. In addition to the primary dialectics of Abstract Conceptualization/Concrete Experience and Active Experimentation/Reflective Observation, the combination dialectics of Assimilation/Accommodation and Converging/Diverging are also represented in an eight-stage learning cycle with Balancing in the center. Thus, the Initiating style has a strong preference for active learning in context (Accommodation) while the Analyzing style has a strong preference for reflective conceptual learning (Assimilation). The Imagining style has a strong preference for opening alternatives and perspectives on experience (Diverging) while the Deciding style has a strong preference for closing on the single best option for action (Converging).

ELT as a Holistic Approach to Learning and Development

Educating is holistic. It is about developing the whole person. Educating the whole person means that the goal of education is not solely cognitive knowledge of the facts, but also includes development of social and emotional maturity. In ELT terms, it is about facilitating integrated development in affective, perceptual, cognitive, and behavioral realms. Rather than acquiring generalized knowledge stripped of any context, learning is situated to the person's life setting and life path (Lave & Wenger, 1991). John Dewey (1897) put it well, "I believe that education which does not occur through forms of life that are worth living for their own sake is always a poor substitute for genuine reality and tends to cramp and to deaden" (p. 7).

As a specialized learning style represents an individual preference for only one or two of the four modes of the learning cycle, its effectiveness is limited to those learning situations that require these strengths. Learning flexibility indicates the development of a more holistic and sophisticated learning process. The learning style types described above portray how one prefers to learn in general. Many individuals feel that their learning style type accurately describes how they learn most of the time. They are consistent in their approach to learning. Others, however, report that they tend to change their learning approach depending on what they are learning or the situation they are in. They may say, for example, that they use one style in the classroom and another at home with their friends and family. These are flexible learners.

Following Jung's theory that adult development moves from a specialized way of adapting toward a holistic integrated way, development in learning flexibility is seen as a move from specialization to integration. Integrated learning is a process involving a creative tension among the four learning modes that is responsive to contextual demands. Learning flexibility is the ability to use each of the four learning modes to move freely around the learning cycle and to modify one's approach to learning based on the learning situation. Experiencing, reflecting, thinking, and acting each provides valuable perspectives on the learning task in a way that deepens and enriches knowledge.

Experiential Learning in Relationship

In the midst of the multitude of educational theories, learning technologies, and institutional procedures and constraints, it is easy to lose sight of the most important thing—teaching is above all a profound human relationship. We can all think of teachers who have had a major impact on our lives and in most cases, this involved a special relationship where we felt recognized, valued, and empowered by the teacher. Parker Palmer (1997) describes the courage necessary for a teacher to fully enter into learning relationships with students as a willingness to expose one's inner world; to honor students as complex, relational beings; and to masterfully weave these worlds together with the course content. ELT suggests that educating is not something one does *to* students through implementation of a set of techniques. Rather, it is something educators do *with* learners in the context of meaningful relationships and shared experiences. Careful planning and structuring of student experiences is an important element of effective education. However, another important element is active participation in the learning process on the part of the educator. Many of the foundational scholars of experiential learning, especially Carl Rogers, Mary Parker Follett, Lev Vygotsky, and Paulo Freire, give a central place to the relationship between educator and learner in their theories.

Lev Vygotsky. While much attention has been given to the origins of experiential learning in the constructivism of Piaget, less attention has been given to its basis in the social constructivism of Vygotsky (Kayes, 2002). Piaget focused on the process of internal cognitive development in the individual, while the focus for Vygotsky was on the historical cultural and social context of individuals in relationship, emphasizing the "tools of culture" and mentoring by more knowledgeable community members. He is best known for his concept of the Zone of Proximal Development—a learning space that promotes the transition from a pedagogical stage, where something can be demonstrated with the assistance of a more knowledgeable other, to an expert stage of independent performance.

