Journal of Education and Human Development
June 2018, Vol. 7, No. 2, pp. 38-48
ISSN: 2334-296X (Print), 2334-2978 (Online)
Copyright © The Author(s). All Rights Reserved.
Published by American Research Institute for Policy Development
DOI: 10.15640/jehd.v7n2a4

URL: https://doi.org/10.15640/jehd.v7n2a4

Learning at Developmental Cusps: A Lifespan Perspective

Julia Penn Shaw,1 Ed.D.

Abstract

This article presents a qualitative analysis of learning at various ages from 1 through 76—suggesting in each case that the learner crossed a boundary at a developmental cusp, with an associated shift in awareness of the self. That these are all ages outside traditional schooling reinforces the lifespan nature of learning. Four elements were present: 1) a pressing puzzle to the self (psychological); 2) developmental readiness of the learner (biological); 3) a conducive learning environment (cultural); and 4) a trusted scaffolding relationship between the learner and a guide (social). Lifespan, childhood, and adult learning theories, as well as sources as diverse as Aristotle and Jung, contribute to an understanding of how developmental cusps are negotiated. Teachers aware of the concept of "developmental cusp" are more apt to provide the educational support needed for the learner to transcend a developmental juncture to a more integrated sense of self.

Keywords: developmental learning, experiential learning, lifelong learning, personal transformation, transformative learning, developmental cusp

1. Introduction: What Is a Developmental Cusp?

Learning is holistic and very particular; interactive and deeply introspective; time-specific and time-expansive; and driven by both developmental and social impulses. This article explores how a particular kind of interaction at a particular time helps learners navigate a juncture in learning of significant personal importance: Learning at the Developmental Cusp. This approach augments existing learning theories with a focus on resolving essential life tensions through educational support, centering specifically on how the self is assisted to cross significant developmental cusps at different points in the life cycle through timely and educationally informed interactions, leading to a transformed sense of self.

A cusp is the point right before—or right at—a significant change. A developmental cusp is a juncture in a child's or adult's development in which he or she is able to move from less complex organizational structures to more complex ones, particularly around an issue of personal significance. It is a liminal opening to the next level of complexity made possible by four elements: 1) a motivating personal challenge; 2) developmental (bodily) changes; 3) environmental opportunities; and 4) specific social support of an educational nature. Such changes in the learner must be developmentally primed, have sufficient prior learning, emerge from environmental opportunity, and relate to a query of deep importance. It is well-established that developmental changes (both neurological and physical) occur in adults past the age of 55 (Benes, 1995). These changes are not the focus of this article, but are a foundation for the premise that developmental cusps can occur when the conditions are right, even in late adulthood.

A developmental cusp is a point of cognitive and emotional reorganization, providing a window to reconfigure the past within new, more integrative frameworks. An educational setting offers exposure to such frameworks as well as an opportunity to work through the impact of a fresh outlook not only on an academic area, but also on one's life. The opening up of existing cognitive and emotional structures offers a time to reconstruct the past into a more integrated sense of self.

¹ Associate Professor, Human Development, Division of Social and Behavioral Sciences, State University of New York, Empire State College, Two Union Avenue, Saratoga Springs, NY 12866, USA. Email: julie.shaw@esc.edu

The essential human capacity for growth, a transformation of the self, is a source of interest for theorists both within and beyond education (Erikson, 1980; Fischer, 1980; Freire, 1998; Kohut; 1977; Jung, 1971;Mezirow, 1991;Piaget, 1950/2006;Vygotsky, 1978).Not all developmental transformations take place through educational paths, but ifone does, it is likely that a theoretical frame offers an opening to the next level of development. What characterizes "learning at a developmental cusp" is exposure to a framework for meaning that provides insight into how to resolve a life challenge—frequently addressing unresolved issues of the past—leading to vigorous explorations in new directions.

Cusp learning is informed by the epigenetic principle, borrowed from biology, which is quite different from Freud's mechanical model for the human psyche (Freud & Strachey, 1961). Erikson invoked the epigenetic principle that we develop through a predetermined unfolding of our personalities, not unlike the unfolding of petals on a flower, each at its time and in a particular order, primed by genetics and enabled by the psychosocial environment, with success at each new developmental cusp in part determined by success at all previous stages. With each unfolding there is growth, which is a synthesis at higher levels of integration accompanied by reconfiguration of the parts. Werner and Kaplan (1963) describe it as the orthogenetic principle: "Organisms are naturally directed towards a series of transformations—reflecting a tendency to move from a state of relative globality and undifferentiatedness towards states of increasing differentiation and hierarchic integration" (p. 7).

This dry definition provides a view of what happens structurally with learning at a developmental cusp. It does not convey, however, the experience of learning at a developmental cusp, which is imbued with subjective richness and depth. There is pleasure in integrating one's life elements in new ways; inthe excitement of new encounters; in the satisfaction one feels in the elegance of novel syntheses; in the focus of attention on aspects of one's environment differentiated and reconnected in a manner formerly unconceivable; in the fresh ways to communicate about one's experiences; and in the newfound wonder at formerly mundane aspects of life.

