

Appendix B

To be sent to participants
Two weeks before Session One

Pre-Meeting Packet of Readings and Handouts

**Participants need to receive this packet at least ten
days before the first session of the Study Circle**

Contents

- Cover letter: “Information about the Adult Development Study Circle”
- Handout A: “What is Study Circle?”
- Handout B: “What Study Circles Are and Are Not: A Comparison”
- Handout C: “The Role of the Participant”
- Handout D: “Schedule/To Do Form”
- Reading #1: “Four Adult Development Theories and Their Implications for Practice”
- Reading #2: “Our Developmental Perspective”
- Reading #3: “Our Developmental Perspective on Adulthood” from *Toward a New Pluralism in ABE/ESOL Classrooms: Teaching to Multiple “Cultures of Mind,”* Chapter 3, pp. 43-75

Date:

RE: Adult Development Study Circle

Dear Participant:

Thank you for registering to participate in the **Adult Development Study Circle**. I really look forward to working with you. This Study Circle was developed by the National Center for the Study of Adult Learning and Literacy (NCSALL), through its Connecting Practice, Policy, and Research (CPPR) initiative. The CPPR initiative builds on NCSALL's Practitioner Dissemination and Research Network (PDRN) and responds to the need to find better ways to have research in the field of adult education and literacy inform practice and policy, and for practice to guide research.

We will meet three times. The first meeting is at _____ on _____ from _____.

At each session, we will be discussing readings relating to adult development theory and their implications for instruction and program design. We'll discuss the findings from NCSALL's Adult Development Research, tracing adult basic education students' processes of learning and in some cases transformation; examine articles from NCSALL's quarterly magazine for practitioners, *Focus on Basics*; and examine other research on this topic.

Before the first meeting, please read the three handouts on Study Circles. Also, please read Readings #1, # 2, and #3 and consider how they relate to instruction and program design. We will be discussing these things at the first meeting.

I have enclosed a folder for you to keep all of the materials for this Study Circle. Please bring this folder and all the materials with you to each of our meetings. Additionally, at our first meeting we will be addressing the following questions related to the first readings:

- How do you understand the similarities and/or differences in the three different ways of knowing—Instrumental, Socializing, Self-Authoring?
- How does Kegan's theory of adult development compare to the four approaches to adult development—Behavioral/Mechanistic, Psychological/Cognitive, Contextual/Sociocultural, and Integrated—described by Baumgartner?

If you have any questions about the Study Circle in general or about what to do before our first meeting, please call me at _____ or send me an e-mail at _____. I'm looking forward to some great discussions with all of you.

Sincerely,

[Your Name and Title]

What is a study circle?

A study circle:

- is a process for small-group deliberation that is voluntary and participatory;
- is a small group, usually 8 to 12 participants;
- is led by a facilitator who is impartial, who helps manage the deliberation process, but is not an "expert" or "teacher" in the traditional sense;
- considers many perspectives, rather than advocating a particular point of view;
- uses ground rules to set the tone for a respectful, productive discussion;
- is rooted in dialogue and deliberation, not debate;
- has multiple sessions which move from personal experience of the issue, to considering multiple viewpoints, to strategies for action;
- does not require consensus, but uncovers areas of agreement and common concern;
- provides an opportunity for citizens to work together to improve their community.

What study circles are and are not: A comparison

A study circle IS:

- a **small-group discussion** involving deliberation and problem solving, in which an issue is examined from many perspectives; it is enriched by the members' knowledge and experience, and often informed by expert information and discussion materials; it is aided by an impartial facilitator whose job is to manage the discussion.

A study circle is NOT the same as:

- **conflict resolution**, a set of principles and techniques used in resolving conflict between individuals or groups. (Study circle facilitators and participants sometimes use these techniques in study circles.)
- **mediation**, a process used to settle disputes that relies on an outside neutral person to help the disputing parties come to an agreement. (Mediators often make excellent study circle facilitators, and have many skills in common.)
- a **focus group**, a small group usually organized to gather or test information from the members. Respondents (who are sometimes paid) are often recruited to represent a particular viewpoint or target audience.
- **traditional education with teachers and pupils**, where the teacher or an expert imparts knowledge to the students.
- a **facilitated meeting with a predetermined outcome**, such as a committee or board meeting, with goals established ahead of time. A study circle begins with a shared interest among its members and unfolds as the process progresses.
- a **town meeting**, a large-group meeting which is held to get public input on an issue, or to make a decision on a community policy.
- a **public hearing**, a large-group public meeting which allows concerns to be aired.

