NO SECRETS TO CONCEAL:
DYNAMIC ASSESSMENT AND A STATE MANDATED, STANDARDIZED
3RD GRADE READING TEST
FOR CHILDREN WITH LEARNING DISABILITIES

A Thesis in
Curriculum and Instruction
by
Emily D. Duvall

© 2008 Emily D. Duvall

Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Doctor of Philosophy

May 2008
The thesis of Emily D. Duvall was reviewed and approved* by the following:

Patrick W. Shannon
Professor of Education
Dissertation Advisor
Chair of Committee

James P. Lantolf
Professor of Language Acquisition & Applied Linguistics

Jacqueline Edmondson
Associate Dean for Teacher Education and Undergraduate Programs

David A. Gamson
Associate Professor of Education

Glen Blume
Coordinator for Graduate Programs in Curriculum and Instruction

*Signatures are on file in the Graduate School.
ABSTRACT
The purpose of this research is to present the results of a pilot study in which a state mandated, standardized test for third grade reading/language arts was redesigned as a dynamic assessment in order to reveal the progress that children with disabilities may be making towards the goals of the general education curriculum. The study argues that ascertaining progress using static testing practices keeps the progress of children with learning disabilities hidden from view; dynamic assessment is offered as an alternative. An alternative research paradigm, activity theory, is used to develop the methodological framework of the four case studies, each including single subject experiment, structured interview (referred to as a reflection discussion), and a design-based (recursive) tutoring component. Data is presented in case study format augmented with video clips. The results suggest that a dynamic standards of learning assessment (DSLA) can reveal hidden progress and offer multiple stakeholders (children, parents, teachers, and administrations) data that is both relevant to real world needs and potentially useful for satisfying the assessment and accountability demands of NCLB (2001) as well as IDEA (2004). The research process and results also trouble the notion of progress, the validity of inferences made from state mandated, standardized tests of reading, and the functionality of such reading tests, the latter supporting the view that reading tests are really a genre of reading itself as well as begging questions of social justice with regard to high stakes testing practices in our schools.
TABLE OF CONTENTS

List of Tables .............................................................................vi
List of Figures ............................................................................ vii
List of Video Clips ...................................................................... viii
Preface ......................................................................................... x
Introduction ............................................................................... xv

Chapter 1 – Change is one thing, Progress is another ................. 1
  1. Policy Background ............................................................... 2
  2. Accountability Umbrella ..................................................... 4
  3. Testing System ................................................................... 5
  4. Subgroup Data ................................................................... 8
  5. Children with Disabilities .................................................. 10
  6. Capping ............................................................................ 12
  7. Accommodating ............................................................... 14
  8. Assessing Progress Towards or Evaluating Attainment of…? 17
  9. Revealing Progress Towards .............................................. 22
 10. Revealing Reading Progress .............................................. 24

Chapter 2 – Beyond Horseshoes and Handgrenades .................. 27
  1. The Foundations of Dynamic Assessment .......................... 28
  2. Learning, Development and the ZPD: Connecting Dynamic Assessment ................................................... 43

Chapter 3 – A Dynamic Standards of Learning Assessment .......... 47
  1. Developing a Content Specific Dynamic Assessment of Reading for Children with Disabilities for NCLB: A Dynamic Standards of Learning Assessment ................. 64
  2. Making Close Count .......................................................... 90

Chapter 4 – A Journey of Methodological Proportions .............. 93
  1. The Research Question ........................................................ 94
  2. Mixed Methods in the Activity Theory Paradigm ................ 102
  3. Activity Theory as an Alternative Paradigm ..................... 104
  4. The Research Methods ....................................................... 112
  5. Method of Analysis ............................................................ 128
LIST OF TABLES

Chapter 3
Table 3.1: Overview of the Hierarchy & Weighting of Within-Test and Within-Question Mediations ........................................84

Chapter 4
Table 4.1: Overview of the Relationship of Activities and Research Methods in Sequential Order ........................................108
Table 4.2: Participant Qualifications ........................................111
Table 4.3: Reflection Discussion Questions and Protocols ........................................121
Table 4.4: Validity and Reliability Case Study Tactics ........................................127

Chapter 5
Table 5.1: Corey’s Tutoring Sessions: Focus and Materials ........................................149
Table 5.2: Lawrence’s Tutoring Sessions: Focus and Materials ........................................174
Table 5.3: Helen’s Tutoring Sessions: Focus and Materials ........................................186
Table 5.4: Helen’s Multiple Skills Series Overview Results ........................................189
Table 5.5: Anita’s Tutoring Sessions: Focus and Materials ........................................201
## LIST OF FIGURES

### Chapter 4

| Figure 4.1: A Partial Family Tree of Paradigms | 104 |
| Figure 4.2: The Research Triangle | 107 |
| Figure 4.3: Visual Representation of the Research Methods | 113 |

