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# Section 1: Introduction

In June of 2010, Erica Goldson graduated as the valedictorian of Coxsackie-Athens High School in New York State. In her valedictory speech--resonant with the ideas of Ivan Illich and inspired in part by her reading of educational reformer John Taylor Gatto--Goldson bravely and publicly interrogated the educational system of which she was a shining product.

Perhaps the most striking statement in Goldson's speech was the reflection that by earning the honor of valedictorian she had "successfully shown that [she] was the best slave."

"I did what I was told to the extreme. While others sat in class and doodled to later become great artists, I sat in class to take notes and become a great test-taker. While others would come to class without their homework done because they were reading about an interest of theirs, I never missed an assignment. While others were creating music and writing lyrics, I decided to do extra credit, even though I never needed it."

"So, I wonder, why did I even want this position? Sure, I earned it, but what will come of it? When I leave educational institutionalism, will I be successful or forever lost?"

Despite her criticism of "educational institutionalism," Goldson spoke of one important interaction:

"If it wasn't for the rare occurrence of an avant-garde tenth grade English teacher, Donna Bryan, who allowed me to open my mind and ask questions before accepting textbook doctrine, I would have been doomed."

And although it may be tempting for adults to dismiss Goldson's speech as the dramatics of a teen, the scenario detailed in the speech resembles many of the literacy narratives we've recorded and uploaded to the Digital Archive of Literacy Narratives (DALN) during the past two years.

Our narrators told tales of learning despite (or in the face of) a system they seemed to think might be engineered to meet the needs of someone else.

In spite of this, in a number of these stories protagonists found a helper as they tried (and sometimes struggled) to enter more fully into the activities of their culture, whether by learning to read, learning to do math, or mastering a technical or disciplinary competency that helped them get on in the world.

# Section 2: ZPD and Scaffolding as Metaphors

In this exhibit, we want to theorize these significant and transformative learning experiences as interactions taking place in what Lev Vygotsky called a Zone of Proximal Development (ZPD).

Vygotsky (1978) first described this zone in the following terms:

"… the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers." (p. 86)

In the time since Vygotsky's writings have become widely available in the West, scholars have attempted to relate his formulation, which Irina Verenikina (2003) points out is itself "of a metaphorical nature" (p. 4) to the metaphor of scaffolding.

This idea was initially forwarded by Jerome Bruner (1975) in the context of a young child's interaction with her mother during language learning:

"In such instances mothers most often see their role as supporting the child in achieving an intended outcome, entering only to assist or reciprocate or 'scaffold' the action" (p. 12)

At about the same time, David Wood, Bruner, and Gail Ross (1976) deployed the notion as they examined the role a tutor played in helping children solve a pyramid-building task (p. 90).

In this important article, they identified six key "scaffolding functions" in which the tutor they studied engaged:

1) Winning the problem-solver's interest.

2) Simplifying the task so the learner could recognize when she had made progress toward the goal.

3) Making sure the problem solver kept trying to achieve the objective at hand.

4) Marking critical features of the task for the problem solver.

5) Ameliorating the problem solver's frustration.

6) Modeling the task to be performed in a way tailored to the problem solver's understanding of the task and goal.

(p. 98)

During the 1980s, the scaffolding metaphor became a substrate for structuring any number of educational experiences so that a learner could achieve, first with adult or peer assistance and later on her own, some intended outcome.

Describing the scaffolding metaphor, C. Addison Stone (1998) explains:

"The key notion captured by most discussions of the scaffolding metaphor is that of a joint but necessarily unequal engagement in a valued activity, with a gradual shift in responsibility for the activity. Central to this image are the notions of affective engagement, intersubjectivity or shared understandings, graduated assistance, and transfer of responsibility." (p. 352)

Although the scaffolding metaphor proved a powerful lens through which to view the developmental process, and there is "consensus that sociocultural psychology and the notion of the zone of proximal development are at the heart of the concept of scaffolding" (Verenikina, 2003, p. 2), people continue to debate the exact ways that the scaffolding metaphor relates to Vygotsky's sociocultural perspective on learning and development.

Indeed, Stone observes "as careful consideration of the sociocultural perspective made scholars increasingly sensitive to the cultural context of children's learning and development, a number of concerns about the scaffolding began to emerge" (p. 349).

Stone summarizes concerns various scholars have about the metaphor, all of which in one way or another spring from the following observation:

"… [the] original meaning of the scaffolding metaphor is too bound to the special case of middle class industrialized societies, and, more broadly, that analyses generated by the metaphor have focused largely at the "micro" level of adult-child interactions, paying little if any attention to the social or cultural factors influencing the quality and potential utility of that interaction." (p. 349)

Critics argue that scholars and educators have interpreted the scaffolding metaphor and applied it in ways that have:

1) Tended to focus on "adults as the agents for instilling new skills and understanding." Until recently the role of peers in day-to-day learning has been neglected.

2) Led to a conception of adult-child interactions as too "one-sided." Key to the notion of scaffolding as it was developed by Wood, Bruner, and Ross is that "the active, initiating child stays in control of the language and the experience while the adult operates effectively in response to the child" (Searle, 1984, p. 480). Dennis Searle observed in I984 that "schools . . . are rarely effective in allowing children either to initiate topics or to shape the experience for themselves" (p. 481).

3) Assumed an "idealized adult-child relationship." Early researchers neglected to note that negative values may be attached to objects or skills to be mastered. In addition, there can be cultural differences in the meanings of objects introduced to and actions undertaken in the classroom.

4) Encouraged people to "focus on quantitative rather than qualitative changes in children's knowledge. In essence, the image created is one of accretion rather than of reorganizing skills or understanding."

5) Neglected to explore in detail the mechanisms by which new learning takes place during adult-child interactions.

(Stone, 1998, pp. 349-350 )

These are not minor critiques, but in spite of them, we think the metaphor is worth pursuing.

