A Different Kind of Diversity Among Adult English Language Learners

By Nancy Popp, Ed.D.

Drawing from her professional development work with the Associated Colleges in the Twin Cities and her research background with the National Center for the Study of Adult Learning and Literacy (NCSALL), developmental psychologist Dr. Nancy Popp discusses how understanding adult development can help educators support adult English language learners.

Fifty years ago, it was assumed that by the time we reached 20 or 21 years of age, we had achieved all of our adult faculties and any continued growth was about age and weight. Fortunately, the field of adult development (and Constructive-developmental theory in particular) is, like its subject, actually continuing to grow and to teach us some surprising—and hopeful—lessons.

The importance of the Constructive-developmental (C-D) theory of adult development in its application can be profound, including for adult English Language Learners (ELLs) and their teachers. It is a particularly clear lens—and mirror—through which we can sharpen our vision and soften our understanding of our students, each other, and ourselves. When we talk about development it gets personal—we inevitably start thinking about our own place on the continuum, or where somebody else is, and there is a real temptation to start judging ourselves, others, or the theory. The spirit and soul of C-D theory is not about judging anybody or anything. It is about developing a deeper understanding of our students and ourselves so that we might work more effectively with them and each other.

This article will introduce C-D theory and the developmental continuum it describes. It will look at the process and evolution of meaning-making and the implications of and applications to our work with adult ELLs.

Constructive-Developmental Theory

Theories not only describe and make sense of the world we see, but they also shape and frame the ways in which we *look* at the world (Edwards, 2009). Theories calibrate the radar of our awareness, attuning us to what we look *at* and what we look *for* (McGuigan & Popp, 2016). C-D theory calibrates our awareness to pay attention to a different kind of diversity than those most observable in the adult English language classroom: that is, to the differing ways that individuals make sense of their experience.

C-D theory brings together two very big ideas in psychology (Kegan, 1980, 1982) that have also influenced education (Fosnot, 2015). They are *constructivism*, which looks at the ways in which we construct our reality, i.e., make sense of it; and *developmentalism*, which looks at the ways in which our construction of our reality changes and becomes more complex over time. In doing so, C-D theory maps a unique terrain in human psychological functioning and experience.

The C-D theory of adult development is related to Piaget's (1952, 1954, 1970) work with the developmental stages of reasoning of children. Piaget was particularly interested in when children came up with the "wrong" answer. He noticed some interesting patterns in their "incorrect" reasoning and began to look more closely at how children made sense of their world—looking beyond what they know to how they know.

Kegan's (1982) C-D theory expanded Piaget's work on the cognitive stages of development in children in two important ways: in length and in breadth. He expanded *breadth-wise* to include social/interpersonal and emotional development as partners with cognitive development in how we know. And he expanded *length-wise* into adulthood, to include (at least) two major stages beyond Piaget's formal operations—post-formal operations and post-post-formal operations. C-D theory gives us insights into the shape of our students' understanding and misunderstanding to shed light on *how* they know and learn and not just *what* they know and learn. C-D theory shows us the hidden logic in our own and our students' reasoning—even, and especially, when our answers seem to be "wrong." Understanding our students' reasoning is about listening carefully enough so that we really hear their own logic in *how they put their world together*.

So it's about understanding—but it's a different kind of understanding. It's not about the *content*—or storyline—of your student's experience. It's about their *meaning-making*—the ways they *make sense of the content*. And the ways they make sense of their own experience has everything to do with who they experience themselves to be. When you understand the way a person *makes sense of* her experience, you get a lot closer to understanding that person's sense of identity—as an adult learner, an immigrant, a non-native speaker, working hard to get ahead.

Content Versus Structure

The same "content" or event can mean very different things to different people, depending on the complexity of the ways they make sense of it. Sometimes these distinctions are easier to see in kids. It's like a mom with two kids: one is three and the other is nine. She's giving them brownies after lunch, and the nine-year-old gets two. Of course the three-year-old instantly wails in protest that she wants two, too. The mom tries to reason with her, saying Tommy gets two brownies because he is bigger and when Zoey is as big as Tommy, she will get two brownies, too. It doesn't work. Zoey wails louder and louder.