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Handout C

The role of the participant

The following points are intended to help you, the participant, make the most of your study circle experience, and to suggest ways in which you can help the group

- **Listen carefully to others.** Try to understand the concerns and values that underlie their views.
- **Maintain an open mind.** You don't score points by rigidly sticking to your early statements. Feel free to explore ideas that you have rejected or not considered in the past.
- **Strive to understand the position of those who disagree with you.** Your own knowledge is not complete until you understand other participants' points of view and why they feel the way they do.
- **Help keep the discussion on track.** Make sure your remarks are relevant.
- **Speak your mind freely, but don't monopolize the discussion.** Make sure you are giving others the chance to speak.
- **Address your remarks to the group members rather than the facilitator.** Feel free to address your remarks to a particular participant, especially one who has not been heard from or who you think may have special insight. Don't hesitate to question other participants to learn more about their ideas.
- **Communicate your needs to the facilitator.** The facilitator is responsible for guiding the discussion, summarizing key ideas, and soliciting clarification of unclear points, but he/she may need advice on when this is necessary. Chances are, you are not alone when you don't understand what someone has said.
- **Value your own experience and opinions.** Don't feel pressured to speak, but realize that failing to speak means robbing the group of your wisdom.
- **Engage in friendly disagreement.** Differences can invigorate the group, especially when it is relatively homogeneous on the surface. Don't hesitate to challenge ideas you disagree with, and don't take it personally if someone challenges your ideas.

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Schedule/To Do Form

What to Do to Get Ready

Session	What to Do Before Session
Session One	<ul style="list-style-type: none"> • Read Handouts A, B, and C and Readings #1, #2, and #3 that you received in the Pre-Meeting Packet. • Highlight interesting points and jot down any questions that come to mind. • Consider the questions listed in the opening letter and prepare to discuss these questions as well as others.
Session Two	<ul style="list-style-type: none"> • Read Readings #4, #5, #6, and #7. You will receive these readings during Session One. • Think about how the concepts presented in each reading might apply to the adult learners you work with.
Session Three	<ul style="list-style-type: none"> • Read Readings #8, #9, and #10. You will receive these readings during Session Two. • Jot down some of your impressions and questions as you critically read the article(s) you chose. • Consider how this research applies to your program and/or practice.

Reading #1

Four Adult Development Theories and Their Implications for Practice

Lisa M. Baumgartner

Baumgartner, L.M. (2001). Four adult development theories and their implications for practice. *Focus on Basics*, 5(B), 29-34.

What is adult development? What relevance do adult development theories and models have to the practice of adult basic education? Our philosophy of adult development informs our teaching. For example, if we believe that people mature by passively absorbing knowledge and reacting to their environments, our instruction differs from that of teachers who assume knowledge is constructed and that development depends on active participation with the environment.

In this article, I discuss several approaches to adult development and their related implications for instruction. Clark and Caffarella (1999) note, “Theories [serve] as a lens through which we view the life course; that lens illuminates certain elements and tells a particular story about adult life” (p. 3). The four lenses through which adult development will be seen are: behavioral / mechanistic, cognitive / psychological, contextual / sociocultural, and integrative.

The Behavioral/Mechanistic Approach

According to the mechanistic approach, people are machines whose response to external forces results in development (Miller, 1993). This approach asserts that past behavior predicts future behavior and that people’s machine-like minds do not construct knowledge but instead absorb existing knowledge (Miller, 1993). Development can therefore be measured quantitatively (Wrightsman, 1994).

Behaviorism exemplifies the mechanistic approach. It is a science interested in predicting and controlling human behavior (Watson, 1930). People learn behaviors by responding to stimuli and by receiving positive or negative reinforcement or punishment. Positive reinforcement increases the likelihood that the immediately preceding behavior will be repeated (Shaffer, 1994). For example, if a girl receives praise (an example of positive reinforcement) for helping her sister, she is likely to repeat the action. In contrast, negative reinforcement occurs when a desired action results in the cessation of an unpleasant stimulus. When a woman buckles her seatbelt to turn off the seatbelt alarm, she receives negative reinforcement (Shaffer, 1994). Punishment is a third kind of reinforcement. Instead of preceding the response as in the case of negative reinforcement, it follows the response and decreases the chance of the behavior recurring (Taber, Glaser et al., 1965). Scolding is an example of punishment.

Watson (1930), the father of behaviorism, believed that people were “an assembled organic machine ready to run” (p. 269) and that their personalities were a collection of complex habits. For example, he said that a deeply religious Christian develops a religious habit system of praying, attending church, and reading the Bible. Habits change, he believed, and develop most during the teen years and are set by age 30. Watson noted, “A Ö gossiping, neighbor spying, disaster enjoying [person] of 30 will be, unless a miracle happens, the same at 40 and still the same at 60” (p. 278).

Instructors who favor the behavioral / mechanistic perspective provide students with plenty of opportunity for drills and practice. Using praise, grades, or some small prizes for their efforts positively reinforces learners. Students learn the appropriate response through reinforcement.

Programmed learning is one method of instruction used by teachers who champion the behavioral/mechanistic approach to development. This instructional technique, which was especially popular in the 1960s and 1970s (Green, 1963; Skinner, 1968; Taber et al., 1965), remains popular in the computer age (Kelly & Crosbie, 1997; Munson & Crosbie, 1998). Programmed learning involves assessing a student’s prior knowledge about a topic, then basing individual programs of instruction on the student’s level of expertise, and leading a student through a program of instruction via a book, slides, or a computer program. The material is divided into manageable portions called frames (Taber et al., 1965). After each frame, a question is asked and the student responds and receives immediate feedback. For example, learners in a research methods course may be presented with the explanation of a particular experimental research design. Next, they are asked a question about the information in the frame. After a correct response, the computer program may respond “Great job!” An incorrect response may yield, “Nice try, but try again.” This reinforcement results in retention of the information.