The key technique for accomplishing this transition is called "scaffolding." In scaffolding, the educator tailors the learning process to the individual needs and developmental level of the learner. Scaffolding provides the structure and support necessary to progressively build knowledge. The model of teaching around the cycle described

above provides a framework for this scaffolding process. When an educator has a personal relationship with a learner, he or she can skillfully intervene to reinforce or alter a learner's pattern of interaction with the world. This approach requires competence in relating to learners in complex ways—ways that help them feel, perceive, think, and behave differently. These ways of relating are characterized in the multiple roles an educator plays in relationship to the learners and the object of the learning endeavor. Highly effective educators do not rely solely on one role (A. Y. Kolb & Kolb, 2013). Rather, they organize their educational activities in such a manner that they address all four learning modes—experiencing, reflecting, thinking, and acting. As they do this, they lead learners around the cycle; shifting the role they play depending on which stage of the cycle they are addressing. In effect, the role they adopt helps to create a learning space designed to facilitate the transition from one learning mode to the other as shown in Figure 3. Often this is done in a recursive fashion, repeating the cycle many times in a learning program as the learner gains secure footing at their current level, to use a scaffolding metaphor. The cycle then becomes a spiral with each passage through the cycle deepening and extending learners' understanding of the subject.

Mary Parker Follett. In *Creative Experience* Mary Parker Follett (1924) describes how we can meet together in experience to evoke learning and development in one another:

. . . the essence of experience, the law of relation, is reciprocal freeing: here is the “rock and the substance of the human spirit.” This is the truth of stimulus and response: evocation. We are all rooted in that great unknown in which are the infinite latents of humanity. And these latents are evoked, called forth into visibility, summoned, by the action and reaction of one on the other. All human interaction should be the evocation by each from the other of new forms undreamed of before, and all intercourse that is not evocation should be eschewed. Release, evocation—evocation by release, release by evocation—this is the fundamental law of the universe . . . To free the energies of the human spirit is the high potentiality of all human association. (p. 303)

Anticipating Norbert Weiner's discovery of cybernetics by many years, she describes how we co-create one another by circular response. “Through circular response, we are creating each other all the time . . . Accurately speaking the matter cannot be expressed by the phrase used above, I-plus-you meeting you-plus-me. It is I plus the-interweaving-between-you-and-me meeting you plus the-interweaving-between-you-and-me, etc., etc.”

Hunt (1987) applies this idea to ELT suggesting that a learning spiral is shared between individuals in human interaction. People relate to one another in a pattern of alternatively “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, both parties alternate between reading and

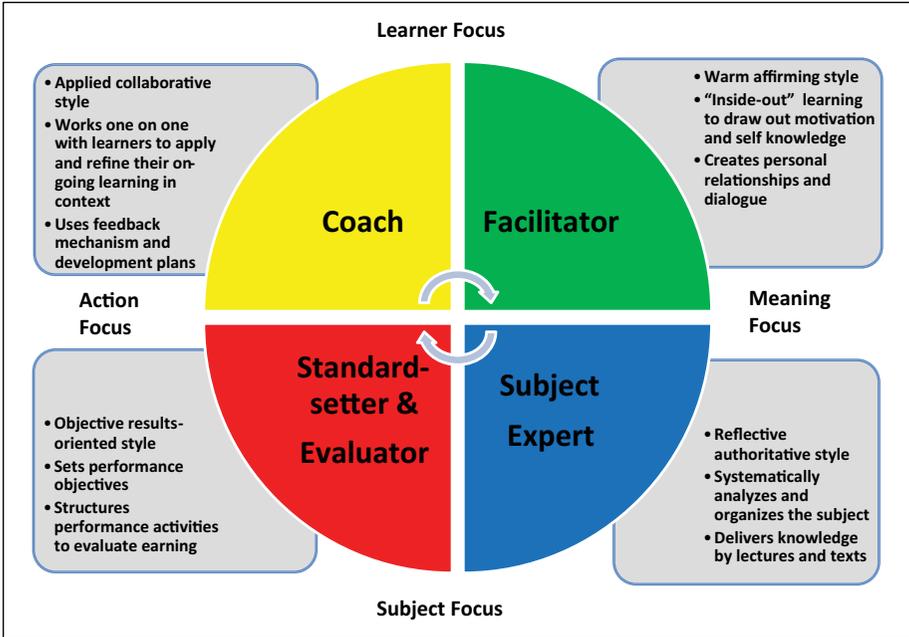


Figure 3. Educator role profile.