The mom, at her wits end, says, "Ok, you want two, I'll give you two!" and she swoops down with a knife and cuts Zoey's brownie in two, and says, "There! You have two!" and Zoey beams with delight—while the mom and Tommy stare at each other in disbelief.

So, that will only work for so long. It would never work with Tommy, and it will never, ever work with your teenager or with your spouse or your adult students. But the principles are the same with our development into adulthood. It's about how differently Zoey and Tommy and your students put the world together.

C-D theory looks at the *complexity* of the different ways people make sense of their experience, the ways they make meaning in and from their experience. Complexity in this context is about the kinds of perspectives people can take on their own experience. Zoey can consider only one aspect at a time—that two is more than one. Tommy knows that cutting something into two pieces increases the number of pieces but does not increase the overall quantity or amount.

Tommy can take a perspective on his perceptions, and can consider two different aspects—size and number—at the same time.

As we become more familiar with the qualitative distinctions between the ways that our students make sense of their learning, their teachers, their struggles and their successes, we begin to see more clearly how the same "content" takes on very different meaning.

These differences in how we make sense of the same things has huge implications for how we all learn, and how our students learn—how they make sense of education, how they make sense of you as a teacher, how they make sense of themselves as learners and what their responsibility is in their own learning process. Some of your students will see you as the fountain of all they want to know and believe that your job is to hand it over to them. Some of your students will see you as the expert, the one who will impart not just facts, but *understanding*. You are the one who will tell them how to understand things that are ambiguous and confusing. You are the one who will tell them how and what to think and why. And some of your students will challenge you and ask why they should believe what you say, or what about this other way of thinking, or how do these two competing things make sense. You are likely to have all of these students in your classrooms.

The Process of Development

Let's look briefly at the developmental process itself. It is important to understand that this kind of development is not a stair-step progression. The stages build on each other, so none can be skipped. It's more like climbing up a mountain than a set of stairs—there are plateaus, valleys, steep and rocky trails—and breathtaking new views that show you new worlds and alter your experience of reality. The basic idea of this developmental process is that what we are "subject to" in one stage becomes what we can take as "object" in the next stage. For more information on the subject-object nature of development, see Kegan (1982). Meanwhile, let's look at one of the most important principles of development—the holding environment.

The Holding Environment

Developmental growth does not happen in a vacuum, but in the ongoing interactions between the individual and his or her social world (Baldwin, 1906, 1975; Darwin, 1968; Maturana & Varela, 1972; Piaget, 1954, 1952, 1970; Vygotsky, 1978; Winnicott, 1965). One of the fundamental tenets of C-D theory is that you can't understand a person separately from his or her holding environment (Baxter Magolda, Creamer & Meszaros, 2010; Belenkey, Clinchy, Goldberger, & Tarule, 1986; Kegan, 1982, 1994; McGuigan & Popp, 2007, 2012, 2016). We are social creatures, and so are always in relationship with our social contexts—our families, jobs, faith communities, neighborhoods, classmates, or sports teams. We learn early on in our families what it means to be a good member of that family—which behaviors are okay and which behaviors will get punished—"We don't throw food at each other in this family!" Our behavior and our values are shaped by our social contexts. We are products of our environments.

Kegan (1982) further defined the holding environment, suggesting it has three functions: holding on, letting go, and sticking around. This means that a good holding environment, a classroom,

say, will hold on to the student by supporting her where she is—validating and encouraging her current way of making sense of her world; will let go of the student by gently pushing on and challenging her current meaning-system; and will stick around by remaining in place for her to come back to as needed. Developmental growth requires an optimal balance of challenge and support from our holding environments. Too much challenge and not enough support leaves us feeling defeated and overwhelmed, and we do not grow. Too much support and not enough challenge leaves us feeling bored and restless, and we disengage and do not grow. An optimal balance leaves us feeling curious, stimulated and motivated. Non-native speakers trying to learn the local language very often find themselves over challenged and stressed in their new lives, and deeply grateful for the safe haven—the holding environment—offered by their English class and cohort there (Kegan et al., 2001). A holding environment like the classroom provides adult learners with a reliable time and space in which they can focus on their learning as learning, where they are expected to make mistakes and celebrate the successes.