# Section 3: How the DALN Helps Address Criticisms of Scaffolding

To begin with, we hold with Stone (1998) that in abandoning the scaffolding metaphor completely we risk disconnecting ourselves from the rich history of discussion about "how adults aid in children's learning and development" (p. 351).

In addition, we also risk abandoning a metaphor that "highlights one of the key features of children's learning: namely that it is often guided by others who strive (explicitly or implicitly) to structure learning opportunities" (p. 351).

Stone goes on to suggest that we must "enrich" and "refine" the metaphor to address the criticisms we have listed: "In particular, it needs to be invigorated with a much more explicit theory of the mechanisms involved in the instilling of new understandings" (p. 352).

We suggest that the Digital Archive of Literacy Narratives (DALN) can serve as a substrate for building this theory because it provides a database of accounts of learning in context. The narratives we've chosen to interpret each highlight an interaction between two or more people who have unequal experience with a particular activity. At the same time, each narrative is unique in its setting and in the way the people negotiate the value of the activity at hand as well as the meaning of the experience.

With this in mind, we return to Jerome Bruner, explaining how people narrate "turning points" in their lives.

Bruner (1991) explained narrative turning points "as a device further to distinguish what is ordinary and expectable (i.e., folk psychological) from that which is idiosyncratic and quintessentially agentive" (p. 73).

In choosing DALN narratives to analyze, we have selected those in which narrators tell about learning within the encounter's ZPD. The goal of such encounters is to enable the individual to perform a culturally valued task on her own.

It is hard to deny that achieving such a performance is a form of agency.

In choosing and interpreting narratives within this theoretical context, we follow Neil Mercer and Eunice Fisher (1992) who suggested that participation in the ZPD is an agentive/transformational event in people's lives that results from a collaborative introduction to a culture's tools.

They argued that the "ZPD is not an attribute of a child ... but rather an attribute of an event. It is the product of a particular, situated, pedagogical relationship" (p. 342).

In the words of David McNamera, "each child's 'scaffold' or ZPD is different and … the teacher must treat each child's learning individually" (as quoted in Mercer & Fisher, 1992, p. 341).

Certainly, then, we shouldn't be surprised at the myriad criticisms of institutional education. The task of creating meaningful learning events for every student even in a class as small as five is a difficult and delicate task.

Nevertheless, we believe that the viewing and elucidation of the narratives in the DALN plays an important role in helping educators and researchers complicate the scaffolding metaphor. We also think it useful for exploring other metaphors like "assisted performance," "apprenticeship," and "legitimate peripheral participation," metaphors which scholars have developed as alternatives to "scaffolding" for creating and enacting zones of proximal development.

# Section 4: Methods

The authoring team for this exhibit selected from a group of 46 narratives we had gathered at a Literacy Narrative event at the University of Arkansas at Little Rock (UALR) on April 28, 2010.

We chose only from the narratives we collected during 2010 because each of these narratives was initiated by the same question: "Would you share with us a story about reading and/or writing in your life or how you learned to read or write?"

If narrators pressed interviewers for ideas, the interviewers were instructed to provide guidance in the form of additional questions like:

"How did learning to read and write change your life?"

"Who had the biggest impact on your learning to read or write and why?"

"What was the biggest challenge you faced when it came to learning to read or write?"

Generally, interviewers did not intervene in the narrators' stories but did follow up each story with a single question: "Can you think of anything else you would like to add?"

Key to this line of questioning was the term "learning." By including this term in the question we hoped to gather stories that evoked scenarios involving learning interactions taking place in a ZPD.

From the 46 narratives, we narrowed the field to only those in which the narrator spoke about interacting with someone else during the process of learning to read or write.

We then separated this group into three categories based on the physical location in which the interaction took place: "home," "school," or "both." The "both" category contained stories of people developing literacy first at home and then continuing at school or stories about the relationship between learning at home and learning at school.

We selected at least one narrative from each group that we viewed as having representative features of the category yet at the same time providing enough detail about the interaction between the two people engaged in the ZPD to enable a relatively detailed analysis.

Our exhibit consists of the following narratives:

1) Chris Dole seeks to create a learning environment for his son by using a method (technique) called Writing Road to Reading (WRTR) (home).

2) Beth Monroe learns to read after listening to and telling stories with her grandfather (home).

3) Mario Davis learns math, which piques his interest in school and keeps him out of trouble (both).

4) Drew Stephens overcomes what he believes might have been ADHD with the help of his teacher's unconventional methods (school).

# Section 5: Narrative One: Chris Dole

http://daln.osu.edu/handle/2374.DALN/1462

Chris states that his literacy story is about his son Torin, but in fact Chris himself plays an equally prominent role. A closer look at his words reveals a shared learning experience in which both he and Torin enter into a zone of proximal development (ZPD) and are changed.

Torin develops significantly as a reader and writer, while Chris progresses as a father/mentor/teacher. Each of them is necessary for the other's advancement, illuminating the social mediation and intersubjectivity of learning.

As Verenikina (2003) has argued, "Central to the concept of mediation is intersubjectivity, which is described by Wertsch (1985, 1998) as the establishment of shared understandings between the child and the adult (Dixon-Krauss, 1996)" (p. 5).

The story begins with eighteen-month-old Torin sitting on Chris's lap tapping on the keyboard as Chris works at the computer. As Verenikina describes it, this first scene captures Vygotsky's concept of the external social stage of a child's development:

"Vygotsky emphasized that social interactions are crucial for development from the very beginnings of a child's life. He asserted that any higher mental function necessarily goes through an external social stage in its development before becoming an internal, truly mental function" (p. 5).

In this narrative, we recognize the shared understanding and social mediation taking place between Chris and his son. Though Chris is obviously in the "educator" role, he appears to have a firm grasp of the Piagetian view of a child as "an active constructor of her own knowledge, as an discoverer and explorer" (Verenikina, 2003, p. 3).