flexing. On the basis of the actions that they take, educators can activate different learning modes in students based on their patterns of reading and flexing (Abbey, Hunt, & Weiser, 1985). This is the foundation of the concept of educator role in ELT.

The Educator Role Profile

The Educator Role Profile (ERP) was created to assist educators in their application of the ELT concepts of the learning cycle and learning style in the dynamic matching model of teaching around the learning cycle. In our interviews and observations of highly successful educators, we find that they tend to organize their educational activities in such a manner that they address all four learning cycle modes—experiencing, reflecting, thinking, and acting; using some form of the dynamic matching model in the roles they adopt. The ERP describes four common educator roles—Facilitator, Subject Expert, Standard-Setter/Evaluator, and Coach. To help learners move around the learning cycle, educators must adapt their role—moving from Facilitator, to Subject Matter Expert, to Standard-Setter/Evaluator, and to Coach as shown in Figure 3.

- **The Facilitator Role.** When facilitating, educators help learners get in touch with their personal experience and reflect on it. They adopt a warm affirming style to draw out learners’ interests, intrinsic motivation, and self-knowledge.

They often do this by facilitating conversation in small groups. They create personal relationships with learners.

- **The Subject Expert Role.** In their role as subject expert, educators help learners organize and connect their reflections to the knowledge base of the subject matter. They adopt an authoritative, reflective style. They often teach by example, modeling and encouraging critical thinking as they systematically organize and analyze the subject matter knowledge. This knowledge is often communicated through lectures and texts.
- **The Standard-Setter/Evaluator Role.** As a standard-setter and evaluator, educators help learners master the application of knowledge and skill in order to meet performance requirements. They adopt an objective results-oriented style as they set the knowledge requirements needed for quality performance. They create performance activities for learners to evaluate their learning.
- **The Coaching Role.** In the coaching role, educators help learners apply knowledge to achieve their goals. They adopt a collaborative, encouraging style, often working one-on-one with individuals to help them learn from experiences in their life context. They assist in the creation of personal development plans and provide ways of getting feedback on performance.

Most of us adopt each of these roles to some extent in our educational and teaching activities. This is in part because these roles are determined by the way we resolve fundamental dilemmas of education. Do we focus on the learner's experience and interest or subject matter requirements? Do we focus on effective performance and action or on a deep understanding of the meaning of ideas? All are required for maximally effective learning. Individuals, however, tend to have a definite preference for one or two roles over the others; because of their educational philosophy, their personal teaching style, and the requirements of their particular educational setting including administrative mandates and learner needs. The ERP assessment instrument is designed to help educators sharpen their awareness of these preferences and to make deliberate choices about what works best in a specific situation.

Development of the ERP Self-assessment Instrument

Most previous research on individual differences in educational approaches to education has focused on the concept of teaching style, conceived of as personal characteristics and teaching methods in classroom teaching (e.g., Grasha, 1994; Kember & Gow, 1994; Trigwell & Prosser, 1996). Two studies in particular have focused on ELT and developed measures of teaching modes that correspond to the four learning modes of the learning cycle. Wheeler and Marshall (1986) develop the Trainer Type Inventory and Rudowski (1996) creates the Teaching Style Inventory. Both instruments were based on Svinicki and Dixon's (1987) model of teaching methods related to the four ELT learning modes.

