

CHAPTER THREE

Our Developmental Perspective On Adulthood

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CONTEXT AND BACKGROUND ON DEVELOPMENTAL THEORY: PIAGET AND THE NEO-PIAGETIANS

Throughout this monograph we use a developmental framework in our analysis of the participants' descriptions of their motivations for learning, their educational and personal goals, their academic expectations, and the cultural and learning challenges they face as students, workers, or parents in the U.S. Our particular developmental perspective, constructive-developmentalism, builds upon and is part of a 30 year old tradition of research and theoretical writing which derives from the work of Jean Piaget (1952, 1965), a Swiss psychologist who was fascinated by and dedicated to researching the cognitive development and later moral and social reasoning of children. Since Piagetian theory is foundational to the understanding of constructive-developmentalism, we first turn our attention to key concepts of Piaget's theory of cognitive development which are shared by our own developmental framework.

Piaget and his colleagues wished to better understand the nature and origins of knowledge. To this end, adapting a clinical method of study in which he presented various scientifically based problems for children of different ages to independently solve, Piaget (1952) devised a developmental conception of intelligence which describes how processes underlying children's reasoning and cognitive growth evolve and change over time. Specifically, from observations and interviews of children's problem solving approaches, Piaget and his colleagues discerned that children of different ages use distinctly different forms of reasoning to solve the presented problems. In other words, the reasoning that guides children's problem-solving approaches represents a continuum of increasingly complex and developmentally distinct ways of analyzing and interpreting a situation. In contrast to a more static view of knowledge and intelligence as fixed or as a process of accretion, Piaget conceived knowledge creation and expansion as a process of transformation of the very logics through which an individual interprets and analyzes incoming information. Cognitive development, then, is the result of the person's engagement with the environment in which the person actively organizes and interprets information according to a distinct and developmentally linked interpretive logic. Knowledge is continuously constructed and reconstructed and itself transforms as it is shaped and reshaped by the predictable and increasingly complex organized systems of thought as depicted by Piaget's developmental scheme.

A quick example may serve to illuminate this point.¹ If one asks a three year old which is larger, the earth or the sun, it is probable that she will reply the earth is larger because it is bigger. In this child's view the earth is bigger because visually the sun looks small in the sky. Here the child is orienting solely to her perceptions; her understanding of the relative size of the earth and sun are guided by the logic of what she directly observes. In this case, what is directly seen is equated with the actual size of the sun. In contrast, if one asks an eight year old the same question, which is larger the sun or the earth, she will predictably respond with a different answer—namely the sun. While it is true that this child may have learned that the sun is larger than the earth, an important transformation of the child's interpretive logic has taken place which allows her to offer such a response. If one probes beneath the response and asks for the reasoning underlying the eight year old's answer we would find that this child does not equate perceived size with actual size but uses the concept of perspective as a mediating idea to understand and distinguish actual and perceived size.

In Piaget's framework of cognitive reasoning, the difference in these two children's responses is not a difference in information or having been taught more. Piaget would maintain that even if one

¹ This example is adapted from Reimer, Paolitto, and Hersh's (1979) descriptions of Piagetian logics.

were to tell the young child that the sun is larger she would observe and understand the earth to be bigger. According to Piaget, the difference in the children's responses reflects their different developmental capacities to understand relations among and between things—in this case to use the logical principle of perspective. In Piaget's scheme, the eight year old has a qualitatively different way of understanding and interpreting and thus responding to the question asked.

Researchers and theorists of a "neo-Piagetian" persuasion have built upon the key concepts of Piaget's research extending the study of cognitive development beyond the development of Piaget's last stage of cognitive development, abstract thought (Basseches, 1984; Commons et al, 1990; King & Kitchener, 1994; Kohlberg, 1969, 1981; Perry, 1970). Other constructive-developmentalists have applied the key tenets of Piaget's framework to different domains of human development such as: adult learning and higher education (Belenky et al., 1986; Daloz, 1986; Macuika, 1990; Perry, 1970; Weathersby, 1976); moral and spiritual development (Kohlberg, 1969, 1981; Fowler, 1981; Parks, 1986); social and psychological development (Noam, 1990; Selman, 1980); skill development (Kitchener & Fischer, 1990); and self and identity development (Harter, 1999; Kegan, 1982, 1994). Constructive-developmental principles have also been used to research role capacity, particularly exploring the ways that increasing complexity in adult thought intersects with professional effectiveness and role leadership (Kegan and Lahey, 1983; Torbert, 1976, 1991); role efficacy and understanding as parents (Newberger, 1980; Roy, 1993; Sonnenschein, 1990); and spousal role communication and family patterns (Goodman, 1983; Jacobs, 1984).

While these research studies have contributed to a fuller understanding of the way development proceeds across the lifespan within many diverse domains, the samples of individuals researched have been, overall, quite distinct from the group of adult learners we have undertaken to interview in this particular study. Prior studies of adults which have used Kegan's theory of adult development and research methodology have generally been comprised of highly educated middle class English speaking adults. Thus, our research extends the use of this particular version of constructive-developmental theory to Adult Basic Education and English for speakers of other languages settings and applies a constructive-developmental perspective of adult learning to a sample of adults who are not middle class, not necessarily born in the United States (the majority of individuals in our sample are immigrants), and non-native English speakers. Our findings, therefore, are particularly exciting since, as we will describe in the following chapters, there are important resonances among these ABE/ESOL learners with both the prior literature and former research on adults, as well as some unique findings which we believe are specific to the ABE/ESOL adult learners we studied. In the truest sense then, we feel that this research on ABE/ESOL learners informs constructive-developmental theory generally, while a constructive-developmental model of adulthood informs our understanding of the learning goals, motives, and aspirations of these literacy learners.