He observes Torin's approach to learning and adjusts accordingly.

Some of the unique characteristics of Torin's ZPD are

1) Torin's short attention span "ten or fifteen minutes."

2) His kinesthetic style of learning "tapping on the keyboard . . . playing little preschool games on the computer, teaching himself what the letters were."

3) A casual, fun learning environment "he didn't want to do school if he had clothes on, so he had to sit in his underwear."

4) His obvious need for assistance because of his age.

We think it is significant that Chris permitted Torin to establish some of the characteristics of the environment in which his learning is accomplished (e.g., studying in his underwear). Though we concede that this might be a problematic practice in the classroom, it certainly supports Verenikina's contention that working in a child's zone of proximal development includes "the means by which the educator reaches and meets the level of the child's understanding" (p. 5).

Chris seems to have taken the unique traits of his and Torin's ZPD into consideration, researching online for a method that would effectively help Torin learn to read "the right way."

Chris discovered a method, developed in the 50's, called "The Writing Road to Reading" (WRTR). Though Chris does not detail why he chose this method over others, he does describe the scaffolding aspects of WRTR:

(video transcript start)

And so he had to sit in his underwear, and we would say, "What letter is this?"

"That's a."

"What does a say?"

"a, ah, aw."

And we practiced all this stuff. And in about six months, he could put all of his blends together.

Consequently, about two and a half years old, he could read.

(video transcript end)

Though Torin's notably early success is atypical (WRTR targets K-12), online testimonials for the method abound. More pointedly, these testimonials show evidence of Vygotsky's idea of "internalization":

"l … thought the 'marking system' to be ridiculous AT FIRST. But, I am totally amazed by how quickly a 6-year old can pick it up. What might seem totally confusing to adults is actually fairly simple to a child. The marking system enables the child to thoroughly analyze the words they write, and eventually they will internalize the rules of our language. In just 4 weeks, I have really seen remarkable results in my students."

This first-grade teacher points to a classic example of Vygotskian "internalization" in which the child writes words, analyzing them through a marking method until the rules of language become internalized.

Vygotsky's idea of internalization can be useful when seen through Bruner's narrative lens as a turning point in stories about learning within ZPDs.

Though Chris does not go into the same level of detail in describing Torin's learning process as the teacher from the review, it appears that Torin went through a similar process of internalization, only at a slower pace, perhaps due to his age.

This is a cognitive turning point, a transformational event that indicates Torin is beginning to acquire the culture to which he belongs. After all, it is through writing that abstraction is made possible. And abstraction is, among other things, an internalization of perspective. As Bruner has argued, "Writing virtually forces a remoteness of reference on the language user" (quoted in Emig, 2003, p. 13).

But Chris had a turning point as well.

Chris mentions that he was motivated by "watching [Torin's] brain work." With this statement, Chris embodies Vygotsky's ideal of the mentor who recognizes a child's natural cognitive development and regards writing for children as more than a motor skill but rather as "a particular system of symbols and signs whose mastery heralds a critical turning-point in the entire cultural development of the child" (Vygotsky, 1978, p. 106).

Remarkably, Chris's recognition of Torin's cognitive potential occurred at an earlier age than even Vygotsky imagined. Chris looked past the normal expectations for his one-and-a-half year old child and saw the boundary of his zone of proximal development more accurately than anyone else would have.

Chris's turning point seems to have occurred as he watched Torin at play on the computer, "teaching himself what the letters were."

Because Chris intends to make Torin the focus of his story, his own transformation, as well as his claim of agency, is subtle. Bruner (1991) describes turning points as a narrator's way of claiming agency by attributing to himself "a crucial change or stance in the protagonist's story to a belief, a conviction, a thought" (p. 73). The mental verbs which Bruner says mark turning points in a story are more implicit than explicit; but there is no doubt that Chris is thinking, making judgments, and acting accordingly:

"I wanted him to learn how to do it right instead of teaching himself the wrong way to do things."

In this statement, Chris's allegiance to a certain set of convictions, which some would say is the ultimate assertion of the Self, is most evident. We can't say for sure what he means by wanting Torin to "learn how to do it right," but he is definitive about his judgment. About these kind of "self-making" statements, Bruner writes:

"So, given that autobiography is also a form of ‘taking a stand,’ it is perforce rhetorical. And when one combines the rhetoric of self-justification with the requirements of a genre-linked narrative, one begins to come very close to what Goodman describes as ‘worldmaking’ in which the constructed Self and its agentive powers become, as it were, the gravitational center of the world." (1991, p. 76)

It becomes clear by the end of his narrative that Chris is indeed taking a stand, that his story clearly has a rhetorical aim, and that he is an unblinking advocate for this "fifty-year-old method that has been lost."

In order to teach Torin to "do it right," Chris bought Torin his own computer and later researched online for an effective literacy method. Though his son was only eighteen-months-old, Chris recognized his zone of proximal development and proceeded to provide the scaffolding necessary for Torin's growth in language competence.

As we make clear in our introduction, we recognize the validity of critics' concerns regarding an oversimplified conception of scaffolding as direct instruction; accordingly, we view Chris's efforts with his son as an excellent example of a more complex understanding of scaffolding that involves collaboration between the teacher and the learner.

According to Michael Yaroshevsky, a prominent Russian historian of psychology, Vygotsky regarded the role of instructor as "teaching of a student not just as a source of information to be assimilated but as a lever with which the student's thought, with its structural characteristics, is shifted from level to level" (quoted in Verenikina, 2003, p. 4).

That understanding of what it means to be a teacher, certainly, is true in Chris's interaction with his son. He recognized Torin's "tomorrow of development," (Vygotsky, 1978) and served as the "lever" that enabled Torin to shift from level to level. For example, consider the following activities:

He allows Torin to sit on his lap and tap on the keyboard.

He gets Torin his own computer.