The ERP, on the other hand, uses the term "educator" to broaden the concept of teaching to other life roles that involve education. When we think of educators, we

Table 1. Examples of Beliefs, Goals, Styles, and Practices Associated With Educator Roles.

Educator role	Beliefs: “Learning occurs best when . . .”	Goals: “My students develop . . .”	Style: “As a teacher, I prefer to be . . .”	Practices: “Instructional forms I often use include . . .”
Facilitator	It begins with the learners experience	Empathy and understanding of others	Creative, warm, affirming	Class discussion, journals, personal stories
Expert	New concepts are integrated into existing mental frameworks	Analytic and conceptual abilities	Logical, authoritative	Lectures, readings, written assignments
Evaluator	Clear standards and feedback are provided	Problem-solving skills	Structured, outcome-oriented, objective	Laboratories, graded homework assignments
Coach	It takes place in a real-life context	Ability to work productively with others	Applied, collaborative, risk-taking	Field projects, role-plays, simulations

immediately think of teachers and educational institutions, but educating is an activity that occurs in nearly all life situations. Erik Erikson goes so far as to say that we humans are a “teaching species,” distinguished by the fact that we parent and teach our young for a long period of time and create societies that share knowledge and cultural values through education. We play educational roles in educational institutions as teachers and administrators; in organizations as leaders, managers, and human resource specialists; and in our personal lives as parents, spouses, and friends. While the items in the ERP were created with more formal educator roles in mind, they also apply more generally to all relationships at work and in personal life.

To emphasize the relational perspective of experiential learning, the ERP goes beyond individual teaching style to define educational roles. The educator role framework shifts the educational paradigm from the educator acting *on* the learner to the educator acting *with* the learner. Because the learner and educator are intertwined, the teacher must behave in ways that elicit or respond to the desired learning mode of the students. Educator roles do not directly correspond to the four learning modes, but are defined as bridging strategies between learning modes. Just as students can gain proficiency in integrating multiple learning modes, educators can gain flexibility in enacting the four teaching roles.

Educator roles, as defined in the ERP self-report instrument, not only include individual teaching style, but also include beliefs about teaching and learning, goals for the educational process and instructional practices (see Table 1).

Item generation. On the basis of a review of the education literature, we created a total of 96 items on a 7-point Likert-type scale—six items in each of the four roles for

beliefs, goals, style, and practices. The resulting questionnaire was administered to a group of 50 human resource specialists. Cronbach's alpha was used to select the 15 items that best represented the each of the four roles. The resulting alpha coefficients for the four roles were coach (.84), facilitator (.83), subject expert (.82), and standard-setter/evaluator (.91).

Instrument development. The ERP instrument was formatted in a forced-choice paired comparison series of 30 items. Each item comparison anchor corresponds to one of four educator roles—coach, facilitator, expert, and evaluator; resulting in 15 anchor items for each educator role. Item pairs were created by selecting items from above Cronbach's alpha analysis to pair each role to every other role 3 times. Pairs were matched on Likert-type scale means in order to balance role preferences in each pair and similar content (e.g., beliefs to beliefs). The resulting instrument was administered in a “think aloud” interview with three faculty members known for teaching excellence and one trainer. Results from these interviews were used to edit and fine-tune the item pairings in the ERP.

ERP scores. The instrument is scored by totaling the number of role choices in each category, resulting in a score between 0 and 15 for each role. In addition, two combination scores represent the emphasis on subject matter versus learner-centered ($[\text{Expert} + \text{Evaluator}] - [\text{Coach} + \text{Facilitator}]$) and emphasis on action versus meaning ($[\text{Evaluator} + \text{Coach}] - [\text{Facilitator} + \text{Expert}]$). Finally, a balance score was created by computing the variance of the four role scores such that a low variance indicated a balanced role profile.