KEGAN'S CONSTRUCTIVE-DEVELOPMENTAL THEORY OF ADULTHOOD

The research methodology and theoretical framework for this study of ABE/ESOL learners is largely premised on psychologist Robert Kegan's constructive-developmental theory of adult growth and change. In the tradition of neo-Piagetians, Kegan draws upon and extends notions of knowledge construction and cognitive development to the overall development of adults across the lifespan. According to Kegan (1982, p. 11), "There is no feeling, no experience, no thought, no perception independent of a meaning-making context." Thus, the unique contribution of Kegan's theory in addition to its explicit depiction of a developmental trajectory of adult growth is his assertion that the

very process of constructing reality—or making and interpreting meaning—is the master motion of personality, the fundamental activity of a human being. We humans are builders of meaning, and as any parent of a young child knows, we start with the very basics of naming, of seeing similarities, regularities, and patterns. We are organizers of those regularities and patterns, constructing ever more complex systems of meaning-making—or ways of knowing and interpreting—in an attempt to bring coherence to them and to our world. Our framework of adult development, then, may be conceived as a theory of consciousness development or of “cultures of mind” in which a person’s development is twinned to the process of making increasingly complex meaning of an increasingly complex world. Again, Kegan’s theory takes as its focus the gradual, transitional nature of the evolution of the meaning-making process over the life course.

We next introduce and elaborate on several key principles which underlie our developmental framework of adult growth and consciousness evolution.²

- Development is a lifelong process.
- The developmental process is distinct from notions of life tasks or life phases.
- Development is more than the accumulation of new information and represents qualitative changes in the very ways we know.
- Societal role and task demands on adults frequently outpace their current developmental capacities.
- Development transpires through ongoing interaction between the person and the environment.

The key processes of developmental movement link to the stability and change of the meaning frameworks through which we interpret experience. These are assimilation, accommodation, and equilibration.

Development is a lifelong process.

As we have already noted, a constructive-developmental view of adult growth presumes that the same processes that underlie children’s development continue throughout the life course. Unlike some theories of adulthood, a constructive-developmental approach to consciousness development maintains that adults’ minds continue to grow and become more complex. We understand development as a gradual process which varies within and across individuals. While this gradualness and variability is perhaps most obvious in infancy and childhood, developmental growth and transformations commonly take years to occur and every person moves at her own unique and distinct pace. Although the pace of a person’s development is unique and variable there is some evidence to suggest that one’s environment may support or constrain the motion of development.

The developmental process is distinct from notions of life tasks or life phases.

Some life cycle and adult developmental theorists (Levinson, 1978, 1996; Erikson, 1968; Scarf, 1980) equate the motion of development with passage through distinct life phases, e.g., infancy, latency age, adolescence, early adulthood, middle adulthood, late adulthood. In these conceptions development is frequently conceived as the negotiation of particular tasks associated with a specific phase in a person’s life. For example, Erikson’s life cycle theory (1968) describes a development as a loosely age-linked sequence of psychosocial crises (such as the adolescent crises of identity formation) which

² The following principles are adapted from Popp & Portnow, 1998.

need to be navigated and resolved in ways yielding either ego strengths or ego vulnerabilities. In contrast, our constructive-developmental theory of adult growth depicts the processes underlying meaning-making, the engine of development, as generally independent from a particular age or phase of life. Individuals who are the same age may be making sense in qualitatively distinct ways. Moreover, in a way that is substantially different from life task theorists, our theoretical model of development suggests that a particular task may be differently understood, interpreted, and responded to depending on the individual's given way of knowing at the time of the task negotiation. In other words, it is a person's way of knowing rather than his age or life phase which is determinative of task resolution.

Development is more than the accumulation of new information and represents qualitative changes in the very ways we know.

We make the distinction between informational learning and transformational learning. Informational learning we see as "learning that primarily focuses on the acquisition of more skills and an increased fund of knowledge [while] we define transformational learning as learning which not only increases knowledge but, more importantly, leads to deep and pervasive shifts in a [person's] perspective and understanding" (Portnow, Popp, Broderick, Drago-Severson, & Kegan, 1998; p. 22). Once again, we see these deep shifts in a person's perspective and understanding as reflective of the qualitative changes in a person's organizing interpretive logic or meaning system. Thus, development is about the qualitative changes in the very way we know.

In our framework, these organizing logics represent the *structure* of our thinking, which we distinguish from the *content* of our thinking. In other words, the *structure* of our way of knowing is the underlying form of reasoning we use which comprises and bounds any given logic or way of knowing. In turn, these logics form the interpretive lens through which we make sense of the *content of our lives*. *Content*, then, is the "stuff" of our lives, the actual things that happen to us, the storyline. The *structure* and *content* of a person's meaning making are both critically important and mutually influencing factors in a person's development.

In our earlier example in which we delineated some key Piagetian principles, we described the different ways that two children, one three years and one eight, would answer the question, which is larger, the sun or the earth? This same question (or content) was understood differently (structured through different logics) by the two children whose thinking was governed by two different meaning systems, one bound by her immediate perceptions and one who was developmentally able to differentiate, through the logical principle of perspective, the perceived size from the actual size. These logics (or structures of thought) which undergird our meaning making comprise a sequence and are qualitatively distinct from each other. Each logic builds upon, integrates, and transforms the reasoning capacities of the previous one.

We believe that a logic or given way of knowing shapes and influences *multiple aspects* of a person's life, e.g., a person's self-understanding, her interactions and relations with others, and her interpretations of events and ideas. Here the implications for practitioners are great. For example, since people move at their own distinct pace and since a way of knowing affects one's sense-making across multiple realms, this model of development implies that within a classroom of adult students, individuals may be interpreting their educational experiences through different logics. For instance, their views of learning, their definitions of educational success or expectations for their instructors, etc. will be differently conceived based on the way of knowing from which they are operating.

Societal role and task demands on adults frequently outpace their current developmental capacities.

As a culture we tend to have certain expectations for how adults should behave, respond, and think. We see these expectations as having within them implicit demands for adults to be operating from a particular logic or way of knowing. Since development is variable and gradual, those expectations often exceed the actual capacities of adults. For example, we expect that parents will and can understand their children's perspective. We commonly assume that parents will be able to put themselves in their children's shoes and thus set limits on their children's behavior which both adheres to parental values and incorporates an understanding of how their children will feel about and react to what they, the parents, say and require. In another example, we frequently expect and reward workers for taking initiative, for being able to set their own work agenda without a supervisor's consistent direction or feedback. In the realm of adult learning, it is not uncommon for college curricula or particular undergraduate and graduate courses to require students to develop or apply critical thinking to the course material. Using our developmental perspective on adult reasoning and growth, we see these various expectations as not merely requirements for particular behaviors but actually as implicit and yet unacknowledged requirements that adults be making sense in a particular way of knowing. Since, as we noted, a great number of adults may not yet be operating from the required way of knowing, we believe there is potential for considerable mismatch between the adult's developmental capacities and the role or task demand expectations. Understanding both the developmental continuum in general and a person's own developmental capacities is important to create the appropriate and necessary kinds of supports and learning challenges to help adults successfully meet the expectations and demands of their lives in this culture.