He puts preschool games on the computer.

He finds "The Writing Road to Reading" program and works with him on it.

He encourages Torin to read to his grandmother.

In this outline, we not only see Torin's shift from level to level, but we also recognize that the shift is enabled by his father Chris in his role as instructor, strengthening our original contention that intersubjectivity characterizes the learning on display in this narrative.

"lntersubjectivity," Verenikina tells us, "is an essential step in the process of internalization as an adult gradually removes the assistance and transfers responsibility to the child" (p. 5).

All these points lead us to the following conclusion:

Scaffolding as an application of Vygotsky's ZPD needs to be understood as a complex process involving give and take between instructors and students, and this process is inevitably customized in accordance with the multitude of contextual variables that characterize each learner's ZPD.

# Section 6: Narrative Two: Beth Monroe

http://daln.osu.edu/handle/2374.DALN/1448

Beth begins her story with a smile and a statement: "I've always loved to read and tell stories."

She asserts that her love of reading is a "big factor" in her "loving to write and being here as a graduate student studying writing."

She hearkens back to what she recalls or thinks she recalls as her pre-school days:

(video transcript start)

I remember as a little girl every day after--I guess it would have been--pre-school, I'm not really sure, I would climb in bed with my grandfather who was sick and bedridden. And, um, we would always read books together …

(video transcript end)

An adult, Beth's grandfather, demonstrates a competence that Beth, the child, wants: "He would really read to me, and, um, one day I remember saying, 'Papaw, I want to read . . .’" This shared time seems to be a form of companionship, and of "play" for the pair. This situation bears out Ferholt and Lecusay's (2010) idea that "a child's world is as real as our own, and play is the activity that creates the zone of proximal development for a child" (p. 59).

Beth continues:

(video transcript start)

I remember saying, "Papaw, I want to read," and I was reading to him. And he said, "Beth, are you reading to me or are you telling me what you remember on this page."

(video transcript end)

Beth and her grandfather are involved in a "joint but necessarily unequal engagement in a valued activity" (Stone, 1998, p. 352) when he challenges Beth with the serious question of whether she is decoding or only remembering.

Scaffolding is instantiated, as Wood, Bruner, and Ross explain, when "the active, initiating child stays in control of the language and the experience while the adult operates effectively in response to the child" (quoted in Searle, 1984, p. 481).

In this "ZPD … event" (Mercer and Fisher, 1992, p. 342), Beth has a turning point:

(video transcript start)

And even though I was only three or four (or however old I was), I remember thinking well there's a difference, that I had not thought about that before, and that that was a difference. And from that moment on, I was determined to be actually able to read the words.

(video transcript end)

Bruner called such a turning point "agentive" (1991, p. 73).

Beth's grandfather seems to be what Belenky et al. (1986) have called a "midwife teacher." These scholars note that "midwife teachers assist in the emergence of consciousness ... and foster the child's growth" (p. 218). As Belenky and her colleagues put it, "Midwife teachers focus not on their own knowledge … but on the student's knowledge. … Midwife teachers help students deliver their words to the world" (p. 219).

The event that Beth describes supports Bruner and Ratner's notion that scaffolding includes, "a familiar semantic domain, predictable structures, role reversibility, variability, and playfulness" (quoted in Searle, 1984, p. 480). Beth's scene is "familiar": she has apparently memorized the stories. There is a "predictable" structure: "every day … we would always read books together." She initiates a "role reversal": "Papaw, I want to read …"

Beth's literacy narrative now takes a turn back to stories, and perhaps to identity--who she comes from, who she is, and who she will become: "And then I also grew up hearing the coolest stories from my dad and his best friend about, just, their growing up experiences as boys."

Rossiter and Clark (2007) speak of the "powerful influence" of family stories and have noted that "stories impart to learners fundamental knowledge of the culture, its history, and values" (p. 72).

They have also found significance in "the power inherent within the structure of narrative, the choice of language, the very way things are said and not said" (p. 8).

Beth relates how growing up hearing her dad's stories told, she has become herself a storyteller--and a writer:

(video transcript start)

And I just--I love to tell stories and I love to hear stories, and it's just so neat to be able to think about how you want a story to sound and then to put it into words on a paper, to type it out, to think it through; just that it's so neat and fulfilling and you just feel so accomplished when you've gotten it all down, and then you can share it with people.

(video transcript end)

Included in Beth's brief narrative are three generations and two important subjects--learning to read and desiring to tell, write, and share family stories. We can conclude with a few words from Sam Keen and Anne Valley Fox (1989), who seem to elucidate Beth's desire to write and share her stories:

"… cultural and family myth comes to rest on the individual. Each person is a repository of stories. To the degree that any of us reaches toward autonomy, we must begin a process of sorting through . . . what we've been given. . . . We gain the full dignity and power of our persons only when we create a narrative account of our lives, dramatize our existence, and forge a coherent personal myth with unique stories that come from our experience." (p. xiv)

# Section 7: Narrative Three: Mario Davis

http://daln.osu.edu/handle/2374.DALN/1447

Mario's literacy story, we contend, supports Searle's argument that Bruner's "scaffolding" has sometimes been misused by well-meaning educators.

Searle reminds us that the original idea of the "zone of proximal development," in order to be useful to teachers, must be understood this way: the would-be mentor must begin where the student is, and the learning event must be motivated by a desire to learn that originates in the learner.

Mario's story is filled with references to his desire to learn math. Sometimes he refers to pain and frustration.

(video transcript start)

. . . what was hurting me was division. And that was kinda pulling me back.

Cause I used to get frustrated, and those are the things that seem to happen. Well, my mom used to get called up to the school a lot, to the point where she would be up there daily. I mean some of my classes she would be holding my hand. I was young, about nine, ten; this was embarrassing for me.

(video transcript end)

Mario remembers how he sometimes experienced the joy of learning and how he reveled in his new-found competence.