It must also be said, however, particularly with adolescents and adults, that there can be necessary pain and even grief when discarding or reconstructing old values, beliefs, or habits; care and tact to reframe or let go of existing relationships built on premises now incomplete or untenable; anxiety of meeting current commitments while exploring new directions; fear of moving in unknown directions in the future; and angst at being caught up too quickly in situations for which one had little prior experience (Mezirow, 1991; Brookfield, 2005).

Development lists seek to gain a constructive perspective on developmental cusps in the life cycle, noting both the originating position and the transformed position. Life is change, so there are always new aspects of the self and of the world to discover, but changes to an essential outlook on the world that lead to integration of formerly disparate aspects of the self are fewer and more profound. Crossing a developmental cusp starts the transformation of significant aspects of the person undergoing the transition, providing deep change to perspective.

2. Learning at Developmental Cusps: Three Examples

The following qualitative analysis reflects on my experiences with learners at three different points of development: age 1, age 76, and age 51—and indirectly at two others. In each case, the learner discovered a framework that incorporated a former view of the self within a cognitively more complex and more integrative view, as part of a shared experience with a knowledgeable teacher. These experiences were memorable for me, as I served either as the guide to help a learner move from one state of the self to another that was broader and deeper, or as the learner gaining new insights

2.1. Clara at Age 1: A Developmental Learning Cusp Experience

A few years ago, my granddaughter Clara turned one. While her mom and dad were at work, we played together. During that time, Clara surprised me by the steps she took along her developmental journey. As Aristotle noted millennia ago, if we would understand anything, we need to observe its beginning and its development.

We "read" some books that she selected from the low shelf, played with various toys, and I talked to her dolly on her behalf. Then we honed in on playing "in and out." I put something into a box, and she watched closely. She tried to put a small square box into a larger square box. Although she was not able to complete the task, her goal appeared clear to me. Taking her lead, I put her new stuffed squirrel in its box and took it out again. She tried to put it in. I completed the task for her as she watched intently.

Her play area was loaded with objects that could contain or be contained. She watched attentively as I created a number of combinations of container and contained, some with multiple containers (one container inside another container). She listened carefully as I used the words "in" and "out" for different tasks. She tried containing objects herself, although her limited fine motor skills prevented her from successfully completing most of her attempts. We played these games for about 40 minutes. Then she stood up and went to a small stuffed chair that was just her size (which I learned later from her parents that she had made no former attempt to sit in). She twirled around (twirling was something she had recently learned), seeming to see the back of herself. Then she twirled the other way looking at her back from the other direction. She turned to face the chair. Then she turned with her back to the chair, twisting to see the back of herself. It appeared to me that she wanted to put the back of herself into the chair (the container for her body), so I helped her locate her body into the chair. Clara bounced on the chair a few times with an intense look on her face, which I interpreted as recognition that her back, which she had just twisted to see, was in the chair. Now, the chair was the container and Clara was the object inside. Twice Clara got in and out of the chair, which tired her. She was ready for her nap. (Shaw, 2007)

I described the events of that brief period with Clara, but my words did not capture my extreme pleasure in learning with her. This in-out experience was compelling for me and seemed to be for her as well. We engaged in a1) personally motivated, 2) biologically based, 3) environmentally supported, and 4) socially constructed mutual interaction. I could not but help to think of developmental concepts as I reflected on this experience. First, it might have been a stretch, but thinking about Erikson's psychosocial theory, her *basic trust* in me seemed almost palpable. She was exerting her *will* to learn about this new concept of in/out and trusted that I would help her do it. I could envision the Erikson an linkage from prior trust having been established in the infancy stage, to will and autonomy in her current early childhood stage, building towards purpose and initiative in Erikson's "play age" and even beyond to beginnings of competence through industry in the "school age" (Erikson, 1980), based on the epigenetic principle that more complex behaviors emerge from simpler origins.

From a Vygotskian perspective, I was aware that with me Clara was in a "zone of proximal development "or ZPD (Vygotsky, 1978) and that I was scaffolding her developmental learning (Wood, Bruner,& Ross, 1976)in the fundamental concept of "container and contained," as an integrated set of physical activities with associated mental constructs (Lakoff & Johnson, 1980). This was not the first connection that Clara made with language, but Vygotsky's (1978) quote came to mind: "The most significant moment in the course of intellectual development, which gives birth to the purely human forms of practical and abstract intelligence, occurs when speech and practical activity, two previously completely independent lines of development, converge" (p.24). Clara was "grasping" the connection between the actions of placing something inside a container with the subsequent state of that object as being contained, and coordinating these actions with the words "in" and "out." Clara's motor skills were not yet mature enough for her to complete the in/out tasks, but she seemed to be using "bridging" as a process of stepping into the unknown by using the language of "in" and "out" as marker shells for development and learning (Granott,2013; Granott & Parziale, 2002). The importance of direct experience, using her eyes to help my hands, was essential. She reflected Dewey's (1938/1997) observation that "knowledge results from the combination of grasping and transforming experience" (p. 7).