Development transpires through ongoing interaction between the person and the environment.

A very important principle in the constructive-developmental framework is the notion that development does not happen in a vacuum. Development happens in the context of the ongoing interaction between the person and his or her environment. We construct meaning from our experience within the context of and in relation to our social-cultural, physical, and psychological environments. In the words of the social psychologist, George Herbert Mead, "[The individual] constitutes society as genuinely as the society constitutes the individual" (1962, p. xxv). In this interchange between our environments and our minds and the evolution of each, the issue of which comes first fades in the light of a more absorbing question: how each inspires the growth in the other. In the particular context of our study, talking with adult students, primarily non-native English speakers from other cultures, about their experiences learning in American ABE/ESOL programs, this question takes on an even more complex set of issues—issues of learning a new language and issues of acculturation.

Whether fresh insight comes first or fresh words I don't know. To this day, I am as bemused by the hen and egg dilemma as I was at six years old. But I know this: When we begin to get new insight we tend to find new words, for only by using the new can we, in turn, communicate the new insight to others or even to ourselves. Surely there is a simultaneity about this matter of fresh ideas gushing in to our minds. A new gestalt is formed, a new coming-together of multiple forces [internal and external] takes place and this gestalt transforms us and the situation in which we exist. (Lillian Smith quoted in Stein, 2000)

In our framework we characterize this “situation in which we exist,” the social, physical, psychological context(s) in which and through which an individual develops and comes to know and define his very self as the “holding environment.” As we noted in the introduction to our monograph, the term “holding environment” builds on a psychological concept created by British psychiatrist, D. W. Winnicott (1965). The concept, which itself ignites a vivid mental image of a person being held, purports that the very way our psychosocial context regards and supports us deeply affects our sense of well-being and the trajectory of our development. Kegan’s theory (1982) of adult development draws upon and further elaborates this psychological idea, relating it to the process of development throughout the life course. He writes,

There is never ‘just an individual;’ the very word refers only to that side of the person that is individuated, the side of differentiation. There is always, as well, the side that is embedded; the person is more than an individual . . . the self [is] embedded in the life-surround . . . There is never just a you; and at this very moment your own buoyancy or lack of it, your own sense of wholeness or lack of it, is in large part a function of how your own current embeddedness culture [your holding environment] is holding you. (p. 116)

The holding environment as we define it has three primary functions (Kegan, 1982): *1. holding on, 2. letting go, and 3. remaining in place.* In the first function the holding environment *holds on* to or supports and recognizes the individual by acknowledging how he thinks and feels *and* by joining *the very way he understands and interprets* the world. Performing the second function, the holding environment, *lets go* of the individual by gently challenging the way a person makes sense, raising questions of how a person thinks and feels with the hope of pushing on the limits of one’s current way of knowing and construction of self. In other words, the process of letting go entails providing experiences and ideas that the current meaning system cannot adequately address and make sense of so as to promote the creation of a new way of understanding which the theory depicts as the motion of development. In the final function, the holding environment *remains in place* by maintaining as a consistent sounding board or context of confirmation so as to enable the coherent integration of new situations, ideas, feelings, and interactions, thus scaffolding the construction of a new meaning system or way of knowing.

Although the concept of the holding environment may appear to the reader as an abstract construct, it actually has direct bearing on the way we meet our adult roles and has important applications for practitioners across various fields. This is because we are simultaneously the creators of holding environments for others as well as the receivers of the holding contexts others create for us. This idea implies that we are intimately engaged and participants in multiple holding environments at any one given point in our life trajectory. For example, parents commonly create and provide a holding environment for their children. Friends provide a context of support, a holding environment, for each other, as do intimate partners. The workplace sets another sort of psychosocial context of growth and development while teachers of children and/or adults necessarily establish intentional or unintentional classroom climates that are themselves holding environments.

The key processes of developmental movement and change: Assimilation, accommodation, and equilibration.

It merits repeating that constructivist theories of developmental change cast the individual as an active agent in his own growth. These theoretical models share the conviction that individuals are

consistently engaged in constructing knowledge, imposing meaning, organization, and structure upon experience. It is this process that brings coherence and ballast to our lives. As developmental psychologist Michael Basseches (1984, p. 34) writes,

A world of 'pure experience' unstructured by acts of human cognitive categorization would be nothing more than James' 'blooming, buzzing confusion' (1890, p. 488). What human cognition does is to impose various kinds of order, or stability, on that confusion. We need something to remain the same, or at least recognizable (i.e., cognizable as the same), amidst the continual changes that occur in our experiential field.

Human beings naturally strive for *both* order or organization and stability or a sense of balance and equilibrium—a kind of constancy in the context of processes of change and growth. Yet, these forms of organization and order which humans employ are not random according to constructive-developmentalists and, as we have described, represent a predictable sequence of increasingly complex interpretive logics which guide and filter our analyses and understandings of events, interactions, and knowledge. It is important to note that a particular logic or way of knowing represents *both* the "organized cognitive *possibilities* and *limits* that characterize [a person's] thinking and feeling processes at given point in [his] development (Reimer, Paolitto, & Hersh, 1979 p. 25). Thus, faced with novel information or new experience, the individual first attempts to interpret the situation through her existing way of knowing. This process of filtering and analyzing experience through the current way of organizing information (the current way of knowing) is what Piaget named the process of *assimilation*. Assimilation then, is the way a person deals with environmental information in an attempt to make the unknown recognizable and to maintain a sense of equilibrium or order. A person may assimilate new information into her existing way of knowing when the new information approximates her current interpretive framework. However, when information is not readily incorporated into a given current way of understanding, the way of understanding itself must change or become substantially modified in order to be able to coherently organize the new information. This process in which an existing interpretive framework, or way of knowing or logic, is changed is known as *accommodation*.