### Chapter 5

| Figure 5.1: Corey: All or Nothing Results vs. Progress Underway (Pretest) | 143 |
| Figure 5.2: Corey: All or Nothing Results vs. Progress Underway (DSLA 1) | 143 |
| Figure 5.3: Corey: All or Nothing Results vs. Progress Underway (Posttest) | 144 |
| Figure 5.4: Corey: All or Nothing Results vs. Progress Underway (DSLA 2) | 158 |
| Figure 5.5: Corey Results: Total with Trend Line | 159 |
| Figure 5.6: Corey Results: Overall by Sub-Section (Comprehension) | 160 |
| Figure 5.7: Corey Results: Overall by Sub-Section (Word Structures) | 160 |
| Figure 5.8: Corey Results: Overall by Sub-Section (Word Analysis) | 160 |
| Figure 5.9: Corey Results: Sub-Section by Question (Comprehension) | 161 |
| Figure 5.10: Corey Results: Sub-Section by Question (Word Structures) | 161 |
| Figure 5.11: Corey Results: Sub-Section by Question (Word Analysis) | 161 |

| Figure 5.12: Lawrence: All or Nothing Results vs. Progress Underway (Pretest) | 165 |
| Figure 5.13: Lawrence: All or Nothing Results vs. Progress Underway (DSLA 1) | 166 |
| Figure 5.14: Lawrence: All or Nothing Results vs. Progress Underway (Posttest) | 166 |
| Figure 5.15: Lawrence: Budding Areas: Main Idea | 169 |
| Figure 5.16: Lawrence: Budding Areas: Locate Information | 169 |
| Figure 5.17: Lawrence: All or Nothing Results vs. Progress Underway (DSLA 2) | 175 |
| Figure 5.18: Lawrence: All or Nothing Results vs. Progress Underway Sub-Scores 1 | 176 |
| Figure 5.19: Lawrence: All or Nothing Results vs. Progress Underway Sub-Scores 2 | 177 |
| Figure 5.20: Lawrence: All or Nothing Results vs. Progress Underway Sub-Scores 3 | 178 |
| Figure 5.21: Lawrence: All or Nothing Results vs. Progress Underway Sub-Scores 4 | 179 |
| Figure 5.22: Lawrence Results: Total with Trend Line | 180 |

| Figure 5.23: Helen: All or Nothing Results vs. Progress Underway (Pretest) | 183 |
| Figure 5.24: Helen: All or Nothing Results vs. Progress Underway (DSLA) | 183 |
| Figure 5.25: Helen: All or Nothing Results vs. Progress Underway (Posttest) | 183 |
| Figure 5.26: Helen: All or Nothing Results vs. Progress Underway (Partial DSLA) | 186 |
| Figure 5.27: Helen: All or Nothing Results vs. Progress Underway (DSLA 2) | 193 |
| Figure 5.28: Helen Results: Total with Trend Line | 194 |

| Figure 5.29: Anita: Progress Underway vs. All or Nothing Results (Pretest) | 196 |
| Figure 5.30: Anita: Progress Underway vs. All or Nothing Results (DSLA 1) | 196 |
| Figure 5.31: Anita: Progress Underway vs. All or Nothing Results (Posttest) | 196 |
| Figure 5.32: Anita: Progress Underway vs. All or Nothing Results (DSLA 2) | 206 |
| Figure 5.33: Anita Results: Total with Trend Line | 208 |
| Figure 5.34: All Participants DSLA-1: Progress Underway vs. Correct or Incorrect | 214 |
| Figure 5.35: All Participants DSLA-2: Progress Underway vs. Correct or Incorrect | 216 |
| Figure 5.36: All Participants: Overall Results | 218 |
LIST OF VIDEO CLIPS

Corey Clips

1. Corey Dynamic Assessment DSLA 1-1 (0:00 – 6:12)
2. Corey Dynamic Assessment DSLA 1-2 (6:12 – 7:27)
3. Corey Tutoring 1 Prediction and Experience, Inference and Details (0:00 – 12:14)
4. Corey Tutoring Rhyming (0:00 – 5:24)
5. Corey Tutoring Shared Reading (5:24 – 10:42)
6. Corey Vowel Sounds DSLA 2-2 (0:00 – 1:22)

Lawrence Clips

7. Lawrence Some of his frustrations with the DSLA 1 (0:00 – 0:44)
8. Lawrence Tutoring Guessing versus Thinking (0:00 – 7:13)
9. Lawrence Tutoring Retells a Story He’s Already Read (7:13 – 11:00)
10. Lawrence Tutoring Involved in a New Story, Makes a Prediction (11:00 – 11:21)
11. Lawrence Tutoring Partial DSLA and Eraser (0:00 – 2:51)
12. Lawrence Tutoring Partial DSLA and Guessing (2:51 – 3:05)
13. Lawrence Tutoring Partial DSLA Focus on word Structure and Sounds (3:05 – 6:47)
14. Lawrence The Eraser DSLA 2-1 (0:00 – 0:59)
15. Lawrence Thinking DSLA 2-2 (0:59 – 3:20)
16. Lawrence Thinking Using a Clue (3:20 – 4:31)
17. Lawrence Identifies the Strategy (4:31 – 5:04)
18. Lawrence Automatic Response (5.04 – 5:34)