(video transcript start)

Once I learned how to divide, and I knew the whole circle, the aspects of math, I always wanted to learn math. Even while everybody else was learning different things: geology and Spanish and writing, I was just thinking about math the whole time. I remember as a child, riding in a car, I would try to add up all the numbers in somebody's license plate in front of me, even if it had letters; I'd convert the letters to numbers one through twenty-six.

It was like I didn't want to stop learning. It got to the point where I went through all the math work that they had.

(video transcript end)

At this point in his narrative, Mario is ready for someone to come along who understands (if only intuitively) the importance of "scaffolding" and the underlying principle of the "ZPD."

Mario describes two instances of movement toward the achievement of a goal that he felt was his own.

Instance one: Miss Lee at Emerson Silk School

Assuming Miss Lee's inner-city classroom is typical, she deals with a large number of children throughout the day. But she sits Mario down and says, "You know I'll call your mother if you don't stop acting out!"

Miss Lee asserts her power as a teacher.

But then, using Mario's interest in math and his mastery of multiplication that she knows he is proud of as a base from which to work, she stays with him until he "gets" it, until he understand how to divide numbers.

Bruner says, "In such instances mothers most often see their role as supporting the child in achieving an intended outcome, entering only to assist or reciprocate or 'scaffold' the action" (1975, p. 12).

Miss Lee has to enter the dialogue by using her power asymmetrically to get him to calm down, but she knows that he wants to understand division. Her role is to support him in achieving this outcome. She is "operating effectively in response to the child" (Searle p. 480).

As Mario confirms,

(video transcript start)

So she sat me down some days and took me personally under her wing and taught me how to divide. Other teachers tried and failed; it seemed like they had no patience with me. But she sat there, and she just, she helped me. And it got to the point that, I got it without learning how I got it. She embedded it in my brain. My brain was like a dry sponge and it was like she absorbed some type of liquid in there that to this day I still can't get rid of. And now it's like, once I learned how to divide, and I knew the whole circle, the aspects of math, I always wanted to learn math.

(video transcript end)

Learning math is a goal that Mario feels is his own. He remembers that he was "like somebody who was illiterate finally learning how to read and wanting to read every novel there is in the world."

Instance two: The College Student Tutor at The Visitation Monastery

Mario relates that the nuns from the Visitation Monastery (whom, he tells us, were "strong women" like his mother) brought in college students to tutor the neighborhood kids after school.

(video transcript start)

And one of the college students, he brought us some math work. And none of the other students or children that were being tutored could understand it, but once he started teaching it to me, it was like I didn't want to stop learning.

(video transcript end)

We don't know whether this college-age tutor was an intuitive or an intentional practitioner of scaffolding and the ZPD. Mario, however, notes how effective this teacher was, remarking, "It got to the point that I had gone through all the Math Works that he had. When I got to high school, algebra was like a refresher."

Searle says, "Too often the teacher is the builder and the child is expected to accept and occupy a predetermined structure" (p. 482). But in both cases that Mario reports, the teachers who collaborated with him built upon his avidity for math: Miss Lee worked from the sense of achievement he felt from mastering his multiplication tables to help him achieve something (mastery of the techniques of division) that he rather desperately wanted to achieve. It was Mario's need, not hers. And the tutor at the Visitation Monastery got him started, handed him the workbooks, and got out of his way so he could achieve a learning goal that he identified as important.

Both also served as adult models.

Both teachers provided what Ferholt and Lecusay describe as "unidirectional development of a child toward an adult model." Mario is now a college student (and tutor) himself. At the time he describes his story, he could imagine himself being like these two teachers. In the time since the events described in his story, he has become like them. Ironically, this may be the outcome desired by those whom Searle describes as misapplying the idea of scaffolding (p. 480). Their error, he implies, is in believing that they can teach their students what they want them to know rather than building (scaffolding) on what the students want to know.

The mature Mario closes his interview with this reflection:

(video transcript start)

Learning math was about the dedication of my teachers, and it was about the tutoring of people that were older than me, just giving me a chance to learn. So I feel that once you have something that you can achieve, once you're finally able to achieve it, you want to surpass every other goal.

(video transcript end)

# Section 8: Narrative Four: Drew Stephens

http://daln.osu.edu/handle/2374.DALN/1454

In his article "Self-Making and World-Making," Jerome Bruner (1991) observed that autobiography serves a "dual function."

When we tell our stories, "we wish to present ourselves to others (and to ourselves) as typical or characteristic or 'culture confirming' in some way. That is to say our intentional states and actions are comprehensible in the light of the 'folk psychology' that is intrinsic in our culture" (p. 71).

At the same time, we try "to assure individuality …, we focus upon what, in the light of some folk psychology, is exceptional (and, therefore, worthy of "telling") in our lives (p. 71).

In paying tribute to his first-grade teacher, Ms. Paul, Drew Stephens sketches for us a ZPD successfully realized when he shows how a special curriculum, a "system of learning how to read that was really unique ... even for the school system at the time," helped him deal with his "problem."

As he tells his story, he self-identifies with attention deficit disorder (ADD), a construct that has become part of our folk psychology in the past couple of decades.

Drew begins by describing himself as he might have at the time the events he narrates took place. He says, "I was always kind of different," and "I had a hard time staying on task or doing things structured-wise."

Within the same long utterance, however, he suggests that he plans to position himself within the narrative as someone with an obstacle to overcome or challenge to face: "maybe [I had] ADD."

Whether or not Drew had enough of the symptoms of ADD--now described in the Diagnostic and Statistical Manual of Mental Disorders (DSM -IV Text Revision) as one of the three types of attention deficit hyperactivity disorder (ADHD)--to be formally diagnosed, he seems to think that introducing the term ADD will help the audience understand his situation. And with good reason: ADD and ADHD have moved into common parlance during recent decades.