In Piaget's model of cognitive development, (and in subsequent applications of his theory to multiple domains of development) substantial growth and change of these interpretive logics proceeds when there is a moderate challenge to the individuals' current way of knowing that requires the creation of a wholly new interpretive logic. This moderate challenge has been previously described by researchers, educators, and classroom practitioners as cognitive conflict or cognitive dissonance. However, it is important to note, that in an effort to retain equilibration individuals attempt to assimilate information. It is out of necessity that individuals' interpretive lenses radically and qualitatively change, or are accommodated. In other words, we assimilate if we can and accommodate if we must. As we have intimated above, one's environmental context has great influence on the ways these developmental processes of assimilation and accommodation play out.

Recently, neo-Piagetian researchers (Fischer & Pipp 1984; Kitchener & Fischer, 1990) have focused their attention on additional forms of growth, the incremental changes that may occur within a person's overall current way of organizing information. These changes represent what we term as the subphases or developmental steps of growth that lead to an eventual overhaul of a person's way of knowing into a more complex logic. These steps comprise a consolidation and elaboration of emergent ways of knowing or organizing experience and understanding that allow for increased

coordination, and interrelation and extension of skill and capacity within a knowledge domain (and sometimes across knowledge domains) within a given meaning system or way of knowing. Moreover, this view of consolidation and elaboration that transpires within a given meaning frame helps us to appreciate and understand both the large qualitative changes of a given way of knowing as well as the slow, continuous, and incremental developmental strengthening that may occur within a meaning framework.

In a way that is similar, but subtly extends Piaget's theory, these neo-Piagetian researchers believe that when a new meaning system or way of knowing first emerges, a person's "best performance in a familiar domain improves sharply . . . [and] is followed by a period of several years during which . . . [there is] a growth plateau. These plateaus do not indicate developmental stasis but instead mark a time of extension and elaboration of skill" (Kitchener & Fischer, 1990). Thus, in our definition, consolidation and elaboration may be an integral part of the process of subphase movement. Consolidation and elaboration may also take place within a particular subphase of a logic thereby creating a kind of "developmental virtuosity" within a subphase, thus involving no actual movement toward the next subphase. On the other hand, consolidation and elaboration of a capacity or skill may come at a moment of developmental ripeness such that it promotes subphase movement. Such an understanding has implications for practice in that it suggests that an individual's developmental movement and skill enhancement benefit from optimal support for the emergence, extension, and elaboration of a way of knowing and the skills that subtend to it (Daloz, 1986; Fischer & Pipp 1984; Kegan, 1982, 1994).

WAYS OF KNOWING IN ADULTHOOD³

With these principles in mind, we will now look at the particular ways of knowing or meaning systems that are most common in adulthood. (We identify six meaning systems that span the life cycle from birth through adulthood, but only three of these occur with any regularity in adulthood. For an in-depth discussion of the entire spectrum, we refer the reader to Kegan, 1982.) These meaning systems are qualitatively different from each other, and each has its own distinct logic. We refer to these systems as the Instrumental way of knowing (meaning system 2); the Socializing way of knowing (meaning system 3); and the Self-Authoring way of knowing (meaning system 4). Since development is a gradual process and the evolution from one way of knowing or meaning system to another has been documented to take years (Kegan 1994), we also identify transitional subphase "markers" between each system. These markers identify the gradual emergence of and transformation to a new system of meaning. We will first describe the levels and then describe the transitional subphases between them.⁴

To embody these meaning system descriptions we have included quotes from the learners in our study after defining the salient and distinguishing features of the particular logic. We offer these quotes as both examples of how these meaning systems sound and as a way of tuning the reader's ear to the important distinctions among the meaning systems. We also hope that by including these quotes we move from what seem like rather static and categorizing definitions of a person's meaning system

³ Throughout this monograph, we will use the terms "ways of knowing," "meaning systems," "ways of understanding," "level of development" interchangeably. They all refer to the same notion.

⁴ The descriptions of the three common adult meaning systems are drawn from Popp and Portnow, 1998.

to a richer appreciation of how these systems apply to and texture an individual's thoughts and feelings as she engages with the world.

Three Common Adult Meaning Systems or Ways of Knowing

Instrumental Way of Knowing (Meaning System 2)

The Instrumental meaning system is characterized primarily by its concrete, external, and transactive orientation to the world. With this way of knowing, one's experience of the world, of others, and of oneself is understood and organized by concrete attributes, events, sequences; by observable actions and behaviors; by one's own vantage point, interests, and preferences. Rules, sets of directions and a dualistic sense of right and wrong guide one's daily life, providing the trajectory for the right way to do what one needs to do, whether helping kids with homework or doing one's job. Interactions with others are based on a kind of tit-for-tat mentality.

- One's understanding and meaning-making is characterized by a very concrete orientation to the world. The self is identified with and defined through one's self-interests; by concrete needs, purposes, plans, wants. One tends to describe herself in concrete, external, or behavioral terms such as one's physical characteristics, one's concrete likes and dislikes, the kind of job one has, the kind of car one drives.
- Characterized by dualistic thinking such as right vs. wrong, and arbitrary either/or distinctions.
- Concerned with concrete consequences such as: "I want to get my GED so I can get a better job/make more money." "If I do/don't do this, will I get fired?" "Will I get caught or punished?"
- Others are seen as either pathways or obstacles to getting one's concrete needs met. For example, "If you like me, there's a better chance that you'll help me get/do what I want. If you don't like me, you won't help me get what I want." Interactions with others are understood in terms of their concrete elements (the facts of what transpired), the concrete give-and-take (what I help you with, what you help me with), and concrete outcomes (I get a better grade).
- Strong reliance on rules to know how to accomplish something and to do it the right way.
- Thinks through categories. Not capable of abstract thinking or making generalizations.
- Understanding of the Golden Rule⁵ has a tit-for-tat mentality: "I'll do to you what you do to me."

Here is how one of the participants in our study with this particular meaning system responded when asked to talk about the ways that other people are different from her and what that means to her. Statements in bold type highlight the essence of the way of knowing.