The teacher who embraces this paradigm sees development as correct behavioral responses. People’s personalities are a series of habits and the teacher’s job is to get the student to develop good habits. Learning is additive in nature. Each set of facts builds on previous knowledge and this addition of knowledge can be accomplished with various types of reinforcement.

The Psychological/Cognitive Approach

The psychological / cognitive perspective focuses on an individual’s “internal developmental processes” in interaction with the environment (Clark & Caffarella, 1999, p. 5). Clark and Caffarella differentiate between sequential models of development and models based on life events or transitions (p. 5). Sequential models, also called stage or phase models, assume that development is unidirectional in nature, that present development is build on past development, and that there is an endpoint (Miller, 1993). In this view, humans are active participants in their development, actively constructing knowledge rather than simply absorbing

it. For example, a chronically ill woman changes medication and becomes increasingly lethargic.

She learns more about the new drug's side effects from friends, health professionals, and the Internet. She notices that when she eats certain foods in combination with the drug, it increases her fatigue. Her knowledge and personal experience help her realize she must change her diet to alleviate the lethargy.

Gould's (1978) model is an example of a stage / phase model. In his theory of transformation, he discusses four major false assumptions that people must overcome in order to move successfully from childhood to adult consciousness and become more fully functioning adults. He maintains that identity formation occurs between the ages of 16 and 22, when people are challenging the false assumption "I will always belong to my parents and believe in their world" (p. 6). The false assumption to be overcome between 22 and 28 is: "Doing things my parents' way with willpower and perseverance will bring results. But if I become too frustrated, confused or tired or am simply unable to cope, they will step in and show me the right way" (p. 71). From the ages of 28 to 34, people confront the false assumption: "Life is simple and controllable. There are no significant co-existing contradictory forces within me," and from 35 to 45, people grapple with: "There is no evil or death in the world. The sinister has been destroyed" (p. 6).

The second psychological / cognitive approach examines life events and transitions. Pearlin's (1982) model notes that anticipated life course role changes, such as getting married and having children, cause less psychological distress than unscheduled changes such as car accidents or the loss of employment. Pearlin maintains that social class, a person's coping skills, the social support networks available to a person, and the type of stress all have an impact on the individual route that a person's life course follows (Bee & Bjorkland, 2000).

The psychological / cognitive approach to development asserts that people reach more complex, integrated levels of development through active participation with their environment. Furthermore, individuals construct knowledge as opposed to responding to existing knowledge. In essence, adult development is a continuous journey toward increasingly complex levels of development. Hence, teachers taking this perspective favor ideas found in the transformational learning literature, such as critical reflection and discussion (Daloz, 1999; Mezirow, 1991).

Mezirow (1990) asserts that through reflection, individuals often arrive at an "a more inclusive, differentiated, permeable and integrated perspective" (p. 14). To encourage critical reflection, instructors may have people engage in role plays. Role reversal activities help learners to explore and express views other than their own, which could encourage them to broaden their perspectives (Cranton, 1994). Another technique involves a method of journal writing, in which learners use one side of the page for

observation and descriptions and the other side for thoughts, feelings, related experiences, or images provoked by the description (Cranton, 1994, p. 179).

Mezirow (1991) maintains that discussion with others is integral to adult learning and development. Instructors who champion the psychological / cognitive view provide discussion guidelines (Cranton, 1994) that ensure an atmosphere of trust, safety, and respect in which learners felt comfortable expressing their ideas. Instructors also allow for quiet time in the discussion groups.

Lastly, teachers recognize that learners' receptiveness to information may be based on their life stage or time of transition. People often return to the classroom during a time of transition (Daloz, 1986; 1999). Instructors holding the psychological / cognitive view watch for what Havinghurst (1972) has termed "teachable moments," in which people are ready to learn and apply a concept because of their life situation.

Teachers who champion the psychological / cognitive framework believe that knowledge is constructed and that adults are active participants in their development. Instructors encourage critical reflection and discussion through a variety of activities. They realize that learners often return to school during a time of transition and look for "teachable moments" in which learners are receptive to new ideas.

Contextual/Sociocultural

The contextual/sociocultural perspective on development works from the point of view that adult development cannot be understood apart from the sociohistorical context in which it occurs (Miller, 1993). Vygotsky (1978), a well-known proponent of the contextual approach, believed that people are not separated from the contexts in which they live, but are part of them. Vygotsky (1978) called this the child-in-activity-in-context. This developmental stance also asserts that culture influences what people think about, what skills they obtain, when they can participate in certain activities, and who is allowed to do which activities (Miller, 1993). Miller (1993) writes, "Different cultures emphasize different kinds of tools (for example verbal or nonverbal), skills (reading, mathematics, or spatial memory), and social interaction (formal schooling or informal apprenticeships) because of different cultural needs and values" (p. 390). This, in turn, influences whom people become.