Since the time Drew was in elementary school, attention-related disorders have generated a good deal of conversation, both in and outside the medical community.

According to a CDC study, Diagnosis of ADHD increased an average of 3% per year from 1997 to 2006 (Pastor & Reuben, 2008, p. 3).

The Urban Dictionary, a popular website that allows users to contribute definitions of words-in-use (i.e., slang or connotations), has a number of entries for ADD and ADHD, ranging from the clinical:

"attention-deficit/hyperactivity disorder, is the only clinically diagnosed term for disorders characterized by inattention, hyperactivity, and impulsivity used in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorder, Fourth Edition." ("Urban Dictionary: add," n.d.)

to the cynical:

"A disease every kid these days claims they have." ("Urban Dictionary: add," n.d.)

Drew spends an idyllic year in kindergarten where all he remembers doing is coloring, playing, and learning to count to fifty. When he reaches first grade, though, he begins to see himself as different from the other children.

Drew intuited that he was missing something when it came to the classroom lessons and he admitted that he felt the teacher "was going so far past anything I knew I could handle," indicating that he felt a little panicked about his lack of understanding.

We can also see, however, that Drew wanted to do well in school because, rather than act out or refuse to work, he tried to leverage the work of a more capable peer, Brittany, in order to accomplish the task Ms. Paul set for the children.

Rather than seeing Drew as short circuiting the learning process by "just copying what [Brittany] had because [he] really didn't understand it," we might see Drew, who by his own admission has had very little literacy experience in kindergarten, trying to engage in what Karen Wohlwend (2007) called an "early literacy apprenticeship" (p. 378).

In writing about her observations of kindergarteners "playing school" (p. 378), Wohlwend suggested that:

"as children acquire foregrounded literacy practices, they also acquire the community's backgrounded ways of talking, handling materials, and positioning selves and others that are expected to accompany reading, writing, drawing, playing, or other message-producing activity" (p. 378).

On only his second or third day of first grade, Drew is somewhat like the students in Wohlwend's study who, while on the cusp of being able to read and write, engage in play that is informed by the activity of literate individuals in their community.

Drew describes himself as trying to "figure out how to do all this stuff," and notes that he used Brittany as his literate model.

However, the first-grade curriculum demanded more from students like Drew than pre-literate play activities.

With one action, Ms. Paul adjusts the task environment so it becomes clear to Drew that the goal of classroom activity is not just the production of marks on a page, achieved by whatever means possible. Interestingly, Drew recalls this as a physical intervention, rather than recounting anything Ms. Paul said to him: "She immediately saw what was going on and she got me and moved me out to the other side of the class where I couldn't just copy off this girl from then on forward."

Looking back, he frames this separation from Brittany as key to his "amazing transformation": "I don't know what would have happened if [the copying off Brittany] had continued."

Building, then, on this theme of physical intervention, Drew explains how the ZPD that Ms. Paul worked to create with her students seemed to be a particularly good fit for him, at his particular developmental level and with his own brand of restless disposition.

As he tells us about Ms. Paul's "big board with the letters on it and the sounds that groupings of letters made" and how she would point at letters and have the children stand and move as they "learned these letters …, words, and sentence structure," Drew moves his body, turning to the left and right, perhaps echoing the motions he went through in class.

(video transcript start)

She had this big board with the letters on it and the sounds that groupings of letters made and she had a large stick and she would stand up in front of the class and she would point to these letters and we all had to stand up it was like a physical thing where we had to move as we learned these letters and as we learned these words and sentence structure and things like that.

(video transcript end)

For Drew, work where he "wasn't sitting at a desk" and wasn't only "memorizing" things enabled him to learn not only how to read but also, by the end of the school year, how to be "reading at like an eighth-grade level."

We see through this narrative that, as Bruner (1991) suggested, "What makes for something 'interesting' is invariably a 'theory' or 'story' that runs counter to expectancy or produces an outcome counter to expectancy" (pp. 71-72). Drew sets himself up as someone who has a disposition ("maybe ADD") that makes school learning, as it is traditionally enacted ("sitting at a desk") difficult.

"Expectancy," as Bruner pointed out, "is controlled by the implicit folk psychology that prevails in the culture" (p. 72 ).

Drew's story also meets Bruner's "criterion of tellability" by violating canonical expectancy.

And, as Bruner suggested, Drew's story does so in a way that his audience can understand (i.e., that is "culturally comprehensible") because his narrative tells of overcoming obstacles with the help of a great teacher, a story that is, itself, part of the folk-psychological canon (p. 72).

In addition, the narrative reinforces another concept that has made its way into folk psychology during the past fifteen years: the idea of multiple learning styles or preferences for different modes of expression (e.g., video, audio, alphabetic text, kinesthetic learning, etc.). Common wisdom now recognizes teaching interventions that take advantage of students' preferences in modes besides reading and writing instead of pharmacological treatments for some cases of attention disorders.

For example, Ricki Linksman (2007) has pointed out that a number of the students she sees at the National Reading Diagnostics Institute have received a diagnosis of Attention Deficit Hyperactivity Disorder (ADHD). Yet in-depth reading evaluations of these youngsters often reveal that, rather than having an attention disorder, they are simply kinesthetic learners they need to engage in gross motor (large-muscle) activity to learn best. Once they are given the opportunity to learn through the proper methods, their ADHD-like behavior often disappears.

In telling his narrative, Drew perhaps unknowingly appropriates some of the vocabulary from the Neil Fleming's visual, auditory, reading/writing, kinesthetic/tactile (VARK) model of learning preferences (which informs Linksman's observation above) when he describes the activity in Ms. Paul's classroom (Fleming & Mills, 1992).

Drew remembers, "It was an active-kind of kinetic-kind of thing," and he goes on to reflect that maybe some people learn more when they're moving."

He obviously believes that he was one of these people in first grade and attributes his success to a ZPD and an instructional intervention that "fit" or "worked" when conventional means (i.e., the district's official curriculum) might not have.