You have an idea but another person has an idea and can help you. Is a good idea, it can help you change. . . . Sometimes I have discussion with other students. **You give your opinion. I give my opinion, they give their opinions.** Sometimes I discuss . . . **If you like that you can take something, something good you take it.** If it's something they know . . . you see it that way, you can do this. . . . You know some cultures have the custom but my culture no. You know some culture like

⁵ The Golden Rule as commonly stated is "Do unto others as you would have them do unto you." from the Gospel of Matthew 7:12, and Luke 6:31. It is a common ethic of reciprocity in many of the world's religions.

another people have costume, for is to show your culture, but my culture you can wear anything, is special dress for wedding . . . different costumes for the culture . . . **I think it's a good idea to learn something you don't know** . . . it's important, you didn't go to all the culture, but you need to know if . . . you have idea to visit, you will know how they work.

The orientation in the Instrumental meaning system is toward the concrete, transactive elements of the interaction: what you have that can help me, what I have that can help you. An individual with this meaning system tends to have a clear, concrete goal, driven by his or her own self-interests, i.e., "what will help me do things right/get what I want/need?" The descriptions of this way of knowing can sound somewhat mercenary, depicting someone very self-centered and manipulative. While it is possible for someone with this meaning system to be just that, it is also possible for someone to be very generous and kind-hearted, even if in a very concrete way. As the quote demonstrates, the student here very much enjoys this kind of give-and-take interaction and enjoys getting and giving this kind of information that is clearly and specifically useful: "If you like that you can take something, something good you take it" and "You need to know if . . . you have idea to visit, you will know how they work." The orientation is to the concrete, factual information that will help the person know the right thing to do.

Socializing Way of Knowing (Meaning System 3)

The Socializing meaning system is characterized primarily by its orientation to the world of the interior, internalizable, and interactive. Others are oriented to not only as a completion of the self but as sources of orientation and authority. "Other" can be relational—important people in one's life, whether friends, colleagues, teachers, supervisors, anyone in a position of authority. Or "other" can be ideational—religious, political, philosophical. Whatever the nature of the other, a person with a Socializing way of knowing gets from it a sense of self, a sense of identity, belonging, validation, acceptance; a sense of sameness, of commonality, of shared experience with others.

- Self is defined by an abstract sense of identity: "I am a sensitive person." "I am shy." "I feel confused a lot." Sense of self is defined by opinions and expectations of others: "If she gets mad at me I feel like I am a really bad person and that she doesn't like me anymore."
- Feels empathy; feels responsible for other's feelings; experiences others as responsible for own feelings. "I made him feel terrible; it's my fault he feels bad." "She made me feel good about myself."
- Concerned with abstract psychological consequences: "Am I still a good person?" "Am I meeting your expectations of me?" "Do you still like/love/value me?" "Do I still belong?"
- Intolerant of ambiguity. Needs a clear sense of what others expect and want from him or herself and feels a strong obligation and duty to meet those expectations.
- Others are experienced as co-constructors of the self: "What you think about me tells me who I am and what kind of person I am."
- Reliance on external authority and important others for standards, values, acceptance, belonging, and sense of identity.
- Capable of abstract thinking, thinking about thinking.
- Criticism is experienced as destructive to the self: "If you don't like what I did/said/am, I am not a good person."

- Understanding of the Golden Rule deals with issues of mutuality and loyalty and obligation: “I should do for you what I hope and need and expect you should do for me.”

When asked to talk about issues of diversity and the ways that others are different from himself and what that means to him, this student with a Socializing way of knowing responded this way:

Well, American students are different than international students. The international students came from different cultures and **understood each other**. The American culture is different. **So we share the same thinking** about American culture, that it’s different than we came from. **So that makes us to connect and to relate to each others. We have the same feelings.** So when you go to other classes, we don’t have that. You feel like you are there the minority, and here is you are now a majority, **all of us internationals who don’t speak the same language, but we connect.** When you go there, you feel like minority, and something doesn’t connect there. I guess we feel strange in this country.

The orientation in the Socializing meaning system is toward a sense of belonging, of connecting around similarities with each other and feeling a common sense of identity and purpose. An individual with this meaning system is driven by, among other things, the need to be understood by, connected to, and identified with a person, group, philosophical, or religious stance. As we will see in the upcoming chapters, feeling this sense of belonging and identity with the cohort can be an especially powerful experience for an adult learner who currently has a Socializing way of knowing.

Self-Authoring Way of Knowing (Meaning System 4)

The Self-Authoring meaning system is characterized by its capacity to take responsibility for and ownership of its own internal authority; its capacity to internally hold, manage, and prioritize the internal and external demands, contradictions, conflicts, and expectations of oneself and one’s life.

- Self is defined by its own internal authority, and by the capacity to differentiate between parts of itself and parts of others.
- Can hold contradictory feelings simultaneously. Self can disagree with itself, feel two or more contradictory or conflicting things at the same time.
- Concerned with consequences for personal integrity and meeting one’s own standards: “Am I competent?” “Am I living/working/loving up to my full potential?” “Am I upholding my own values and standards?” The self is the evaluator of its own performance and the holder of its own standards and values. “I evaluate myself according to what I have decided is important.”
- Integrates others’ perspectives, including criticism, as one perspective among many. Evaluates and uses criticism and other perspectives according to own internally generated standards and values.
- Others are experienced as autonomous entities with their own psychological agendas and standards. Differences with others are experienced as a given, are appreciated as such and are taken as opportunities for growth and creativity.
- Reliance on own authority. “I am my own authority on my values and standards and goals, and especially on what I know, what I need to know, and what I don’t know, and can choose to consult with others to enhance my own authority.”

- Understanding of the Golden Rule deals with the recognition, acknowledgment, and respect of different values and standards: “Doing for each other supports each of us in meeting our own self-defined values, ideals, and goals, and helps preserve the social order.”

Here one of the participants in our study with this meaning system responded when asked the same question about the impact and experience of the diversity of the cohort.