Taking Clara's lead was delightful for me. I was primed to do this, having been exposed to constructivist concepts in education. But a theory is nothing until it has been grasped in direct experience and played out in practice, especially with someone you care about and whom you can help. My observations led me to believe that I was witnessing the epigenetic principle at work, as Clara integrated distinct and differentiated actions under the umbrella of "in and out." Clara appeared to be integrating the mental concepts of container and contained (as shown by her actions) with the words "in" and "out," while exploring various examples of how objects could be different but still serve as containers. Most interesting was Clara's ability, after practicing the concept with objects, to practice it with herself as being "in" the chair. She did not articulate it, but her actions indicated that she might then have a view of herself as "contained" by her little chair. Once she had sat down in the chair with concentration, she relaxed, got out of the chair, and was happy to take a nap. Her focus changed from our game to snuggling.

The term "scaffolding" is strongly associated with Vygotsky's ZPD concept (Wood et al., 1976). Clara was ready to be scaffolded with the in-out concept prior to her being able to complete the task herself. When Clara later had the motor skills, she would play in-and-out on her own, no longer needing the scaffolding. Were there advantages to her experiencing in-and-out as primarily executed by another before she was able to physically complete the tasks?

I believed so. Scaffolding provided a practical and linguistic frame for effectively using the learning environment. Watching another person perform the task provided a framework for future exploration with words to attach to her actions. When Clara learned to use prepositions in phrases such as "in the box" or "on the table," she would speak with confidence because she had a grounded understanding of the physical basis for such phrases. Basic ideas such as "in" and "out"at a later time contribute to complex mental structures such as "self" and "other" when there is an embodied concept of the self as being "within" or "outside" a psychological or social boundary (Lakoff & Johnson, 1980).

An important premise in Montessori training is to recognize a child at a level of developmental preparedness and provide the right stimulation to encourage accurate connections between body actions and mental structures, helping the child be ready to absorb experiences beyond his or her ability to complete them (Montessori, 1995). The teacher or caregiver completes the task if the child cannot, so that the child has the satisfaction of seeing it done. Although not framed in those terms, Montessori's method supports the importance of 1) personal motivation of the child, 2) developmental readiness, 3) supportive learning environment, and 4) trusted social support. Clara initiated the exploration of the concept of in/out with me; she had the learning foundations to do so; and she was in a conducive learning environment, including my presence. I finished tasks for her that she could not complete, but she was preparing to complete them herself in the future.

This experience led me to feel a kinship with developmental theorists. Working with Clara was a confirmation that constructivist methods are sound. They reinforce each other, working together, with each one adding depth and breadth to the other. Learning about developmental theories and then putting them to practice is like having a dialogue with great minds. With this event, I felt my own confidence in, and knowledge about, developmental growth becoming both more *integrated* as I used varied theories in conjunction with each other and also more *differentiated* as I learned how to pull together ideas from different theories in actual practice.

2.2. Joe at Age 76: Another Developmental Cusp

In my academic role,I pay close attention to what each student wants to achieve through schooling, helping her seek an educational path that can be traversed to best achieve those goals (Clark-Plaskie &Shaw, 2015;Shaw &Clark-Plaskie, 2015; Clark-Plaskie &Shaw, 2014). Within such a context, I had an experience with a graduate student, Joanne, who with my help created an independent study on "Developmental Learning: Narratives across the Lifespan." After Joanne had read the basic developmental theories, we scheduled a phone session. We were positioned to integrate this learning with her experiences as an activities director at a residential senior facility. I gave Joanne a synopsis of my experience with Clara, much as I provided it here, as an example of developmental learning. Then Joanne said something like, "I see how developmental learning applies to small children, but how does that relate to the purpose of this course, which is for me to understand how narratives help older people in their lives? I can see that developmental learning applies to small children, but does it make sense to see an elderly person as still developing in a similar way? That seems like too much of a stretch to me."

At this time, Joanne told me about Joe, an elderly gentleman who lives in the senior residential group that she serves, whose experiences, in part, had led her to create this independent study. Joanne's story about Joe is not given in detail here, although from her description, her interaction with Joe was as meaningful for her as my interaction with Clara was for me. The discussion in this article focuses largely on how developmental theories provided a framework for Joanne for to better understand her interactions with Joe.

Joe wanted to tell his life story, again and again, to both visitors and people in his living group (Butler, 1974). Telling his story seemed to give him comfort about lost opportunities and ruined relationships. Mindful that his needs might reflect the needs of other residents as well, Joanne set up a weekly "story group" where participants could tell their life stories to each other. The rules were simply to take turns, keep confidences, and to be respectful of the stories told by others. This group was working well and seemed to be very meaningful to the participants. Seniors were sharing their lives, both positive and negative events, with the appearance of increased trust in communicating sad as well as prideful experiences.

Over time some who participated reframed difficult events into memories that were easier to bear. There was the appearance of increased ease among those in the group. Joanne felt that something powerful was happening that she wanted to understand in greater depth—hence the creation of this course with me.