Normative sample. The ERP was administered to a diverse sample of 222 educators comprised of four groups:

- **Management educators:** 37 organizational behavior management educators from various European and North American universities.
- **Judicial educators:** 65 judicial educators attending an experiential learning workshop at their national conference.
- **Retirement educators:** 44 retirement educators who coach clients on financial issues in a public pension fund (Timura, 2012).
- **K-12 educators:** K-12 educators from India who are involved in applying experiential learning principles in their teaching.

ERP scores for these groups are shown in Table 2. As most of the sample were individuals who were familiar with experiential learning, it is not surprising that the ERP scores are skewed toward learner-centered preferences for coach and facilitator roles. The exception is the retirement educator sample the majority of whom are financial planners with no training in experiential learning. Their scores are the most subject expert centered with the most balanced role profile. The other three groups have

Table 2. ERP Scores for Four Groups of Educators.

Sample	<i>n</i>	Coach	Facilitator	Expert	Evaluator	Subject/ learner	Action/ meaning	Balance
Total	222	8.82 (2.26)	8.87 (2.69)	6.43 (2.51)	5.67 (2.35)	-5.60 (6.64)	-0.81 (5.11)	27.28 (22.37)
Management educator	37	9.16 (1.94)	9.35 (3.07)	6.22 (2.04)	5.27 (2.72)	-7.01 (6.76)	-1.14 (5.53)	33.08 (22.52)
Judicial educator	65	9.14 (2.02)	8.49 (2.60)	6.35 (2.58)	6.02 (2.43)	-5.26 (6.54)	0.31 (5.59)	25.01 (18.62)
Retirement educator	44	7.80 (1.91)	7.64 (2.60)	8.45 (2.30)	6.09 (2.13)	-0.89 (6.44)	-2.20 (4.42)	18.73 (16.03)
India K-12 educator	76	8.99 (2.64)	9.68 (2.32)	5.42 (2.09)	5.32 (2.15)	-7.93 (5.31)	-0.80 (4.69)	31.36 (26.60)

Note. The values in parentheses refer to standard deviation. ERP = Educator Role Profile.

higher variance scores indicating more specialized role preferences for coach and facilitator.

Reliability. Split-half reliability scores were computed for the four role preferences and four combination scores in the normative sample of 221. Coefficients for Coach (.74) and Facilitator (.82) were good, but weak for Expert (.59) and Evaluator (.56). All four combination scores had good coefficients—Learner focus (.88), Subject focus (.70), Action focus (.70), and Meaning focus (.81).

Do Educators Teach the Way They Learn?

It is widely believed that educators teach the way they learn (Davidson, 1990; Hartel, 1995). Some studies even use style measures to assess teaching approach (Allinson, Hayes, & Davis, 1994; Onwuegbuzie & Daley, 1998). The two ELT-based studies cited earlier show little evidence for this relationship. Wheeler and Marshall (1986) find no relationship between the KLSI and the Trainer Type Inventory; while Rudowski (1996) finds a small relationship between the KLSI and the Teaching Style Inventory and Wheeler's Trainer Type Inventory with 38% of the sample showing similar patterns on the three instruments.

As participants in the ERP normative sample also took the Kolb Learning Style Inventory 4.0 (A. Y. Kolb & Kolb, 2011), it is possible to examine the relationship between learning style and teaching approach as measured by the Educator Role Profile. Results of this analysis are shown in Table 3.

Results show a highly significant relationship ($p < .0001$) between the abstract learning style and subject matter orientation as indicated by preferences for the Expert and Evaluator roles. Concrete learners on the other hand are learner oriented preferring the Facilitator role in particular. These results are consistent with predictions that

Table 3. Correlation of the Kolb Learning Style Inventory 4.0 With the Educator Role Profile.