In my observations of and participation in this growth process over the years, including with adult English language learners (Kegan et al., 2001; McGuigan & Popp, 2016; Popp & Portnow, 2001), I have noticed that when given an opportunity to stretch and extend one's mental reach, there seems to be an intrinsic urge to go for it. We don't question this in little kids—their excitement when they can do something new is evident and infectious. We celebrate those achievements because we can see how much it means. While our adult expression might be more restrained, we still very often feel the same excitement when we achieve a hard-won victory—being able to say no and advocate for ourselves, finding our own voice after feeling invisible and powerless, or even just being able to read a menu and order in a new language. Those are developmental achievements that feel just as important and just as liberating as a one-year-old learning to walk. It feels good to grow! A good holding environment provides all of the necessary ingredients for those achievements.

Like humans, fruit trees have certain requirements for healthy growth. They need plenty of sun, water, food, and space. But when the weather is too rainy for too long, the fruit doesn't grow well. If it is too sunny and there's not enough rain, the fruit shrivels and doesn't grow. If the tree is over-protected when it is young, i.e., staked and never exposed to the wind, it doesn't grow strong and resilient, but becomes weak and brittle, and breaks in a big storm. An optimal balance of challenge and support is as essential for healthy human growth as it is for a strong, healthy tree and a good harvest. This begs the question of what constitutes an optimal balance of challenge and support for human psychological growth if we all make meaning in such different ways. The next section will take a look at the three developmental mindsets that we find most commonly in adulthood, the implications for teaching, and how to create an optimal holding environment for them in the English language classroom.[1]

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[1] For a more detailed and in-depth discussion of the developmental process, including the subphases, please see Popp, N. & Portnow, K. (2001). Our developmental perspective on adulthood. In R. Kegan, M. Broderick, E. Drago-Severson, D. Helsing, N. Popp, K. Portnow, & Associates (Eds.), Toward a "new pluralism" in the ABE/ESL classroom: Teaching to multiple 'cultures of mind' (pp. 615-662). NCSALL Research Monograph #19. Boston: World Education. http://ncsall.net/fileadmin/resources/research/19_c3.pdf

The Three Most Common Mindsets in Adulthood

There are identifiable signposts and markers along the adult developmental journey to guide and map where we are. We call these markers mindsets, or meaning systems, and they signify qualitatively different perspectives and ways of making sense of where we are. Kegan (1982) identified six such markers from infancy to mature adulthood. We will look at only three of them—the three that occur most commonly in adulthood, and the ones that we are most likely to encounter in our adult learners (Baxter Magolda, 2009; Kegan, 1982, 1994; McGuigan & Popp, 2016; Torbert, 2004). While it can be tempting to view mindset characteristics as cultural differences, research to date has found clear evidence of these mindsets in diverse non-Western adult populations (Lindsley, 2011; Villegas-Reimers, 1996), and among ABE and community college ELLs (Kegan et al., 2001; Ouellette-Schramm, 2016). The following mindset descriptions and illustrations have been adapted from Popp & Portnow (2001).

Instrumental/Concrete Mindset

The Instrumental Mindset is one that is most associated with pre-adolescence, during that time when kids are all about linear, cause-and-effect, rule-oriented life. But this mindset is also common in adulthood, and an adult learner can be recognized by his or her singular focus on external, observable aspects—of others' behavior and actions, of events and consequences, and on the impact on his or her own needs. Characteristics of this mindset include:

- Self is defined by a very concrete orientation to the world and to one's self-interests; by one's concrete needs, purposes, plans, wants, and concrete characteristics such as nationality, likes and dislikes, age, religion, what kind of job one has, how many children, etc.
- Dualistic thinking such as right vs. wrong, and arbitrary either/or distinctions.
- Concern with concrete consequences such as: "I just want to get my degree, 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?" "How can I get what I need?"
- 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." Relationships are valued for these reasons. 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/job/salary).
- Strong reliance on rules to know how to accomplish something and to do it the right way.
- Linear, cause-and-effect thinking.
- Criticism is experienced as being told I did it wrong and I am bad.
- Learning and education is about getting information, facts, and skills.
- A good teacher is the owner and imparter of necessary information and facts.
- Understanding of the Golden Rule has a tit-for-tat mentality: "I'll do to you what you do to me."