I leave [Even Start] last year . . . I transfer to the other program . . . but I don't like what they teaching, no . . . because I saw [it was] back too down. [It was too simple?] Yes . . . and **when I went there . . . this is what it looked to me like wasting time and I left . . .** [I was learning more at Even Start] . . . yes, we studied social studies, science, history . . . [You wanted more information about subjects, than just about reading and writing?] Yes, exactly, that's it . . . [At Even Start] we **have different nationalities there, you know, from Africa, from the Caribbean, from Europe, even from United States . . . So we look like United Nations there. That was wonderful . . . studying different cultures, different history, what it is exactly the people, how they live in different areas . . .** Yes, we all of the time talk about culture, especially what is the government of the country, how they are run, what they do.

A person with the Self-Authoring meaning system orients to his or her own internal authority and then sets that in relation to the context(s) in which he or she resides or wants to reside, as this student did in choosing a learning environment better suited to his own goals for his learning. The goals set by someone with this way of knowing reflect his or her own values, standards, agenda, and are conceived out of an understanding and experience of him or herself in relation to the social and political and environmental worlds he or she moves among. The wonderful thing for this student in the diversity of the class he chose was the wealth of information available in the wide range of experiences and origins of the other students. He sought out and appreciated the differences between and among the other students and himself and their cultures rather than needing to find the similarities.

The Transitional Sub-Phases of Development

These brief quotes illustrating the foundations of the three different meaning systems found in adulthood give us a sense of the increasing complexity and the ongoingness of the development of the adult mind. As we noted earlier, development is a gradual process, its movement as varied as each individual. No one person's development is predictable as to its pace. However, while the pace of development is varied and individual, the progression is predictable. Between each of the systems identified above, there are four observable phases in between, marking the gradual evolution of a new meaning system out of the old one. Each phase is more complex than the last, always incorporating the previous phase into the new one.

We have a shorthand for understanding these transitional phases which gives a visual sense of the evolution (Lahey, et al., 1988). If X is the current meaning system, and Y is the evolving meaning system, a trajectory of the evolution from X to Y is symbolized like this: X—>X(Y)—>X/Y—>Y/X—>Y(X)—>Y. In position X(Y), the meaning system X is working just fine, but the person begins to bump up against a growing sense of its limitations and has a kind of uneasy sense that there is something else to think about or some other way to “be” but doesn't quite know what it is or how to

articulate it. In the X/Y position both structures are fully operative, each on behalf of the other. The X structure works to bolster the emerging Y and the Y works to both defend and transform the X. The same is true for the Y/X position, but with the Y structure being dominant. In the Y(X) position, the Y structure is fully dominant, and the (X) is the remnant of the previous structure, acting as a kind of nagging, if you will, at the new structure. The new Y structure works hard to keep that remnant of the former meaning system at bay, to shore up its own new meaning and balance.

Calling upon our earlier stated principle as to the gradualness of the evolution from one meaning system to the next, it is important to note that in all of the longitudinal data we have reviewed (Kegan, 1994), the evolution from one subphase to the next has not taken place in less than one year. So, while this evolution is indeed variable among individuals, it seems that there is a certain minimal amount of time required to integrate a new meaning system and replace the old one. Conversely, there is no maximum limit on the length of time the transformation may take.

To illustrate these rather abstract pictures of the subphases of development, we use the voices from the learners in our study to show how someone with each of these progressive meaning systems might respond to the question of how the diversity in the classroom has impacted his or her life and learning. Here is a learner from the Polaroid site in the beginning transitional phase between the Instrumental and the Socializing meaning systems, the 2(3) position:

When they (the other cohort members who were from other countries) read their life stories, it was kind of, you could see the struggle some of them had how they came here and met their husbands and met their wives . . . I never thought about people (like that) before? I never thought about foreigners. To me, stop the flow at the border, you know, but what would have happened if a hundred years ago, they stopped my family from coming in, stuff like that.

I just know I see them in a different light, people from other countries, than I did before. To me, they were just invaders. Not invaders, I shouldn't have said that. You know, I don't know what I mean. Just to see them and . . . actually talk to them and hear their life stories, and most of them struggling coming up. . . . I'm just trying, I ain't got the right words . . . I have a better appreciation for people who come from poor countries and third world countries.

The beginnings of the emergence of the Socializing meaning system here adds a beginning awareness of a way to think and feel beyond how one has always thought and felt—a beginning awareness of the relationship between people as an entity in itself—and a new kind of concern about the struggles, feelings, and experiences of the other; beginning to see the other(s) in the context of their lives and struggles. And a beginning awareness of a different way to think, that there is something of value in knowing another besides the concrete help, facts and information that has always been the cornerstone of one's knowledge and understanding.

In the next phase, 2/3, as the Socializing way of knowing evolves to a fuller presence, that concern for feeling comfortable with others, feeling a sense of belonging, and the beginning sense of identification with others becomes more important, even while being constructed in the context of the more concrete issues of helping each other with the assignments:

It's the people. They are very friendly here because they have been in the same situation, like they want to learn because they are new here, and they are very friendly . . . The program, the class I am in, they are not stuck up [like the Americans in my other class]. In the beginning they don't talk to you because you are new, because that is the first day. So later on you get used to each other, and we talk to each other . . . It's fun because you feel comfortable. You feel comfortable working with them, and we can help each other with the stuff that we don't understand. . . . My friend, his name is Tak-Jang, like when I have problems, I ask him for help, and I feel comfortable with him because I am always with him, and he can help me on to write an essay, and explain to me the questions. It's just that you feel comfortable around them . . . Surprising to me is that the people that I have class with, they are very friendly, and I actually study.

The experience of feeling comfortable with someone or with a group speaks to the evolution of a sense of self that is increasingly constructed in relation to others. The context of the concrete elements of the interaction and relationship still provide the foundation for this new sense of self in relation to others and provide the validation for it, since the relationship still satisfies the concrete needs and goals.

In the next phase, 3/2, when the Socializing way of knowing is becoming more dominant, the concern for others begins to dominate other concerns, the sense of similarity with others begins to create a bond that is more about the relationships themselves than the usefulness of them. The concrete context still remains as the way to ground the connection with others—relating to the concrete give-and-take of sharing information with each other:

We work together with our friend . . . we talk together and everybody is friends . . . we share food from different culture, we sit together . . . make little party . . . when some friend not come and not at school we ask our teacher, what happened to her if she not come? But the first times nobody know everybody, but after we was together we share some things . . . other people, surprise when they say something, you say, "oh." But some people have something is same [in] my country . . . But if you not share something, you don't know . . . if you have some idea you can share, you can share something good they can take . . . we discuss . . . because everybody has children too.