# Section 9: Conclusion

"The objective of narrative," argued Bruner (1991), "is to demystify deviations. Narrative solves no problems. It simply locates them in such a way as to make them comprehensible" (p. 72).

In this exhibit, we've attempted a cultural-historical approach to DALN narratives as locations in which we can come to understand how people talk about learning. In exploring the case-study narratives, we've tried to complicate the widely researched and applied educational metaphor of scaffolding by interpreting stories about learning experiences told by four individuals who related experiences involving zones of proximal development.

Etienne Wenger (1999) theorizes learning in terms of trajectories, a constant becoming or movement that has "coherence through time that connects past, present, and future" (p. 154).

These trajectories, he argues, "provide a context in which to determine what, among all the things that are potentially significant, actually becomes significant learning. A sense of trajectory gives us ways of sorting out what matters and what does not, what contributes to our identity and what remains marginal" (p. 155).

People tell about what they have come to regard as significant learning, considering the trajectories their lives have taken.

Much of the research on the ZPD and scaffolding doesn't allow for this type of longitudinal retrospective sense-making on the part of learners.

One important contribution of the DALN, then, to educational research is that it provides a database of accounts that help us explore how teachers and learners interact to produce memorable (and in retrospect, important) pedagogical experiences.

And while we agree with Bruner that "narrative solves no problems," we also believe that examining the DALN can help us enrich the scaffolding metaphor and facilitate understanding about how context impacts learning experiences involving ZPDs. Returning to the words of Mercer and Fisher (1992), we hold that the ZPD "is the product of a particular, situated, pedagogical relationship" (p. 342) and that in order to understand instances of this relationship, we need to explore the specific contexts in which it develops.

To that end, we forward some questions that helped inform our analysis. We hope that they will guide others who wish to use the DALN to examine and complicate an understanding of the situated nature of the ZPD. These questions cover several broad areas:

**Experience differential.** Why was there an experience differential between the learners and teachers discussed in the narratives? Were there methods of interaction that seemed to be most effective in bridging that differential? Was there evidence that the pedagogical relationship was collaborative? How was the more experienced member of the dyad changed by the interaction?

**Access.** How/why did the more and less experienced people come together? Was their coming together institutionally arranged? How did this method of matching affect their construction of a significant experience? How did a person's membership in various groups (i.e., ethnic group, class, sexual orientation, gender) impact her access to a transformative pedagogical experience?

**Literacy and group membership.** Why did the people in the narrative view the acquisition of a particular literacy (i.e., reading, math, HTML, disciplinary knowledge, etc.) as important? To what groups did acquisition of this literacy enable membership? What sorts of relationships do these groups have with individuals who do not have this literacy? Do literate groups provide support for entry into them?

**Formal teaching.** If the literate group provided formal means for teaching others, what were they? Does the narrative identify ways in which these means were adequate or inadequate for the individual seeking to develop literacy? In other words, does the narrative characterize how individuals leveraged or subverted existing structures to create the intensely personal learning experience that David McNamera formulates as working well in a ZPD?

Finally, we feel the DALN offers an opportunity to see the ideas of scaffolding and the ZPD in all their beautiful complexity.

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# Appendix (Transcripts)

## Transcript 1 Chris Dole

My name is Chris, and my literacy story is about my son Torin. It started when he was really little. I'd be working on the computer, and he would crawl up and tap on the keyboard. And so I got him his own computer, and he started playing little pre-school games and was teaching himself what the letters were. And he's all of about a year-and-a-half when he was doing this.

And so I wanted him to learn how to do it right instead of teaching himself the wrong way to do things, so I got online and did some research, and I found a method that they used from the 50's called the Writing Road to Reading. And the emphasis of that method of teaching someone how to read and to write was through the use of blends.

And he and I, he was about two years old when this started, with the actual reading and writing part, um. We would sit there, and his attention span is ten or fifteen minutes, and it was really funny, you know, he's got big blond curls everywhere and, you know, he's in his little underwear, he didn't want to do school if he had clothes, and so he had to sit in his underwear.

And, you know, we would say "What letter is this? That's a. What does a say? a, ah, aw." And we practiced all this stuff. And in about six months, you know, he could put all of his blends together and, you know, "b and r always say br, they don't say bu er."

And consequently, about two-and-a-half years old, he could read. And, I remember my mom came to visit. We had moved in the meantime; we were living in Texas, we were originally from Oregon, and my mom came to visit, and I was telling her how well Torin could write and read, and the writing part came a little later as motor control happened. But, you know, he would really try, and he would make his letters and they weren't very legible, but that's alright. And she had a hard believing that he could read as well as he did, and I don't remember what book she was reading, but I said, you know, "Go sit in Grandma's lap and read to her."

And he just started reading, because he doesn't see the letters as individual sounds. He sees them as groups of sounds, and he can just put them together in his head. And I think a lot of that is because we started so early. And so, my literacy story is about my son and just watching his brain work, and teaching him a fifty year old method that has been lost. When I went to find the book in the library, it was in the basement, and we had to go dig for it.

And, they don't teach kids to write like that anymore, and I think it's a shame because he can read anything he wants to read. He's in fifth grade now and reads on a college level, and his teachers are always incredibly impressed, and I'm very proud of him, and I contributed to that, and that's a good thing.

## Transcript 2 Beth Monroe

Well, I guess I would say that I've always loved to read and to tell stories, and so that's been a big factor in loving to write and being here as a graduate student studying writing. Um, I remember as a little girl every day after--I guess it would have been pre-school, I'm not really sure--I would climb in the bed with my grandfather who was sick and bedridden. And, um, we would always read books together. He would really read to me, and, um, one day I remember saying, Papaw, I want to read, and I was reading [air-quotes] to him. And he said, Beth, are you really reading to me or are telling me what you remember is on the page? And even though I was only three or four or how-ever old I was, I remember thinking I had not thought about that before, that there's a difference. From that moment on, I was determined to be able to actually read the words and to be able to do that.