Here is how one adult learner (Kegan et al., 2001) with an Instrumental 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 this mindset.

> 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.**

The orientation within this meaning system is toward the concrete, transactive elements of an interaction: what you have that can help me, what I have that can help you. An adult learner 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 learn the right way to speak English/get what I want/need?" Descriptions of people with this mindset can often sound mercenary, 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, albeit 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 helpful information that is clearly and specifically useful: "If you like that you can take something, something good you take it."

Socializing Mindset

People with this mindset can often be recognized by their guiding concern for the feelings and experience of others, and the deep desire not to offend or hurt another person. Adult learners will gravitate toward the commonalities within the group, looking for shared values and norms to connect with and gain a sense of belonging. Characteristics of this mindset include:

- Self is defined by important others and a sense of belonging: "The values of my group (faith community, political party, family, etc.) define me and the kind of person I am." "What you think about me tells me who I am, what kind of person I am, and my sense of worth."
- Feels empathy; feels responsible for other's feelings; holds others 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 living up to my community's expectations and values?" "Do you think I am still a good person?" "Do I still belong?" "Do you still like/love/value me?"
- Intolerant of ambiguity. Needs a clear sense of what others expect and want from him or herself.
- Reliance on external authority, identity group, and important others for values, acceptance, belonging, and sense of self.
- Abstract 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." "My sense of belonging is threatened if you criticize me."
- Education and learning is about learning new ideas to expand what I know so I can be more of an expert in my field.

- A good teacher is the expert, the authority on the subject who teaches me what he or she believes I need to know and understand.
- Understanding of the Golden Rule deals with issues of mutuality and loyalty and obligation: "I should do for you what I need and expect from you."

In a discussion about issues of diversity and the ways that others are different from himself and what that means to him, this student with a Socializing Mindset 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.**

The orientation in the Socializing Mindset 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. Feeling this sense of belonging and identity with a class or cohort can be an especially powerful experience for an adult learner with this mindset, and can often make or break his learning experience and success.

Self-Authoring Mindset

An adult learner with a Self-authoring Mindset can often be recognized by a clear and well-defined personal agenda and set of goals that she brings to her classes. She will be interested in many different perspectives and could very well challenge her teachers on what is being taught and why.

- Self is defined by its own internal authority, value system, self-standards.
- Holds contradictory feelings simultaneously. Self can disagree with itself, feel two or more contradictory or competing things at the same time.
- Concerned with consequences for personal integrity and meeting one's own standards: "Am I competent?" "Am I living up to my full potential?" "Am I upholding my own values and standards?" "Am I meeting my own goals?"
- Integrates others' perspectives, including criticism, as one perspective among many. Evaluates and uses critical feedback and other perspectives as helpful information about the integrity of own self-system.
- Others are experienced as being responsible for their own feelings and thoughts and having their own psychological agendas and standards. Differences with others are experienced as a given, are appreciated and taken as opportunities for growth and creativity.
- Welcomes ambiguity.
- Education and learning is about engaging new ideas to challenge my own, to expand my thinking, and challenge my assumptions.

- A good teacher is a knowledgeable person in the role of teaching others, presenting new ideas, new ways of thinking, and challenges assumptions.
- Understanding of the Golden Rule deals with the recognition, acknowledgment, and respect of different values and standards: "Doing for each other supports each of us in meeting our own self-defined values, ideals and goals, and helps preserve the social order."

An adult learner with a Self-authoring Mindset also talked 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 own internal authority in relation to the context(s) in which he finds himself, as this man did in choosing a learning environment better suited to his own learning goals. The goals set by someone with this mindset reflect one's own values, standards, agenda, and are conceived out of an understanding and experience of oneself in relation to the social and political and environmental worlds one moves among. For this learner, the diversity of the class he chose and the wealth of information available in the wide range of experiences and origins of the other students was the most valuable part. He not only appreciated the differences between the other students and himself and their cultures—he sought them out, finding more opportunities to learn from the differences rather than needing to find the similarities.