In the final phase of the transition, 3(2), as the Instrumental meaning system is almost completely transformed, the concerns are much more about the shared realities and the ways they learn from each other. The (2) manifests itself in a fading context of concrete information and learning:

we come from different country that have different culture . . . Everything different. We discuss and we learn something from, maybe other country is good, maybe other parents they teach something is different. I will try that, and everybody is different . . . Well because we talking about, we learn many things, we come from many countries and we can learn or we are talking about their country and also we learn many countries' culture and many, many things . . . Yes, other people come from other countries. They have different culture, different opinion, everything is

different. And we know. . . . We enjoy it. We learn, too. We enjoy it with other students, they come from other country. We don't know their culture, their customs and when they are talking about their culture and their country, we know it and we learn . . . They want to know how in my country and so like I can tell them. They learn too, my country's culture.

The primary orientation here is the sharing of so many differences, the acknowledgment that everybody has a different opinion and that the differences are valued within the context of teaching each other, sharing with each other, enjoying the interest of the others in one's own culture.

The transition from the Instrumental way of knowing to the Socializing way of knowing can be roughly characterized as the evolution of thinking from concrete to abstract, and as the evolution of the regard for relationships with others as evolving from a means-to-an-end to an end in and of themselves. The mind, in its journey through this evolution, becomes increasingly malleable, able to think about its own thinking, able to generalize, take on other's feelings—empathize, hold two different feelings at the same time. The transition from the Socializing meaning system to the Self-Authoring meaning system is another evolution to yet another radically different capacity of mind. We will now turn to that transition, illustrating it in the same manner, taking off from the earlier quoted voice of the student at BHCC, demonstrating the Socializing meaning system, repeating it here for clarity and continuity:

Well, American students are different than international students. The international students came from different cultures and understood each other. The American culture is different. So we share the same thinking about American culture, that it's different than we came from. So that makes us to connect and to relate to each others. We have the same feelings. So when you go to other classes, we don't have that. You feel like you are there the minority, and here is you are now a majority, all of us internationals who don't speak the same language, but we connect. When you go there, you feel like minority, and something doesn't connect there. I guess we feel strange in this country.

The important issue, again, for this student is the sense of sameness he feels with the other students—the “same thinking about American culture,” the “same feelings,” and how that “makes us to connect.” This sense of sameness, the sense of belonging and support is essential for an experience of well-being for someone with the Socializing way of knowing.

We will now hear from a student who is in the beginning of the transition to the Self-Authoring meaning system, beginning with the first transitional phase 3(4):

We all was [in the same boat], all foreigners. [At least two] of them wasn't [foreigners]. They were [really] American. We're all foreigners. We are all here for the same goal [to] learn English better because so many of them really struggle at their work place. They can not explain themselves and if you have—[if] there is a promotion, promotion around [at work], they can't do it just by not having high school diploma. . . . [W]e all got our strengths. We all have our weaknesses. Maybe what I, what I am good at, maybe they lack of it. What they are good at, maybe I lack at it. We have all got our weaknesses to work on. . . . Well, really, I

don't pay attention too much with people. Maybe when they ask question I might say, "oh, okay."

This position along the evolution of the meaning systems tends to be about feeling the limitations of the current meaning system, but not being able to construct anything beyond it yet—just knowing that there must be a different way to think and feel about things, and not wanting to be so caught by the concerns and issues that feel so ultimate and fundamental to who one is. The student here is concerned with the commonalities of the group, that "we are all here for the same goal to learn English better," and at the same time tends to distance himself from the others when he says "I don't pay attention too much with people." In that, there is the sense that he is trying not to be quite so identified with the group.

In the next phase of the transition, 3/4, the student appreciates both that the group members are respectful of each other so there is a sense of belonging and commonality, and at the same time that they are so diverse, that they are not all the same:

Because—I mean, one teacher and then one student can't do the job. You have to be diverse. A different group. You know what I mean? A group—a bunch of people. We learn from each other. You know, we learn from each other. We . . . appreciate our—our work we done, so we appreciate our friendship. You know, we've been . . . very respectful to . . . each other, so we learn to do that, because we're not kids. We—we are adults. So we not make fun of people by saying stuff like if they don't know what to say. . . . So, we [are] polite. Maybe after the class, we may teasing each other a little bit. This is something we all do. So we do appreciate each other. . . . So I—I will miss—I will miss everybody. You know, after the class. And then I will hope—I really hope, you know, we can still keep in contact. I mean contact, you know, calling each other, you know, things like that—to see . . . how we doing, you know.

This student puts the emphasis on the relationships and friendships that the group has made possible. Even as he appreciates the diversity and acknowledges that "you have to be diverse," so that "We learn from each other," this student experiences also a sense of sameness among all the group members as he talks about them as one entity—"we . . . appreciate our work we done;" "we appreciate our friendship;" "we've been . . . very respectful to each other, so we learn to do that, because we're not kids." There is the sense of oneness in the "we," that we are all the same. The acknowledgment of differences in the context of sameness is indicative of the transitional phase of 3/4.

As the transition continues and the balance shifts toward the Self-Authoring way of knowing, 4/3, the Self-Authoring system becomes more of a critique of the student's own behavior and feelings:

I see that I can connect with Asian students. I can talk with them. I see that I can learn a lot of them, from them. It's so interesting, and it's important that it's like open me. I am feeling that I'm not limited anymore that I like now. At first, I thought that we are very different from each other. And I thought that people from, I don't know, China, they listen only that kind of music. And then I asked that girl, "Have you ever heard about Madonna and Michael Jackson?" and when she told me

that they actually heard about Madonna, about, I was like, “Oh, really?” When I came here, when I meet my friend, he’s American, and he asked me, “Have you ever heard about Tupac?” And my sister, she had a room full of his pictures and his book, and I was like, I was like, “Are you crazy?” I even get mad. “How can you ask me something like that?” And then I was thinking, “Hey and you asked that Chinese girl if she have heard, and . . .” And I tried to compare how was I thinking about that people, about some other people that’s not from my country, and, and then I start to compare how I behave, according to them. That’s opened me. That’s why I am feeling it’s opened me. I don’t feel like I’m limited anymore. I feel like I’m just born again. And I’m really grateful for that opportunity to see that, to see so many different people. And I’m just here one year. Can you imagine that? So, I practically didn’t see anything yet because, you know, the first one, the first year, you don’t even know where you are. And, I’m always more open. That’s what I like about school.