Sociocultural elements such as race, class, gender, ethnicity, and sexual orientation influence adult development (Chavez & Guido-DiBrito, 1999; Cross, 1995; Kroger, 1997; Merriam & Caffarella, 1999). These factors position people in relation to each other and in relation to a society that rewards those who fit the US "mythical norm," which Audre Lorde (1984/1995) defines as "*white, thin, male, young, heterosexual, Christian, and financially secure*" (p. 285) (italics in the original). US society devalues those outside this mythical norm.

It is the intersection of these factors rather than a single factor that affects adult development and learning (Baumgartner & Merriam, 2000; Etter-Lewis & Foster, 1996; Johnson-Bailey, 2001). For example, Johnson-Bailey (2001) examined the common experiences shaping the persistence in higher education of African-American women who enrolled at a non-traditional age. Through these women's stories, she poignantly demonstrates how discrimination based on race, class, and gender affects their educational journeys. Speaking about the influence of racism and sexism in their lives, Johnson-Bailey notes, "Racism and sexism impact the educational experiences of Black women in many ways. As Blacks, they are thought to be intellectually and morally inferior. As women, they are held to task for the alleged inadequacy of their gender's intellect" (p. 91). The contextual/sociocultural approach views individuals as inextricable from the society in which they live; they develop in ways intrinsic to themselves but molded by the discriminatory forces of society within which they function.

Instructors utilizing this framework may use Vygotsky's (1978) idea of guided learning. The teacher and learner are active participants in the learning process. Learning involves observation, collaboration, and "scaffolding" (Shaffer, 1994, p. 78). Scaffolding requires that the teacher adjust the instructional level based on the learner's response. The learner is an apprentice who develops culturally relevant skills through thought and action (Vygotsky, 1978).

Teachers who adopt a contextual / sociocultural approach to adult development also focus on how social inequities based on various attributes including race, class, and gender affect adult development and learning. Like their colleagues who work within the psychological / cognitive paradigm, the instructors who believe in the sociocultural context are interested in having their students gain increasingly integrated and higher levels of understanding through critical reflection and discussion. However, they may take an approach that focuses on social justice, encouraging students to question critically why social inequities exist and how these inequalities remain part of the educational experience. For example, they may ask students to reflect on how school policies, procedures, and curriculum continue to privilege some while discriminating against others (Apple, 1996; Apple & King, 1983).

Educators who ascribe to the contextual / sociocultural view of adult development also recognize the importance of increasing students' cultural awareness. Sleeter and Grant (1988) write, "The ideology of multicultural education is one of social change - not simply integrating those who have been left out of society but changing that very fabric of society" (p. 139). Furthermore, these educators strive to introduce the idea of cultural pluralism, defined as "maintenance of diversity, respect for differences, and the right to participate actively in all aspects of society without having to give up one's unique identity" (p. 140).

These instructors infuse materials from different cultures into their curricula, perhaps gathering stories to demonstrate a particular concept through a variety of cultural lenses. For example, a teacher of General

Educational Development (GED) students may provide reading materials that examine the institution of marriage through different cultural lenses. She might help her students analyze how various aspects of a person's identity affect marriage.

Teachers who choose this paradigm realize how race, class, gender, and sexual orientation influence adult development. They encourage students to question critically how societal inequities are reproduced in the classroom. Instructors who see adult development through this lens also work to increase people's cultural awareness.

Integrated Approach

The integrated approach to adult development takes a holistic view of adult development. This perspective is focused on how the intersections of mind, body, and sociocultural influences affect development (Clark & Caffarella, 1999). Spirituality is also sometimes included in the integrated approach (Dirkx, 1997; Tisdell, 1999).

Perun and Bielby's (1980) proposed integrated model of development suggests that the life course is composed of changes on several levels across time. Changes in each area follow their own timetables. Different types of changes include physical changes, changes in the family life cycle such as being married and having children, changes in work roles, and in emotional tasks (Perun & Bielby, 1980, p. 102). Stress results when the timetables are asynchronous (Perun & Bielby, 1980).

While others do not present a model, they draw attention to aspects of adult development that are not widely discussed, including spirituality. For Tisdell (1999), spirituality is connection to history, to others, and to moral responsibility (p. 89). Moreover, Tisdell notes the inextricable tie between culture and spirituality. All are interconnected and, maintains Tisdell, all are important for adult learning. Recognizing spirituality as an aspect of the adult learner's experience, realizing its importance in meaning-making, and understanding "spirituality as the grounding place for the work of many emancipatory adult educators" are important concepts for adult educators to grasp (p. 94).

Dirkx (1997) discusses "nurturing the soul" in adult learning (p.79). Instead of relying exclusively on logic, he invites educators to explore "ways of knowing grounded in a more intuitive and emotional sense of our experiences" (p. 80). In this type of transformative learning, students move beyond the rational to the extrarational. Images and symbols are important in this type of learning. Learning through the soul "has to do with authenticity, connection between heart and mind, mind and emotion, the dark as well as the light" (p. 83).