Reflecting on your Experience

These have been very brief descriptions of the three primary mindsets that we find in adulthood, and despite the absence here of a discussion about the transitional journey from one to the next, there is a predictable and gradual process of evolution (Kegan, 1982; Popp & Portnow, 2001).

Hopefully these descriptions of the different mindsets and their experience of learning have resonated with your own experiences with your students, and maybe even sparked insight into some of the struggles they have that have puzzled you. In the next section, we will look at what understanding these mindsets can mean for teaching in developmentally diverse classrooms.

Implications for Teaching in a Developmentally Diverse Classroom

What do you do when your classroom is filled with people with all these diverse agendas and ways of making sense of you and of their learning? Most likely, you already intuitively do this every day. When your students don't understand what you are asking them to do, you most likely inquire as to where they get stuck. We create social learning contexts in our classrooms with the intention of helping our students grow.

Most often we focus on what we are teaching—those facts and skills that we know our students need to know to be able to navigate successfully in their communities. C-D theory gives us the added awareness to attend not only to what they learn but to how our students learn and how they know. When we ask our adult students to analyze a particular paragraph in English, for example, we may do so with the assumption that they can do this in their native language, that they know what it means, that they can look at a paragraph and pull out the main idea. But not all of them can—and very often it is not because they are not smart or curious enough, and not only because of difficulty with the language (Helsing, Broderick, & Hammerman, 2001; Kegan et al., 2001; Ouellette-Schramm, 2016). Very often it has a lot to do with the mismatch between what we are asking them to do and the complexity of their meaning-system to engage it (Kegan, 1994; Kegan et al., 2001; Popp & Boes, 2001). Analysis tasks requiring abstract thinking capacities outstretch some learners' meaning-making capacities. And while C-D theory can explain why some adult learners can't or don't learn certain things, fundamentally the theory is more about understanding what they can do and what their strengths are (Popp & Boes, 2001), so that we can start from there and support them toward achieving their goals.

Creating an optimal holding environment for adult learners with an Instrumental mindset means supporting their points of view while at the same time encouraging them to think about what another person has said and to identify something that is useful about it; to begin to think about how another person's point of view (that is different from their own) might be able to actually help them. The idea is to begin to link up meeting their own concrete goals with working together, so that a personal victory becomes a team victory.

An optimal holding environment for adult learners who have a Socializing Mindset would include encouragement to come up with their own opinions and trust their own instincts; to begin to unpack ideas and values into aspects that they agree with and other aspects they don't, to bring their focus internally to find their own preferences and passions.

Adult learners with a Self-authoring Mindset tend to come into the classroom already self-motivated and clear about what they want to learn. The challenge for these students is to develop more patience for their classmates who haven't yet developed that confidence and clarity. Encouraging your Self-authoring students to mentor others is a great way to support their confidence and their empathy and also help them challenge and clarify their own thinking and assumptions.

We support our adult learners by meeting them where they are and starting with what they can do. And we challenge them by pushing on their thinking, giving them work that is just beyond

what they can comfortably do—that is hard, but not too hard—so they can feel some success, but still have to reach. In the stretching and reaching, our adult learners can actually begin to feel their own growth and achievement. That is the reward for us as teachers, not to see our students reach our goals, but to celebrate with them when they reach their own hard-won goals.

References

Baldwin, J. M. (1906). *The Mental Development of the Child and the Race*. New York: Macmillan & Company.

Baldwin, J. M. (1975). *Thoughts and things*. New York: Arno Press.

Baxter Magolda, M.B. (2009). *Authoring your life: Developing an internal voice to navigate life's challenges.* Sterling, VA: Stylus.

Baxter Magolda, M.B., Creamer, E.G. & Meszaros, P.S. (Eds.) (2010). *Development and assessment of Self-authorship: Exploring the concept across cultures*. Sterling, VA: Stylus.