Considering my experience with Clara and other students, my first thought was to consider how concepts from developmental theories might apply to Joe's behavior. How would Erikson's theory apply? His psychosocial theory would suggest that Joe was perhaps struggling with "integration versus despair," a compelling psychosocial dichotomy for older people. Was telling and retelling his story helpful in that way? This observation clicked with Joanne, and she noted that Joe seemed to want others to accept him with his bad as well as his good memories. Joanne surmised that the story group helped him reframe his remorse into regret, which was much easier to accept. His strong desire to tell his story again and again, changing it with each iteration to be a bit smoother, looked like movement toward amore integrated sense of himself. Moore recommended, "We give what is problematical back to the person in a way that it shows its necessity, even its value" (in Dirkx, 1997, p. 86). Joe seemed to be initiating the reconsideration of the problems of his life on his own.

We then looked at Joe's experience with the story group through the lens of Vygotsky's ZPD. Joanne could see that as the coordinator of the story group she had a role in scaffolding him towards identity integration. She saw the participants of the group as being even more critical in this role. We saw that scaffolding could be a tool not only for cognitive tasks, like math or reading, but also for identity tasks such as the psychosocial challenges posed by Erikson.

Joanne's description suggested that the four elements of a developmental cusp were present in Joe's experience: 1) a personal puzzle to solve (a satisfactory story of his life); 2) developmental readiness (Erikson might suggest Joe was ready to face integration of his life versus despair about the meaning of his life); 3) a supportive learning environment (provided by Joanne through her "story group"); and 4) social support (offered by both Joanne and the members of the story group).

2.3. Joanne, Age 51: Another Developmental Cusp Experience

I sensed some of the same engagement in Joanne that I had experienced in my interaction with Clara. Integrating various developmental theories with our own actions helped us understand why our interactions in these situations were meaningful and effective. The theories provided a foundation for our understanding ourselves better, understanding how we were helpful at one point in time, and how we could make our actions repeatable in the future.

I asked Joanne if there was a special meaning in her helping seniors tells their stories. Her satisfaction suggested that it tapped into something deeply important to her. Why was helping seniors coming to grips with their lives so significant to her? Was there something in particular about their cross-generational stories that moved her? Joanne was silent for a moment and then spoke haltingly. To me this was a sign that she was expressing thoughts that were newly related to each other. As James and colleagues(James, Collins,& Samoylova, 2012) said in their video study of a transformative experience, "How hesitant the speech was during moments that led to the light bulb moment" (p. 247). Joanne's story was that her mother, for whom she had responsibility in her elder years, had died with bitterness and regret. She isolated herself, and if she did respond it was with irritability. She said she did not want to talk about what was bothering her, even with Joanne, her only daughter. Joanne felt that if her mother had trusted her and told her the experiences that brought her shame that her mother would have died in peace, and Joanne would have at last established a trusting bond with her, even as she was dying. So much had been lost in their relationship because her mother could not share her full story with her: She always held much of herself back.

Joanne had the insight of the link between her motivation to help elders at the residence and her motivation to be closer to her mother through stories. She could see how important one's story was to being at peace with oneself. She saw what happens when despair overcomes integration at the end of life. Joanne found it healing to be able to help other elders integrate past experiences that caused sadness or grief. She saw how scaffolding could help others bridge across a developmental cusp that was difficult to do on one's own.

I asked Joanne how old she was, and she responded that she was 51. I asked her to put that within the Erikson psychosocial context. I could almost hear her smile as she identified herself with the "generative or stagnation" generation. She realized that her engagement when working with elders likes Joe was in part to overcome her regret about not helping her mother die peacefully. Becoming conscious of her regret about her mother relaxed her.

Connecting her internal sadness and confusion about her relationship with her mother (even at the basic trust level) with her chosen role to help seniors tell their stories was impacting her sense of self. Later, as she completed the course, she said that because of her new insights, she had more vitality for her work. As Erikson (1997) wrote, "Identity is an evolving configuration" (p. 74). The signs were all there that Joanne was at a cusp in her developmental learning:1) an unsolved life puzzle (why her mother was not close to her); 2) developmental readiness (ready to turn her concern for her mother into generatively that provided positive experiences for elders in sharing their lives); 3)a supportive learning environment (provided by my institution that enabled her to create an independent study that directly addressed her puzzlement); and 4) a trusted interaction (with me as we explored developmental frameworks that might help her better understand her experiences). Joanne was developmentally ready to learn why she cared about narratives for seniors (Erikson's theory seemed to apply), and she had created a learning environment for her developmental growth in the senior center and also in courses such as the one in which we were engaged. Our experience together was helping her become conscious of—and therefore able to navigate—that developmental cusp. Learning at the cusp is alive, active, joyful, and liberating.

2.4. Julie: Another Developmental Cusp Experience

My interactions with students are frequently reciprocal, intent but relaxed, a mode of teaching that I am most comfortable with. Therefore, I was not surprised when Joanne asked me why I found this study to be so powerful. Was this experience impacting me as well? I just laughed. It was beautiful how so many dimensions of lifelong learning emerged from one long dialogue with a student. It was so unexpected, so simple, and yet so remarkable. In sharing our experiences over the course of about two hours, we managed to uncover five different points of ZPD for developmental cusps that we had personal knowledge of and personal attachment to: Clara, Joanne's client, Joanne's mother, Joanne, and now myself.