Teachers who espouse the integrated approach to adult development believe in the interconnection between mind, body, spirit, and sociocultural factors. They are interested in promoting students' growth intellectually, physically, emotionally, aesthetically, and spiritually (Miller, 1999).

Encouraging students to connect to course content in a variety of ways requires myriad techniques. Instead of relying solely on class discussion and written work, teachers may encourage students to construct a learner's portfolio in which course content is addressed in a variety of ways including, for example, art music, poetry and fiction, or dance. Other techniques may include visualization and meditation.

Instructors who see adult development as an integrated process may be more sensitive to the idea of multiple intelligences (Gardner, 1993). This theory notes that there are seven kinds of intelligence: linguistic, logical-mathematical, musical, bodily-kinesthetic, spatial, interpersonal, and intrapersonal. These teachers incorporate activities that address different types of intelligences into their teaching (see Focus on Basics Volume 3, Issue A, on how teachers use the theory of multiple intelligences in the adult basic education classroom).

Promoting spiritual development in learners' lives is of interest to those who adopt an integrated approach to development (Tisdell, 1999; Palmer, 1999). Spirituality is often equated with connection to others and to something larger than oneself (Palmer, 1999; Suhor, 1999). Connecting subjective feeling with objective fact by journaling, by promoting discussion that "generates a sense of unified consciousness" (Suhor, 1998/1999, p. 14), or by creating sensory experiences such as viewing a beautiful painting or engaging in a walk outdoors is a way to achieve this connection and begin to discuss larger life questions.

Those who adopt the integrative framework of adult development may also be acutely aware of the teacher-student interaction. They may simultaneously observe themselves and their students in interaction with each other. They may encourage themselves and their students to engage in an activity and then journal the physical feelings, emotional issues, and analyze the situation (Brown, 1999).

Those believing in the integrative approach recognize the intersection between mind, body, spirit, and sociocultural factors. They recognize the importance of connecting students to course content in a variety of ways to promote growth on several levels. Writing stories, discussion, drawing, other artwork, and engaging in visualization and meditation may be techniques used to encourage this development.

In Conclusion

In conclusion, each of the four lenses on adult development makes different assumptions. Recognizing these different outlooks on adult development broadens our perspective on adult development and its relation to practice. This awareness can lead to appropriate instruction for our students, which, in turn, will promote their development, whatever you believe it to be.

References

- Apple, M. W. (1996). *Cultural Politics and Education*. New York: Teacher's College Press.
- Apple, M. W., & King, N. (1983). "What do schools teach?" In H. Giroux & D. Purpel (eds.), *The Hidden Curriculum and Moral Education*. Berkley, CA: McCutcheon.
- Baumgartner, L., & Merriam, S. M. (2000). *Adult Learning and Development: Multicultural Stories*. Malabar, FL: Krieger.
- Bee, H., & Bjorkland, B. (2000). *The Journey of Adulthood* (4th ed.). New York: Prentice-Hall.
- Brown, R. (1999). "The teacher as contemplative observer." *Educational Leadership*, 56 (4), 70-73.
- Chavez, A., & Guido-DiBrito, F. (2000). "Racial and ethnic identity development." In M. Clark & R. Caffarella. (eds.), *An Update on Adult Development Theory: New Ways of Thinking about the Life Course* (New Directions for Adult and Continuing Education, No. 84). San Francisco: Jossey-Bass.
- Clark, M., & Caffarella, R. (eds.) (2000), *An Update on Adult Development Theory: New Ways of Thinking about the Life Course*. (New Directions for Adult and Continuing Education, No. 84.) San Francisco: Jossey-Bass.
- Cranton, P. (1994). *Understanding and Promoting Transformative Learning: A Guide for Educators of Adults*. San Francisco: Jossey-Bass.
- Cross, W. (1995). *In Search of Blackness and Afrocentricity: The Psychology of Black Identity Change*. New York: Routledge.
- Daloz, L. (1986). *Effective Teaching and Mentoring: Realizing the Transformational Power of Adult Learning Experiences*. San Francisco: Jossey-Bass.
- Daloz, L. (1999). *Mentor: Guiding the Journey of Adult Learners*. San Francisco: Jossey-Bass.
- Dirkx, J. (1997). "Nurturing soul in adult learning." In P. Cranton (ed.), *Transformative Learning in Action: Insights from Practice*. (New Directions for Adult and Continuing Education, No. 74). San Francisco: Jossey-Bass.
- Etter-Lewis, G., & Foster, M. (1996). *Unrelated Kin: Race and Gender in Women's Personal Narratives*. New York: Routledge.
- Gardner, H. (1993). *Multiple Intelligences: The Theory in Practice*. New York: Basic Books.
- Gould, R. (1978). *Transformations: Growth and Change in Adult Life*. New York: Simon & Schuster.
- Green, E. (1963). *The Learning Process and Programmed Instruction*. New York: Holt, Rinehart, and Winston, Inc.