The emphasis becomes more and more focused on being able to critique one’s own attitudes and knowledge and intentions. Comparing her own behavior to her reactions to the same questions posed to her demonstrates her new capacity to step back from her own feelings and reactions to see them in a wider context—both to critique her own behavior and stay tuned in to and concerned about the feelings and experience of the other.

In the final transitional phase of this segment of the continuum the 4(3) position has as its essential characteristic, the warding off of the psychological tug back to the old, i.e., Socializing way of knowing. There is often a certain kind of defensiveness inherent in this position that might sound something like this:

[I] enjoy them [the group]. Most of them have wonderful ideas and they wanna [be good] parents too. Of course anytime anywhere . . . if you new, kind of shock, embarrass in a way, but then you get used to it, they so friendly . . . Sometimes we learn stuff from other parents, new ideas and information . . . Oh I give you an example. Like they have a how to be a good parent. Last time we discuss. When [my son] want to read a book or whatever, or colored pencils, if he don’t like it, perhaps you put it away for a while and then try to make something else for him to do instead of let him sit there and get bored with it and throw things around. So just pick something out and later jump back to the topic again. So you can just go back anytime, instead of “no, you can’t do it.” We discuss about it in parenting class last time. And we get different ideas from other parents . . . I listen to other people’s opinions and ideas, but compare their ideas and my ideas . . . think about it see what would happen . . . [but] I don’t pay attention, I’ve never been too concerned about them [about what the other cohort members think] . . . I think I’m enjoy too much of what I had learned to so I don’t pay attention to other people that much.

This father’s orientation is to really appreciate the ideas and the companionship of the other parents at Even Start, to “listen to other people’s opinions and ideas, but compare their ideas to my ideas . . . think about it see what would happen.” He seems to be saying that he appreciates the ideas other

people have, but always wants to think them over to see how they compare with his own and think about how they might work out. He is essentially bringing the other parents' ideas to his own set of standards and values. The slight defensiveness is in his assertion that "I don't pay attention to other people that much."

As the evolution continues and the last of the previous meaning system fades, that defensive quality fades as well and the person sounds and feels more contained within him or herself, more settled, more at ease in incorporating others' opinions or not. (This is not to say that all conflicts and difficulties evaporate. In fact, they do not. The same content that is the stuff of our lives continues with us all along the way. Our relationship to it changes and we might develop new strategies for dealing with it and sometimes can transform it to something more benign and less troubling, but development does not make difficult issues go away.) The Self-Authored meaning system now generates its own values and preferences and best ways of doing things. The opinions and expectations of others matter, but are not definitive, and can be accepted and mulled over with less sense of losing one's own way. There is a more matter-of-factness about differences between oneself and others and an emphasis more one's interest in learning new things. The group becomes the context for such learning. We repeat the previously quoted illustration of this meaning system:

I leave [Even Start] last year . . . I transfer to the other program . . . but I don't like what they teaching, no . . . because I saw [it was] back too down. [It was too simple?] Yes . . . and when I went there . . . this is what it looked to me like wasting time and I left . . . [I was learning more at Even Start] . . . yes, we studied social studies, science, history . . . [You wanted more information about subjects, than just about reading and writing?] Yes, exactly, that's it . . . [At Even Start] we have different nationalities there, you know, from Africa, from the Caribbean, from Europe, even from United States . . . So we look like United Nations there. That was wonderful . . . studying different cultures, different history, what it is exactly the people, how they live in different areas . . . Yes, we all of the time talk about culture, especially what is the government of the country, how they are run, what they do.

These brief quotations represent only a fraction of the countless ways that individuals can and do express and articulate their ways of knowing, and only one of infinite contexts within which adults continue to learn and grow and evolve.

THE CONTEXT OF GROWTH: THE HOLDING ENVIRONMENT

As noted in the principles of the Constructive-Developmental perspective, none of this evolution occurs in a vacuum, but does so in the context of the holding environment, the dynamic social and educational environment in which every individual finds him or herself, and in particular, that environment created by the three programs in our study. Ideally, in two of its functions, holding on and letting go, a holding environment both supports and challenges the process of learning for its students, facilitates the transformation and evolution of their meaning systems, and provides a context for their developing competence.

Holding environments can be helpful to a person's growth, thwarting, or both. The ways in which they can be most helpful is to provide an optimal balance of challenge and support (Daloz, 1986; Kegan, 1982, 1994). An optimal balance of challenge and support means challenging students to stretch the limits of their understanding to consider and integrate new information, while supporting the students by having that information presented in a way that is accessible to them and their current meaning system. If that balance is not struck within a reasonable range and a person is challenged beyond his capacity to succeed or understand, he will most likely feel demoralized and defeated, unable to attain the expectations set out for him. If a person is overly supported, she might feel bored, disheartened by lack of challenge, and tune out. Either way, the holding environment has lost both an important connection with the student and the ability to provide an effective opportunity for his or her growth.

Creating a holding environment which provides this optimal balance for a whole classroom can be a challenge, for what feels supportive for one person might feel too challenging for another. Teachers from classrooms at every level will recognize this problem. We will argue throughout this monograph that to understand the developmental continuum along which every student travels will greatly enhance an educator's efforts to create an environment that can provide a good balance of challenge and support for most, if not all, of its students; in Chapter Six, we will take an in-depth look at how one such environment was created by a complex interaction of the teachers and the students themselves.

The next five chapters will take the reader into each of the three sites of our study through the voices of the participants as they share their experiences in their respective programs. Our developmental perspective serves as our guide through the complex plurality of voices and experiences and creates the context in which to understand the many other contributing factors that make up these adult students' lives.

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