Learning style (KLSI 4.0)		ERP subject- learner	ERP action- meaning	ERP variance	Coach role	Facilitator role	Expert role	Evaluator role
Abstract- concrete	<i>r</i>	.284**	.073	-.211**	-.051	-.292**	.262**	.154*
	<i>p</i>	.000	.317	.003	.482	.000	.000	.033
Active- reflective	<i>r</i>	-.139	.031	.092	.141	.088	-.100	-.064
	<i>p</i>	.056	.666	.207	.051	.229	.169	.382
Learning flexibility	<i>r</i>	-.110	.087	-.041	.088	.076	-.161*	.025
	<i>p</i>	.113	.208	.553	.203	.273	.020	.724

Note. Pearson's *r*, *p* values two-tailed, *n* = 190. ERP = Educator Role Profile.

* *p* < .05. ***p* < .01.

concrete feeling-oriented educators connect more with individual learners while abstract educators connect more with ideas. The other prediction that active learners would prefer the action roles of evaluator and coach, while reflective learners would prefer the meaning-oriented roles of facilitator and expert, was not borne out by the results, which showed no significant relationships for these variables.

The prediction that educators who had high learning flexibility would have a more balanced ERP result (as evidenced by low ERP variance) was also not confirmed by the data. However, results showing that concrete educators had greater balance in their ERP results and those low in learning flexibility did preferred the expert role are consistent with previous research indicating that concrete learners vary their learning style by context (Sharma & Kolb, 2010) and that experts have a tendency to become "cognitively entrenched" (Dane, 2010) and less flexible. It is also worth noting that two of the four normative subsamples did show significant positive relationships between learning flexibility and balanced educator roles—the management educators (.45, *p* < .006) and the retirement educators (.31, *p* < .05). Future research may show that institutional and professional contexts emphasize specialized educator roles reducing role balance and flexibility.

The Practice of Dynamic Matching

The dynamic matching model of ELT offers the experiential educator a more complex, but more realistic model for guiding educational practice than do simple prescriptions to facilitate or match teaching and learning style. In addition to considering the relationship between educator and learner, one must also consider the match of learning approach with the subject matter. Willingham (2005), in fact, considers this more important than matching learning and teaching style. All of this must be determined in the light of the multiple performance, learning and development objectives of most educational activities. Professions with precise performance requirements such as surgery or software