- Havinghurst, R. (1972). *Developmental Tasks and Education* (3rd ed.). New York: McKay.
- Johnson-Bailey, J. (2001). *Sistahs in College: Making a Way Out of No Way*. Malabar, FL: Krieger.
- Kelly, G., & Crosbie, J. (1997). "Immediate and delayed effects of imposed postfeedback delays in computerized programmed instruction." *Psychological Record*, 47, 687-698.
- Kroger, J. (1997). "Gender and identity: The intersection of structure, content, and context." *Sex Roles* 36 (11/12), 747-770.
- Lorde, A. (1984/1995). "Age, race, class, and sex: Women redefining difference." In B. Guy-Sheftall (ed.), *Words of Fire: An Anthology of African American Feminist Thought* (pp. 283-291). New York: New Press.
- Meachum, J. (1997). "Autobiography, voice, and developmental theory." In E. Amsel & K. Renninger (eds.), *Change and Development* (pp. 43-60). Mahwah, NJ: Lawrence Erlbaum.
- Merriam, S., & Caffarella, R. (1999). *Learning in Adulthood: A Comprehensive Guide* (2nd ed.). San Francisco: Jossey-Bass.
- Mezirow, J. (1990). "How critical reflection triggers learning." In J. Mezirow (ed.), *Fostering Critical Reflection in Adulthood* (pp. 1-20). San Francisco: Jossey-Bass.
- Mezirow, J. (1991). *Transformative Dimensions of Learning*. San Francisco: Jossey-Bass.
- Miller, J. (1999). "Making connections through holistic learning." *Educational Leadership*, 56 (4), 46-48.
- Miller, P. (1993). *Theories of Developmental Psychology* (3rd ed.). New York: W. H. Freeman.
- Munson, K. & Crosbie, J. (1998). "Effects of response cost in computerized programmed instruction." *Psychological Record* 48 (2), 233-250.
- Palmer, P. (1999). "Evoking the spirit." *Educational Leadership*, 56 (4), 6-11.
- Pearlin, L. (1982). "Discontinuities in the study of aging." In T. Hareven & K. Adams (eds.), *Aging and Life Course Transitions: An Interdisciplinary Perspective* (pp. 55-74). New York: Guilford Press.
- Perun, P., & Bielby, D. (1980). "Structure and dynamics of the individual life course." In K. Back (ed.), *Lifecourse: Integrative Theories and Exemplary Populations* (pp. 97-120). Boulder, CO: Westview Press.
- Shaffer, D. (1994). *Social and Personality Development* (3rd ed.). Pacific Grove, CA: Brooks and Cole.
- Skinner, B. F. (1968). *The Technology of Teaching*. New York: Meredith Corporation.

ADULT DEVELOPMENT

Sleeter, C., & Grant, C. (1988). *Making Choices for Multicultural Education: Five Approaches to Race, Class, and Gender*. Columbus, OH: Merrill.

Suhor, C. (1999). "Spirituality: Letting it grow in the classroom." *Educational Leadership*, 56 (4), 12-16.

Taber, J., Glaser, R., & Shaeffer, H. (1965). *Learning and Programmed Instruction*. Reading, MA: Addison-Wesley.

Tisdell, E. (1999). "The spiritual dimension of adult development." In M. C. Clark & R. S. Caffarella (eds.), *An Update on Adult Development Theory: New Ways of Thinking about the Life Course* (New Directions for Adult and Continuing Education, No. 84). San Francisco: Jossey-Bass.

Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.

Watson, J. B. (1930). *Behaviorism*. Chicago: University of Chicago Press.

Wrightsman, L. (1994). *Adult Personality and Development: Theories and Concepts*. Thousand Oaks, CA: Sage Publications.

About the Author

Lisa M. Baumgartner is an Assistant Professor of Adult Education at Buffalo State College in Buffalo, NY. Her interests include adult learning and development, identity development, and qualitative research.

Reading #2

Our Developmental Perspective

Eleanor Drago-Severson, Deborah Helsing, Robert Kegan, Maria Broderick, Kathryn Portnow and Nancy Popp

Drago-Severson, E., Helsing, D., Kegan, R., Broderick, M., Portnow, K., & Popp, N. (2001). Our developmental perspective. *Focus on Basics* 5(B), pp. 5-6.

We employed a constructive developmental perspective of growth, based on the work of psychologist Robert Kegan (1982, 1994), to understand: how the adults in this study experienced - or made sense of - what they learned in their programs; and the supports and challenges they named as facilitating their growth. Our perspective is informed by the past 30 years of research in the field of adult development, which suggests that developmental principles can be applied to adults (Basseches, 1984; Belenky et al., 1986; Daloz, 1986; Kegan 1982, 1994; Kohlberg, 1984; Piaget, 1952; Weathersby, 1976).