As I spoke, I fumbled with words to tell my story, needing to reconstruct it as a reflection. My dialogue with Joanne was part of my longer personal narrative. I had held back on sharing my research on meaning-making with a professional audience. Why? Although all of the information was there, the approach to communicating it with a larger audience was not. Somehow, I needed, at least initially, to couch my academic writing within an interpersonal frame and with a more personal audience, which is where my meaning always starts—in caring about and sharing with one other human being

In my research, I study the structure of personal narratives, stories gathered from one individual at a time. My dialogues with Joanne enabled me to bring some of my understanding about developmental learning to the "just enough larger" sphere of the course we created (just enough larger being our ZPD). My dialogues with Joanneab out her developmental stories and my developmental stories scaffolded my confidence to write about developmental learning to a broader audience. It felt like I was revisiting an old, broken place in my competence, from an Eriksonian perspective, that needed to be reconfigured before I could move forward.

I felt that in my interaction with Joanne, I was negotiating a developmental cusp of my own: 1) a personal puzzle (why I held back from publishing my learning with a larger audience); 2) development readiness (moving past the "stagnation" of a writer's block); 3) a supportive learning environment (my institution which provides opportunities for growth for both students and teacher/mentors); and 4) a trusted social interaction (with Joanne in a dialogue about developmental learning).

Dirkx (1998) states, "The more I learn about transformative learning, the more I regard it as a way of *being* rather than a process of *becoming*" (p. 11). My experience with developmental cusps tells me that when transformative learning is a way of being, it is likely to be mutually scaffolding. One might not always be in a state ready for transformation *with* others, but it is a delight when it happens. It is an experience that once had, one wants to repeat. As Aristotle (1998) said, "The pleasures arising from thinking and learning will make us think and learn all the more" (1153a 23).

3. Integrating and Differentiating Lifespan Perspectives

As I integrated my personal growth with the transformative experiences of others, I treasured the opportunities to reflect on developmental theories and how they interplayed and supported each other. On many levels, I related cusp learning to other learning frameworks. No one theory was enough. Different theories were like good friends, each of whom I turned to in different situations.

3.1. Erikson's Psychosocial Theory of Lifespan Development

Erikson's psychosocial theory of lifespan development is so useful as a framework for changes across the lifespan that I want to bring it out of its therapeutic origins and have it dance with learning theories. As one gets older, the psychosocial breadth of one's meaning changes, and therefore the concept of "learning" may be transformed to the concept of "wisdom." Developmental cusps are points of significant change in meaning.

This applies to changes in childhood as well as in adulthood, but children do not have the cognitive skills nor the words to describe them that may be available to adults. I found Erikson's theory effective as a backbone for the framework of 'learning at the developmental cusp' while fleshing out the framework with insights from other sources. At a developmental cusp, the soma, the psyche, and the ethos support each together:

On the basis of case-historical and life-historical experience, therefore, I can only begin with the assumption that a human being's existence depends at every moment on three processes of organization that must complement each other. There is in whatever order, the biological process of the hierarchic organization of organ systems constituting a body (soma); there is the psychic process organizing individual experience by ego synthesis (psyche); and there is the communal process of the cultural organization of the interdependence of persons (ethos). (Erikson, 1997, pp. 24–25)

Erikson uses three of the four elements of a developmental cusp as the basis for his epigenetic approach to lifespan development: 1) psyche; 2) soma; and 3) ethos. I suggest breaking up ethos into two parts: first, the cultural and institutional support provided to the learner at a particular time (such as the learning institution and the culture that supports it and springs from it); and second, the social engagement at a particular time with a trusted other that focuses on the puzzlement that the psyche is addressing. It is helpful to discriminate these two aspects of social/environmental support so that teacher/mentors can understand their particular role in helping another negotiate a developmental cusp.

I suggest that we get a glimpse of soul at a developmental cusp—a liminal space where soma, ethos, and psyche meet to address a pressing psychological need. An encouraging and scaffolding social relationship in an educational setting can sometimes offer a framework to reconstruct the self at such a time. Erikson's work is significant here because it informs changes in one's identity across the lifespan. The developmental cusp enables one to see multiple sides of the former self and reconstruct them within a new framework that both contains and expands them.

3.2. Theories of Learning in Childhood

Theories of learning in childhood are foundation to theories of learning in adulthood and are critical to the understanding of learning across the lifespan. Piaget (1970, 1971, 1950/2006), Vygotsky (1978), Montessori (1986), Winnicott (2005), and Duckworth (2006) inform every interaction I have with a child in conscious and unconscious ways. My motivation to integrate theories across lifespan meaning at developmental cusps is to incorporate some of the insights of these theories across the lifespan. Indeed, this quote from Piaget (1970) could be extended to learning across the lifespan: "The child no longer tends to approach the state of adulthood by receiving reason and the rules of right action ready-made, but by achieving them with his own effort and personal experience" (p.138).