Belenkey, M. F., Clinchy, B.M., Goldberger, N.R. & Tarule, J.M. (1986). *Women's ways of knowing: The development of self, voice, and mind*. New York: Basic Books.

Darwin, C. (1968). *The origin of the species*. Harmondsworth, Middlesex, England: Penguin.

Edwards, M. (2009). *Organizational transformation for sustainability*. New York, NY: Routledge

Fosnot, C. (2015). *Constructivism theory, perspectives, and practice* (2nd ed.). New York, NY: Teachers College Press.

Helsing, D., Broderick, M., & Hammerman, J. (2001). A developmental view of ESL students' identity transitions in an urban community college. In R. Kegan, M. Broderick, E. Drago-Severson, D. Helsing, N. Popp, K. Portnow, & Associates (Eds.), *Toward a "new pluralism" in the ABE/ESL classroom: Teaching to multiple "cultures of mind"* (pp. 77-228). Research Monograph, NCSALL reports #19. Boston, MA: World Education.

Kegan, R. (1980). Making meaning: The constructive-developmental approach to persons and practice. *Personnel and Guidance Journal, 58*-5: 373–80.

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., Broderick, M., Drago-Severson, E., Popp, N., Portnow, K., & Associates. (2001). *Toward a new pluralism in ABE/ESOL classrooms: Teaching to multiple "cultures of mind."* Research Monograph, NCSALL reports #19. Boston, MA: World Education. http://ncsall.net/index.php@id=29.html

Lindsley, R. B. (2011). *Constructive developmental theory and programming across cultures: An examination of the development and experiences of adult Burmese participants in a high quality adaptive capacity development program.* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (Order Number 3459743).

McGuigan, R. & Popp, N. (2016). *Integral conflict: The new science of conflict*. Albany, NY: SUNY Press.

McGuigan, R. & Popp, N. (2012). Consciousness and conflict (explained better?). *Conflict Resolution Quarterly 29*: 227–260.

McGuigan, R. & Popp, N. (2007). The self in conflict: The evolution of mediation. *Conflict Resolution Quarterly, 25*(2), 221-238.

Maturana, H. & Varela, F. (1972). *Autopoiesis and cognition*. Dordecht, The Netherlands: D. Reidel.

Ouellette-Schramm, J.R. (2016). Developmental diversity in the academic language–learning experiences of adult English as a second or other language learners: A constructive-developmental study." *Adult Education Quarterly*, *66*(3) 219–236.

Piaget, J. (1970). *Structuralism*. New York, NY: Basic Books.

Piaget, J. (1954). *The construction of reality in the child*. New York, NY: Basic Books.

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

Popp, N., & K. Portnow, K. (2001). Our developmental perspective on adulthood. In R. Kegan, M. Broderick, E. Drago-Severson, D. Helsing, N. Popp, K. Portnow, & Associates (Eds.), *Toward a "new pluralism" in the ABE/ESL classroom: Teaching to multiple "cultures of mind.*" Research Monograph, NCSALL reports #19. Boston, MA: World Education. http://ncsall.net/fileadmin/resources/research/19_c3.pdf

Popp, N., & Bose, L. (2001). Competence as a developmental process. In R. Kegan, M. Broderick, E. Drago-Severson, D. Helsing, N. Popp, K. Portnow, & Associates (Eds.), *Toward a "new pluralism" in the ABE/ESL classroom: Teaching to multiple "cultures of mind.*" Research Monograph, NCSALL reports #19. Boston, MA: World Education. http://ncsall.net/fileadmin/resources/research/19_c8.pdf

Torbert, B. & Associates. (2004). *Action inquiry: The secret of timely and transforming leadership*. San Francisco, CA: Berrett-Koehler.

Villegas-Reimers, E. (1996). Self-development of Venezuelan adolescents: A test of Kegan's theory of subject-object interview in another culture. *Journal of Cross-Cultural Psychology*, *27*(1), 25-36.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Wade, J. (1996). *Changes of mind: A holonomic theory of the evolution of consciousness*. Albany, NY: SUNY Press.

Winnicott, D.W. (1965). *The maturational process and the facilitating environment*. New York, NY: International Universities Press.

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