The first premise in a constructive developmental perspective is that **growth and development are lifelong processes**. Growth does not end in adolescence; as adults we continue to grow and develop. Another is that these **growth processes are gradual and in the direction of greater complexity**. Adults evolve from one way of knowing, or underlying meaning system, to another more complex way of knowing at their own pace and depending on the available supports and challenges. While these developmental processes are sequential, people of similar ages and phases of their lives can be at different places in their development (Broderick, 1996; Drago-Severson, 1996; Goodman, 1983; Kegan, 1982; Popp, 1998; Portnow, 1996; Portnow et al., 1998; Stein, 2000). Moving from one developmental stage to another is a progression of increasing complexity in an individual's cognitive, emotional, interpersonal, and intrapersonal capacities. Each stage includes the capacities of the prior stage, but adds new capacities as well. Some readers may wonder therefore whether we are suggesting that a higher stage is necessarily a better stage. We prefer to look at this question in terms of the natural learning challenges (or "hidden curricula") people face in their lives. If the complexity of one's meaning system is sufficient to meet the challenges one faces, it would not necessarily be better to construct a more complex meaning system. But if the complexity one faces outstrips the current complexity of one's meaning system, a change in one's meaning system in the direction of greater complexity **would** indeed be better, in the practical sense. We do **not** believe that a person is a better person for having a more complex meaning system.

Development, from our point of view, involves more than learning new skills or acquiring new knowledge, which we refer to as informational learning. Development also involves transformational learning: a qualitative shift in how people know and understand themselves, their worlds, and the relationship between the two. Transformational learning enables people to take broader perspectives on themselves (seeing and understanding different

aspects of the self) and others (Cranton, 1994; Kegan, 1982, 1994; Kegan & Lahey, 2001; Mezirow, 1991). In our view, transformational change is intimately linked to the way in which people conceive of their adult responsibilities. This transformational learning, which underlies changes in how people construe their roles, helps them enhance their capacities to manage better the complexities of their daily lives as learners, parents, and workers. In our view, transformational development occurs across domains. Therefore, people tend to, but do not always, exercise the same meaning systems across all domains of life.

To understand how adults made sense of and interpreted their experience, we used a framework (Kegan 1982, 1994) that considers the way people construct - or make sense of - the reality in which they live, and the way these constructions can change or develop over time. We refer to an adult's underlying meaning system - through which all experience is filtered and understood - as a way of knowing or a developmental level. People's ways of knowing organize how they understand their experience of themselves, others, and life events and situations. Our ways of knowing may feel more to us like the way we are; and the world we construct through our way of knowing may seem to us less the way things look to us, and more like the way things are.

Each way of knowing has its own logic, which is different from and builds upon the previous logic by incorporating the former into its new meaning system. We are all engaged in the universal and continuing processes of meaning making. Understanding how a person is making sense of her world creates an opportunity to join her and offer support in a way that she will experience as being supportive. Three qualitatively different ways of knowing (and several identifiable transition points between any two) are most prevalent in adulthood: the Instrumental, the Socializing, and the Self-Authoring. Instrumental learners tend toward a concrete, external, and transactive orientation to the world. To Socializing learners, the self is identified with its relationship to others or to ideas. Self-Authoring knowers take responsibility for and ownership of their own internal authority.

People's ways of knowing shape how they understand their responsibilities as students and how they think about what makes a good student. It also frames how adults think about themselves as family members, learners, and workers. We used this lens in our research analysis to understand how participants made sense of their motives and goals for learning, expectations of themselves as learners and for their teachers, supports and challenges to their learning, and sense of themselves in their social roles. This framework also allowed us to trace how participants' sense making changed - and grew more complex - over time.

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Reading #3

Our Developmental Perspective on Adulthood

Nancy Popp and Kathryn Portnow

From Drago-Severson, E., Helsing, D., Kegan, R., Broderick, M., Portnow, K., & Popp, N. (2001). *Toward a new pluralism in ABE/ESOL classrooms: Teaching to multiple “cultures of mind”* (NCSALL Report #19), Chapter 3, pp. 43-75. Cambridge, MA: NCSALL.

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 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 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 a 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 indepth 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 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 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 selfdefined 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: $X \rightarrow X(Y) \rightarrow X/Y \rightarrow Y/X \rightarrow Y(X) \rightarrow Y$. 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-Authoring 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.

Notes

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

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

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.

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.

References

Basseches, M. (1984). *Dialectical thinking an adult development*. Norwood, NJ: Ablex.