The theories of child and lifespan learning mentioned here show compatibility with the concept of learning at a developmental cusp because all of these theories have the epigenetic principle in human development as a foundation. As mentioned earlier, Montessori's method fits beautifully with the concept of learning at a developmental cusp. Piaget's vast work covers so many grounds, but at a high-level, his concept of equilibrium describes a state in a learner where a conceptual puzzle is addressed with a satisfactory answer that reframes a question with greater integration and more differentiated elements.

3.3. Experiential Learning

Dewey (1938/1997) said that experiential learning is "the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience" (p. 7). Cusp learning is distinguished from experiential learning in that all learning at a developmental cusp is experiential, but not all experiential learning is at a developmental cusp. Experiential learning reinforces the importance of the "I" at the center of the learning.

Dewey describes educators ad having a sense of the continuum of the educative experience in the past and also into the future (Coulter et al., 2008). Meaning is always personal. It is always based on personal experience.

3.4. Transformative Learning

Mezirow's distinction between formative change in youth and transformative change in adulthood is an important one, contributing to our understanding of the significance of adult learning (Mezirow, 2000). The works of Mezirow (2000), Kegan (1982), Taylor and Cranton (2012), Brookfield (2005), Dirkx (1997), Merriam et al. (2012), and others capture the identity disruption and reintegration through transformation of perspectives about the self in adulthood. This work is significant because it gives us working models for how transformations in adulthood arise, are worked through, and are resolved.

I came to adult learning theory through a lifespan perspective, so I interpret adult learning within a lifespan developmental framework. The body undergoes developmental changes in adulthood that enable complex reorganization of one's identity to take place. The transformations described may be at developmental cusps in adulthood, which may be hard to anticipate, difficult to support, unexpected, and impactful to the social milieu of the learner. Through cusp learning I would like to connect these transformative experiences to those of children and even older adults, so that the insights from work on transformative learning enrich a lifespan view of developmental learning.

3.5. Neo-Piagetian and Post-Formal Operational Theories

Kurt W. Fischer's dynamic skill theory provides a well-articulated and well-researched basis for a lifespan view of learning (Fischer, 1980; Fischer & Watson, 1981; Fischer & Bidell, 2007). Other neo-Piagetians such as Basseches (1984), King and Kitchener (1995), and Case (1985) provided models that reinforce a lifespan perspective. For me, connecting these excellent theories with Erikson's psychosocial theory enables them to become even more foundational: for example, whereas Erikson's theory provides insight into the meaning behind significant lifespan changes, Fischer's theory provides cognitive underpinnings for such lifelong changes. Whereas Erikson highlights "stages," or points of crisis across the lifespan, Basseches's theory (1984)on dialectic changes in adulthood captures the tension around an unresolved issue, with its possible articulation into thesis (the current state)and antithesis (the challenge to address) as perspectives that need to be resolved with a synthesis perspective. In educational settings, a framework for the synthesis can be scaffolded when the conditions are met: 1) a psychic puzzlement; 2) developmental preparedness; 3) a conducive learning environment; and 4) a knowledgeable guide.

4. Learning at a Developmental Cusp: Some Take-Away Thoughts

Developmental learning theorists take as a starting point the natural desire of humans to understand the world and to formulate meaningful frameworks appropriate to the needs of their time in life. A good theory augments experience. It provides a frame for a narrative, a story within which human events of importance take place. It gives events a form within which they may fit, and when the fit seems "elegant," then the theory satisfies something deeply meaningful within us. The concept of lifespan learning is very powerful, and made more so when incorporating all learning theories available. A lifelong learning perspective can help a parent or teacher see "the adult in the child" as well as help oneself, at a later age, to see "the child in the adult."

Cusp learning and training are different in nature but complementary. Training, or the practice and repetition of skills to gain mastery, is necessary and important both to precede and to follow cusp learning in order to create new habits and practice new skills. When self-selected, training makes use of the emotional impetus provided by the reintegration of the self to reinforce skills of interest since the last developmental cusp, building confidence toward the next developmental cusp. Joanne and I both anticipated that our new insights would lead us to execute our work more effectively, each in our own area of growth, based on a stronger foundation of knowledge in that area. I saw Clara use her new knowledge as a basis for later play and the later use of words. A new fitting framework offered at a developmental cusp provides direction for training. New skills lead to practice, and practice leads to confidence and exploration of the new area. It was instructive for me, as I was working with one-year-old Clara, to think about how our simple lesson would provide a foundation for her learning across a lifetime. It was healing for Joanne to reflect upon how her mother's lack of basic trust in herself prevented her from establishing a trusting relationship with her as her daughter, and how her mother might have been hampered in growing past her despair toward integration due to a lack of appropriate environmental support—support such as that she was providing for Joe.

Knowing it was a stretch, I nevertheless later wondered if my sharing a moment of my own personal growth with Joanne had been healing for her. It was the kind of experience that she had wanted with her mother but that had never been forthcoming. Perhaps Joanne's role as a listener to the stories of residents helps serve that purpose for them.