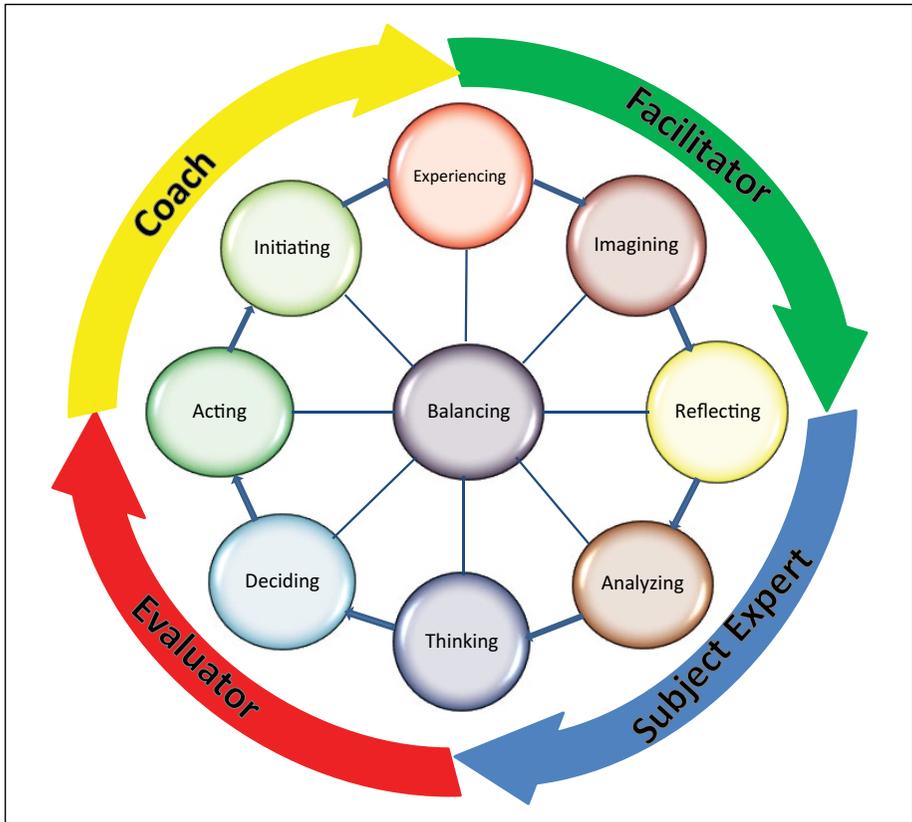


Figure 4. Educator roles and the nine-style learning cycle.

development may make the standard-setter/evaluator role paramount and require development of thinking, deciding, and acting learning styles. Art education, on the other hand, may make the facilitator role paramount and require development of experiencing, imagining, and reflecting learning styles (Eickmann, Kolb, & Kolb, 2003). In addition to specialized academic training, teachers often have objectives concerning the growth and creativity of their students. In making students more “well-rounded,” the aim is to develop the weaknesses in the students’ learning styles to stimulate growth in their ability to learn from a variety of learning perspectives.

Educating Around the Experiential Learning Cycle

Figure 4 shows the nine-style experiential learning cycle and the corresponding educator roles that match them; for example, the coach role is most appropriate for the experiencing, initiating, and acting styles, while the facilitator role connects with the experiencing imagining and reflecting styles (see Figure 4).

Table 4. Educator Roles, Learning Styles, and Instructional Techniques.

Teaching roles	Instructional techniques	Learning style
Facilitator	Journals, group discussion, brain storming, perspective taking, personal examples	Experiencing, imagining, reflecting
Expert	Lectures, readings, written assignments, model critiques	Reflecting, analyzing, thinking
Evaluator	Laboratories, case studies, simulations, graded homework	Thinking, deciding, acting
Coach	Field work, site visits, applied projects, practicum experiences	Acting, initiating, experiencing

The dynamic matching model suggests that matching style with role is important to connect with and engage learners. Raschick, Maypole, and Day (1998) find that social work students whose learning styles were similar to their field supervisors along the active experimentation-reflective observation continuum would rate their field experience with them higher. We suggest that the finding is most relevant for the supervisors at the beginning point of the learning cycle, when matching their teaching techniques to learners' preferences offers encouragement to move through the rest of the learning cycle. Individual learning styles can be an entry point through which learners enter a particular learning space, but most learning requires that they continue to actively move around the learning cycle using other learning styles to acquire increasingly complex knowledge and skills and capacity to adapt to the wider demands of a given learning environment.

While Figure 4 depicts an idealized sequential progression through the educator roles and learning styles in most cases, a curriculum design will be based on a sequence of activities and instructional techniques that fits the subject matter and learning objectives that may or may not fit such an orderly progression. In considering a design, it is useful to consider for each segment the teaching role to adopt, the learning style that you want to engage, and the choice of instructional technique best suited to the learning style and role (see Table 4).

The dynamic matching model recognizes that not only educators have individual role preferences, and learners have preferred learning styles, but also that both can develop the capacity to adapt their respective roles and styles to one another and the learning situation at hand.

Educator Role Flexibility

Kosower and Berman (1996) argue that faculty members are capable of learning to teach in ways that are incongruent with their own learning styles: "because we all engage in all of the strategies to some degree, it seems to be more a matter of willingness to learn rather than ability" (p. 217). Baker, Simon, and Bazeli (1987) contend that teaching is an art requiring the instructor to select from among a wide variety of

instructional strategies to reach students with a diversity of learning preferences. Milne, James, Keegan, and Dudley (2002) develop an observational method to assess mental health trainers' transaction patterns along with their impact on student learning and a training program designed to teach trainers to teach to all learning modes. The results of the study indicate that during the baseline phase, the observed teaching method was primarily didactic in nature and accounted for the greatest impact (46.4%) on learner behavior in the reflection mode of the learning cycle, followed by smaller overall impacts on the remaining phases of the cycle. In the intervention phase by contrast, the greatest impact of the trainer's behavior on learners' was on the concrete experience (59.5%), followed by reflective observation (33%), and active experimentation (4.5%) phases of the learning cycle. We conclude that the intervention phase produced trainer's behaviors that promote learners' ability to take advantage of the full range of the experiential learning cycle thus maximizing their learning outcomes.