And then also I grew up hearing the coolest stories from my dad and his best friend about, just, their growing up experiences as boys. And I just I love to tell stories, and I love to hear stories, and it is just so neat to be able to think about how you want a story to sound and then to put it into words on a paper, to type it out, to think it through, um, just that it's so neat and fulfilling and you just feel so accomplished when you've gotten it down and then you can share it with people. That's what's so cool about it. That's actually what I'm doing my thesis on, is a non-fiction, memoir-type project where I'm kind of telling my childhood stories because I know one day if I have kids those are stories they're gonna want to know too. So I guess that's it.

## Transcript 3-Mario Davis

I know most people are talking about how difficult it was to learn to read, but mine is more about mathematics. My father died young; my mother had three kid to raise by herself. So it was a big burden on her to work and take care of us three kids at the same time and to help us with our homework.

She put me in a Spanish-American learning center called Emerson Silk. To this day I think that was one of the best choices she made for my life. But at that time, it was focused on teaching Latin kids how to speak English, and English speaking kids to speak Spanish. I don't regret learning Spanish; I can still speak it pretty well, but it took time away from me learning mathematics. I could add, I could even multiply at an early age, but what was hurting me was division, that was holding me back, causing me to be frustrated.

At the same time, because of my father passing away, I had no male or father figure to guide me or hold me back from doing wrong. I was causing a lot of trouble in class. So I got frustrated, and my mom got called up to the school at lot. Sometimes she came every day. I was nine or ten, and it was embarrassing. She was trying to understand why I was having trouble with math. She only had a high school education.

I understood adding and multiplication, but I couldn't grasp subtraction and division. I could only grasp it if I saw it. Well, one teacher, her name was Miss Lee. She would always threaten me when I would act a fool in class. She'd say, You know I'm going to call your momma. That kinda kept me in check. And I felt I could talk to Miss Lee more. She took me personally under her wing. She sat with me until she taught me how to divide. Other teachers had tried and failed, but it seemed they had no patience with me. But she sat there until I got it and I got it without realizing how I got it. She embedded it in my mind some way. It was like my mind was a sponge suddenly filled with water or something.

Once I learned how to divide, I thought about math all the time. I wanted to learn all of it. While everyone else was learning Spanish and geology and writing, I was thinking about math.

I remember riding in a car and adding up the totals of the numbers on licenses plates. If a license plate had letters, I'd convert the letters to numbers and add them up too. I was fascinated by my ability. It's like somebody who was illiterate finally learning how to read and then wanting to read every book there is in the world.

North Minneapolis in '95, '96 was real bad: gang violence, drugs. It was the second wave of the cocaine era of the eighties. I did have a strong mother, but there were other strong women in our neighborhood: the nuns at the Visitation Monastery. My mother would send us there every day after school. They would tutor us kids. When it was time for us to come over, they would hang a windsock outside their house. They even took me to Jamaica one time. And they paid for me to go to a private high school: DeLaSalle. They would bring the college students in to work with us on our homework. One of the college students was a math major. He would bring his *Math Works* with him and try to teach it to us. None of the other children could understand him, but once he started teaching it to me, I didn't want to stop learning. It got to the point that I had gone through all the *Math Works* that he had. When I got to high school, high school algebra was like a refresher.

My success with and my love for math was about the dedication of my teachers and being tutored by people older than me. I learned that when you have something you want to achieve, once you have achieved that, you want to reach every other goal.

## Transcript 4-Drew Stephens

I guess my literacy story would be about my first grade teacher, Ms. Paul, in Malvern Arkansas.

I started school in 1984 or 85, I believe, so I went to kindergarten. And at that time--nowadays kids learn how to read in kindergarten it's amazing what they learn--but when I was in kindergarten, it was just okay here are your colors you can count to 50 and play in the sand that's you know your passed that your of your life.

I was always kind of different as a child maybe ADD. I don't know what my problem was, but I had a hard time staying on task or doing things structured-wise, but kindergarten was fine because it was all play.

When I got in first grade, I remember the second or third day of class I had sat down next to this girl named Brittany. I believe we're just going, the teacher was going so far past anything I knew I could handle, and I immediately started just looking off her paper and trying to figure out how to do all this stuff and just copying what she had because I didn't really understand it.

And my teacher Ms. Paul at the time she immediately saw what was going on, and she got me and moved me out to the other side of the class were I couldn't just copy off this girl from then on forward.

I don't know what would have happened if that had continued.

But she had a system of learning how to read that was really unique I think even for the school system at the time.

She had this big board with the letters on it and the sounds that groupings of letters made, and she had a large stick and she would stand up in front of the class, and she would point to these letters, and we all had to stand up. It was like a physical thing where we had to move as we learned, as we learned these letters, and as we learned these words, and sentence structure and things like that.

And it was so foreign to anything I had ever learned before because I wasn't sitting at a desk and I wasn't you know saying okay memorize these things and figure out how to do it.

It was an active--kind of kinetic--kind of thing.

I don't know, maybe some people learn more when they're moving.

But that really helped me learn how to read, and it was crazy because that year I did great and learned an amazing amount about how to read.

And we were all tested at the end of the year.

I started the first grade not knowing anything about learning how to read.

And at the end of the first grade they tested us all and I tested at reading at like an eighth-grade level.

It was an amazing transformation for me.

And I don't think … it really set me on a course that changed the rest of my life.

And I think if I got any other teacher who was there, you know I probably would've learned how to read, but it would have been different.

And, you know, it wouldn't have gone as well.

But since then, of course, I was terrible and have been terrible in math.

But reading, writing learning how to express myself in words that you know one person sent me on a course to completely do something different with my life, and I have Ms. Paul to thank for that.