- Belenky, M., Clinchy, B., Goldberger, N., & Tarule, J. (1986). *Women's ways of knowing: The development of self, mind, and voice*. New York: Basic Books.
- Commons, M., Armon, C., Kohlberg, L., Richards, A., Grotzer, T., & Sinnott, J. (1990). *Adult development 3: Models and methods in the study of adolescent and adult thought*. New York: Praeger.
- Daloz, L. (1986). *Effective teaching and mentoring*. San Francisco: Jossey-Bass.
- Erikson, E. (1968). *Identity: Youth and crisis*. New York: W.W. Norton & Company Inc.
- Erikson, E. (1950). *Childhood and society*. New York: W.W. Norton & Company.
- Fischer, K., & Pipp, S. (1984). Process of cognitive development: Optimal level and skill acquisition. In R. J. Sternberg (Ed.), *Mechanisms of cognitive development* (pp. 45–80). New York: W. H. Freeman & Co.
- Fowler, J. (1981). *Stages of faith: The psychology of human development and the quest for meaning*. New York: Harper & Row.
- Goodman, R. (1983). *A developmental and systems analysis of marital and family communication in clinic and non-clinic families*. Unpublished doctoral dissertation. Harvard Graduate School of Education.
- Harter, S. (1999). *The constructions of the self: A developmental perspective*. New York: Guildford Press.
- Jacobs, J. (1984). *Holding environment and developmental stages: a study of marriage*. Unpublished doctoral dissertation. Harvard Graduate School of Education.
- James, W. (1890). *The principles of psychology*. New York: Henry Holt.
- Kegan R. (1982). *The evolving self: Problem and process in human development*. Cambridge, MA: Harvard University Press.
- Kegan, R. (1994). *In over our heads: The mental demands of modern life*. Cambridge, MA: Harvard University Press.
- Kegan, R., & Lahey, L. (1983). Adult leadership and adult development. In B. Kellerman (Ed.), *Leadership: Multidisciplinary perspectives*. New York: Prentice-Hall.
- King, P. M., & Kitchener, K. S. (1994). *Developing reflective judgment: Understanding and promoting intellectual growth and critical thinking in adolescents and adults*. San Francisco: Jossey-Bass.
- Kitchener, K., & Fischer, K. (1990). A skill approach to the development of reflective thinking. In D. Kuhn (Ed.), *Developmental perspectives on teaching and learning thinking skills. Contributions to Human Development, 21*, 48–62.
- Kohlberg, L. (1969). Stage and sequence: The cognitive-developmental approach to socialization. In R. A. Goslin (Ed.), *Handbook of socialization theory and research*. New York: Rand McNally.

Kohlberg, L. (1981). *The philosophy of moral development*. New York: Harper and Row.

Lahey, L., Souvaine, E., Kegan, R., Goodman, R., & Felix, S. (1988). *A guide to the subject-object interview: Its administration and interpretation*. Unpublished manuscript.

Levinson, D. J. (1978). *The seasons of a man's life*. New York: Ballantine Books.

Levinson, D. J. (1996). *The seasons of a woman's life*. New York: Ballantine Books.

Macuika, L. (1990). *Exploring adult learning from the learners' perspectives: A critical review of the literature*. Unpublished qualifying paper. Harvard Graduate School of Education.

Mead, G. H. (1962). *Mind, self, and society from the standpoint of a social behaviorist*. Chicago: The University of Chicago Press.

Newberger, C. (1980) The Cognitive structure of parenthood: Designing a descriptive measure, *New Directions for Child Development*, 7.

Noam, G., Powers, S., Kilkenny, R., & Beedy, J. (1990). The interpersonal self in lifespan-developmental perspective. In R. Lerner, P. Baltees, & D. Featherman (Eds.), *Lifespan-development and behavior*. Vol. X. Hillsdale, NJ: Erlbaum.

Parks, S. (1986). *The critical years: The young adult search for a faith to live by*. San Francisco: Harper and Row.

Piaget, J. (1952). *The origins of intelligence in children*. New York: International Universities Press.

Piaget, J. (1963). *The child's conception of the world*. Patterson, NJ: Littlefield, Adams.

Piaget, J. (1965). *The moral judgment of the child*. New York: Free Press.

Perry, W. (1970). *Forms of intellectual and ethical development in the college years: A scheme*. New York: Holt, Reinhart & Winston.

Popp, N., & Portnow, K. (1998). Transformational learning in adulthood. Workshop presented at Equipped for the Future Field Development Institute. Louisville, KY.

Portnow, K., Popp, N., Broderick, M., Drago-Severson, E., & Kegan, R. (1998). Transformational learning in adulthood. *Focus on Basics*, 2(D).

Reimer, J., Paolitto, D., & Hersh, R. (1979). *Promoting moral growth: From Piaget to Kohlberg*. New York: Longman.

Roy, N. (1993). *Toward an understanding of family functioning: An analysis of the relationship between family and individual organizing principles*. Unpublished doctoral dissertation. Harvard Graduate School of Education.

Scarf, M. (1980). *Unfinished business: Pressure points in the lives of women*. New York: Ballantine Books.

Selman, R. (1980). *The growth of interpersonal understanding: developmental and clinical analyses*. New York: Academic Press.

Sonnenschein, P. (1990). *The development of mutually satisfying relationships between adult daughters and their mothers*. Unpublished doctoral dissertation. Harvard Graduate School of Education.

Stein, S. (2000). Equipped For the Future content standards: What adults need to know and be able to do in the 21st Century. National Institute for Literacy.

Torbert, W. R. (1976). *Creating a community of inquiry: Conflict, collaboration, transformation*. New York: Wiley.

Torbert, W. R. (1987). *Managing the corporate dream*. Homewood, IL.: Dow Jones Irwin.

Torbert, W. R. (1991). *The power of balance: Transforming self, society, and scientific inquiry*. Newbury, CA: Sage Publications.

Weathersby, R. (1976). *A synthesis of research and theory on adult development: Its implications for adult learning and postsecondary education*. Unpublished Qualifying Paper. Harvard University.

Winnicott, D. (1965). *The maturation processes and the facilitating environment*. New York: International Universities Press.

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