Part of the power of learning at a developmental cusp is the acknowledgment of powerful emotions that motivate us to learn. When our emotional and cognitive structures are satisfied by a new framework, it can feel like a "fit" solution.

Lifelong learning becomes a richer, deeper concept when we think about learning having impact that reaches back as well as reaching forward (Shaw, 2002), and Erikson's model helps us bridge from infancy to old age. In addition, thinking about Erikson's dichotomies at significant developmental cusps across the lifespan offer clues as to how "learning" can be scaffolded to enable us to transform to more complex perspective structures. For example, the dichotomy of "integration versus despair" led to Joanne's insights about the meaning of her work with senior stories. Learning at developmental cusps is transformative, and transformative learning is lifelong. It emerges from childhood learning and propels learning in adults. It is helpful to use all theoretical tools available to see these connections, and use them for the benefit of learners of all ages.

How do we know when learning is at a developmental cusp? We can 1) experience it and reflect upon what has happened; 2) see it happen to another person and then reflect upon what has happened; or possibly3) interact with another in a mutual exchange that leads to transformation and then reflect upon what happened. Participating in such transformations is one of the delights of being a parent or even a teacher of adult learners. To know that one has played a role in scaffolding such transformations in another can initiate a deep pleasure.

We can look for signs that a learner is ready for learning at a developmental cusp. The learner will have a strong motivation to solve a personal puzzle, likely one of emotional significance. He has been seeking an environment where answers might be found and for which he has the requisite skills to succeed. Hopefully he is willing to share enough about the puzzling personal problem that the mentor can figure out what might be helpful. If these signs are present, then there is potential for a developmental cusp experience: 1) psychological motivation, 2) developmental readiness, 3) environmental support, and 4) a trusted social interaction.

There are clues as to when a developmental cusp has been negotiated: the intensity of focus of the learner and of the guide; the "aha" experience of finding a framework that supports a deeper identity; the feeling that learning is both more open and also bound within a more expansive space that one can explore; the sense that the new insight is both unexpected and most obvious (Duckworth, 2006). There is a conscious recognition by the seeker that new possibilities are now available, and an acknowledgment of internal change to make use of these possibilities. Psychological pieces that the seeker had described as at odds, now fit together in a more integrative way, with the new framework providing a GPS (Goal Positioning System; Clark-Plaskie &Shaw, 2014) for conscious exploration. There is a relaxation of a former internal tension, paired with energy to move forward.

We may discover that we have had such an experience as it happens, or possibly in retrospect. A learner may be prepared for a developmental cusp by having the four elements ready, but there is a delight when it happens because there is never a guarantee that hoped-for insights will come, nor knowledge of what form they will take. The synchronicity of the elements coming together at a particular time is deeply satisfying (Jung,1971), and brings to mind words of Aristotle that some pleasures lead to a virtuous life (Aristotle, 1998). The benefits of learning at a developmental cusp are personal, educational, and frequently professional. Any significant change to the sense of self will bring a change in all that person touches.

References

Aristotle. (1943). On man in the universe. Edited with Introduction by Louise Ropes Loomis. New York, NY: Walter J. Black.

Aristotle. (1998). *Nicomachean ethics*. Mineola, NY: Dover Publications. (Unabridged replication of the work first published by J.M. Dent &Sons Ltd. in London in 1911 under the title of *Aristotle's Ethics*).

Baltes, P. B., Reuter-Lorenz, P. A., &Rosler, F. (2006). Lifespan development and the brain: The perspective of biocultural co-constructivism. New York, NY: Cambridge University Press.