As education becomes more learner-centered, Harrelson and Leaver-Dunn (2002) suggest that experiential learning requires that teachers assume a facilitator mind-set, which might be a difficult mind-set for some. Lipshitz (1983) underscores the complexity of roles for an experiential educator who needs to have a firm grasp of the relevant conceptual material, and develop sensitivity and skill in managing learners' emotional reactions to the learning process.

Learners may also react to the shifting role of the educator from that of a knowledge purveyor to one that creates the learning environment and facilitated the holistic learning process. McGoldrick, Battle, and Gallagher (2000) indicate that the less control instructors exert on the students' experiences, the more effective the learning outcome will be. However, instructors may run the risk of losing control over course structure and failing to keep the learning activities bounded within a specific time frame. Most of the risks associated with the experiential method, contend the authors, can be mitigated through careful planning, unambiguous course structure, establishing of clear expectations, and firm deadline for each class activity. Furthermore, learners will have differing level of interest as well as difficulties with certain stages of the learning cycle. It is incumbent upon the educator to grasp the diverse needs of learners and be aware of the challenges that some will face in the various phases of the cycle.

Learning Style Flexibility

Studies do show, however, that learners are able to flex their learning styles according to the demand of different learning tasks. Several studies suggest that in fact students shift their learning strategies to match the learning demands of a particular discipline (Cornett, 1983; Entwistle, 1981; D. A. Kolb, 1984; Ornstein, 1977). Jones, Reichard, and Mokhtari (2003) examine the extent to which community college students' learning style preferences vary as a function of discipline. They found significant differences in students' learning style preference across four different subject-area disciplines: English, math, science, and social studies. The results indicate that 83% of the 103 participants switched learning styles for two or more disciplines suggesting that students are capable of flexing their learning strategies to respond to the

discipline-specific learning requirements. By understanding the dynamic matching model, they can become more capable of deliberate experiential learning (A. Y. Kolb & Kolb, 2009a, 2009b; D. A. Kolb & Yeganeh, in press).

Summary

The Educator Role Profile and the dynamic matching model offer experiential educators a framework to guide their practice. Becoming an experiential educator involves more than just being a facilitator or matching learning style with teaching style. Experiential education is a complex relational process that involves balancing attention to the learner and to the subject matter while also balancing reflection on the deep meaning of ideas with the skill of applying them. The dynamic matching model for “teaching around the learning cycle” describes four roles that educators can adopt to do so—facilitator, subject expert, standard-setter/evaluator, and coach. Using the Educator Role Profile, we find that to some extent educators do tend to teach the way they learn, finding that those with concrete learning styles are more learner-centered, preferring the facilitator role; while those with abstract learning styles are more subject-centered preferring the expert and evaluator roles. However, with practice, both learners and educators can develop the flexibility to use all roles and styles to create a more powerful and effective process of teaching and learning—in Mary Parker Follett’s words, “. . . free the energies of the human spirit . . . the highest potentiality of all human association.”

Author Contributions

All authors contributed substantially to this article. AYK, DAK, AP, and GS conceived and designed the instrument. DAK and AP gathered data. DAK wrote the final manuscript. AP and AYK wrote the first draft. AYK, DAK, and AP did the bulk of the literature search. AYK, AP, and GS made numerous critiques and suggested specific wording. DAK designed most of the graphics. DAK and GS did most of the statistical analyses.

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