- Basseches, M. (1984). Dialectical thinking and adult development. New York, NY: Ablex Publishing Company.
- Benes, F. M. (1995). A neurodevelopment approach to the understanding schizophrenia and other mental disorders. In D. Ciccetti & D.J. Cohen (Eds.), *Developmental psychology* (Vol. 1, pp. 227–253). New York, NY: Wiley.
- Brookfield, S. (2005). The power of critical theory: Liberating adult learning and teaching. San Francisco, CA: Jossey-Bass.
- Butler, R. N.(1974). Successful aging and the role of the life review. *Journal of the American Geriatrics Society*, 22(12), 529–535.
- Case, R. (1985). Intellectual development: Birth to adulthood. Cambridge, MA: Academic Press.
- Clark-Plaskie, M., &Shaw, J.P. (2014). Beyond stages: Mentoring as transitional identity space for adult learners. *Educational Research*, 5(2), 58–70.
- Clark-Plaskie, M., &Shaw, J.P. (2015, November). Mentoring and advising adult learners. *Council for Adult and Experiential Learning* (CAEL) publication.
- Coulter, X., Mandell, A., Shaw, J. P., Willis, W., &Winner, L. (2008). Experiencing Dewey on experience: A conversation. *All About Mentoring*, 34, 9–14.
- Dewey, J. (1938/1997). Experience and education. New York, NY: Simon and Schuster.
- Dirkx, J. M. (1997). Nurturing soul in adult learning. New Directions for Adult and Continuing Education, 1997(74), 79–88.
- Dirkx, J. M. (1998). Transformative learning theory in the practice of adult education: An overview. *PAACE Journal of Lifelong Learning*, 7, 1–14.
- Duckworth, E.(2006) The having of wonderful ideas: And other essays on teaching and learning(3rded.). New York, NY: Teachers College Press.
- Erikson, E. H. (1980). Identity and the lifecycle. New York, NY: Norton.
- Erikson, J. M. (1997). The life cycle completed: Erik H. Erikson—Extended version with new chapters on the ninth stage of development. New York, NY: Norton.
- Fischer, K. W. (1980). A theory of cognitive development: The control and construction of hierarchies of skills. *Psychological Review*, 87(6), 477.
- Fischer, K. W., & Bidell, T. R. (2007). Dynamic development of action and thought. In W. Damon & R. M. Lerner (Eds.), *Handbook of Child Psychology* (6th ed., Vol. 1, p. 7). New York, NY: Wiley.
- Fischer, K. W., & Watson, M. W. (1981). Explaining the Oedipus conflict. New Directions for Child and Adolescent Development, 1981(12), 79–92.
- Freire, P. (1998). Pedagogy of freedom: Ethics, democracy, and civic courage. New York, NY: Rowman & Littlefield.
- Freud, S., & Strachey, J. (1961). Beyond the pleasure principle. New York, NY: W.W. Norton & Co.
- Granott, N. (2013). We learn, therefore we develop: Learning versus development. In C. Smith & T. Pourchot (Eds.), Adult learning and development: Perspectives from educational psychology (pp. 15–34). Florence, KY: Taylor & Francis.
- Granott, N., & Parziale, J. (Eds.). (2002). Microdevelopment: Transition processes in development and learning (Vol. 7). Cambridge, UK: Cambridge University Press.
- James, D. M., Collins, L. C., &Samoylova, E. (2012). A moment of transformative learning: Creating a disorientating dilemma for a health care student using video feedback. *Journal of Transformative Education*, 10(4), 236–256.
- Johnson, S., & Taylor, K. (Eds.). (2011). The neuroscience of adult learning: New directions for adult and continuing education (No. 110). New York, NY: Wiley.
- Jung, C. (1971). The Portable Jung. J. Campbell (Ed.). New York, NY: Viking Press.
- Kagan, J. (2002). Surprise, uncertainty and, mental structures. Cambridge, MA: Harvard University Press.
- Kegan, R. (1982). The evolving self. Cambridge, MA: Harvard University Press.
- King, P.M., & Kitchener, K. S. (1995) Developing reflective judgment. New York, NY: Wiley.
- Kohut, H. (1977). The restoration of the self. New York, NY: International Universities Press.
- Lakoff, G., & Johnson, M. (1980). Metaphors we live by. Chicago, IL: University of Chicago Press.
- Merriam, S. B., Caffarella, R. S., & Baumgartner, L. M. (2012). Learning in adulthood: A comprehensive guide. New York, NY: Wiley.
- Mezirow, J. (1991). Transformative dimensions of adult learning. San Francisco, CA: Jossey-Bass.
- Mezirow, J. (2000). Learning as transformation: Critical perspectives on a theory in progress. The Jossey-Bass Higher and Adult Education Series. San Francisco, CA: Jossey-Bass.
- Montessori, M. (1986). The discovery of the child. New York, NY: Ballantine Books.
- Montessori, M. (1995). The absorbent mind. (Reprinted.) New York, NY: Holt.
- Piaget, J. (1950/2006). The psychology of intelligence. New York, NY: Routledge.

- Piaget, J. (1970). Science of education and the psychology of the child. New York, NY: Orion Press.
- Piaget, J. (1971). The construction of reality in the child. New York, NY: Ballantine Books.
- Shaw, J. P. (2002). A model for reflective processing using narrative symbols: Time and space coordinates in adult reflection. Unpublished dissertation for Harvard Graduate School of Education, Cambridge, MA.
- Shaw, J.P., &Clark-Plaskie, M. (2015, Winter). Mentoring and the identity development of adult learners. *All About Mentoring*, 46.
- Shaw, J. P. (2007). Adult Learning: Peas in a Pod, Candies in a Box, Steps on a Ladder and Scenes of Significance. *All About Mentoring*. SUNY-Empire State College. Saratoga Springs, NY. 33.
- Taylor, E. W., & Cranton, P. (Eds.).(2012). The handbook of transformative learning: Theory, research, and practice. New York, NY: Wilev.
- Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. M. Cole, C. John-Steiner, S. Scribner, &E. Souberman (Eds.). Cambridge, MA: Harvard University Press.
- Werner, H., &Kaplan, B. (1963). Symbol formation: An organismic-developmental approach to the psychology of language. New York, NY: John Wiley and Sons.
- Winnicott, D. W. (2005). Playing and reality. (2nd ed.). New York, NY: Routledge.
- Wood, D. J., Bruner, J. S., &Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychiatry and Psychology*, 17(2), 89–100.