Helen Clips

19. Helen DSLA 1: Compare and Contrast Surprise (1:01 – 1:40)
20. Helen DSLA 1: Getting Worn Out (1:40 – 3:33)
21. Helen Tutoring: Using Distractions (0:00 – 1:04)
22. Helen Tutoring Session 3, From Avoidance to Excitement to Engagement (0:00 – 4:10)
23. Helen Test Taking Skill, Looking for Patterns (4:10 – 6:29)
   1. Helen Rereads
   2. Main Idea After Rereading
   3. Why Helen Made That Choice
   4. Recall of Detail; Using the Text to Verify
   5. Rereading a Passage to Make an Inference
   6. Review Strategy; Using Text to Verify
24. Helen: What Happens When the Story is Exciting; Practicing Strategies (6:29 – 10:20)
Anita Clips

26. Anita DSLA-1 (0:00 – 3:32)
   1. Using Rereading and Test Taking Strategy
   2. Using Text to Mediate
   3. Elimination as Most Frequent Strategy

27. Anita Tutoring 1: Using her Choice of Text (0:00 – 3:55)
   1. Anita vocabulary Prep
   2. Anita Choosing to Read What She Has Read Before
   3. Anita Vocabulary Strategy

28. Anita Tutoring 2 (0:00 – 2:42)
   1. Rereading
   2. Main Idea when the Story is Fun
   3. Done

29. Anita Tutoring 3: Poems and Rhyming (0:00 – 3:15)


32. Anita Tutoring 3: Memory (6:07 – 6:31)

33. Anita DSLA 2: When Reading the Questions Ahead Seemed Like a Great Strategy (0:00 – 0:48)

34. Anita DSLA 2: Reading the Questions Ahead Doesn’t Really Help (0:48 – 2:13)
No Secrets to Conceal: Dynamic Assessment and State Mandated, High Stakes, Standardized Reading Tests for Children with Learning Disabilities

Preface

My involvement with state mandated standardized tests began in the spring of 2000 when I administered my first set of reading/language arts, math, science and social studies state tests to my third and fifth grade students, all children with special needs. Seven of my eight third grade students and all two of my fifth graders were identified as having what are referred to as high incidence special needs or disabilities. These are more or less invisible disabilities that occur with ‘relative frequency’ and are generally considered to be low cost in terms of the supports and services needed. The exception was Jenna, one of my third grade girls, who was also hearing impaired, a low incidence disability requiring more intensive, more varied, and therefore more costly supports and resources.

Jenna was giggly, she was scrawny, and a tomboy to boot. She wore her dishwater blonde hair long and stringy and her smile at the ready, mischievousness dancing in her eyes. But her heart was big and tender, and without bias; she had a profound sense of justice and was anyone’s advocate in their time of need. She wore a form of sound amplification that we called ear cuffs, while I wore a small portable transmitter that sent my voice directly to the cuffs. She was the exception, though, as for the most part, the kids I spent my days with were identified as having other health impairments (OHI) or a specific learning disability (SLD). Martin, for example, was one of my third grade boys with a SLD (reading), but he’d actually been identified as OHI due to a combination of severe asthma and attention deficit hyperactive disorder (ADHD). He was a big
boy and often seemed on edge; he didn’t do well with change. Interestingly, he was also color blind and taught me a lot about the way he could identify colors by shades of gray. One of his favorite pastimes was giving me a hard time about my poor handwriting. Justifiably so, I would say.

I saw my small group of third graders first thing every morning and they stayed with me in our resource room for a pull-out reading and language arts class. The rest of their day was spent mixed back in general education, where a paraprofessional provided them with extra support such as reading tests or reinforcing lessons as needed. Some of the kids were also pulled out for supplemental services such as speech or occupational therapy or regular sessions with the school counselor.

I spent the balance of my day juggling a mid-morning schedule that involved meeting with an assortment of children in kindergarten, first, second and fourth grade – some of whom needed short, intensive one-on-one pull-out sessions, some I taught in small pull-out groups, and some I joined for inclusion in their general education class. When lunchtime came I sped across the county to another elementary school and spent the afternoon pulling-out my fourth and fifth graders for reading/ language arts and math.

That year, none of my third or fifth grade students could read or write on grade level. In fact most were more than a year behind their general education peers; some had several years’ difference, especially when you compared their achievement scores to the norm-referenced scores in the reading sub-tests from the Woodcock-Johnson Psycho-Educational Battery-Revised Tests of Achievement (WJ-R). Still, we were able to use quite a bit of grade level material with support - though for the most part we would work with predictable, below level texts. As the year progressed, I began directing my students toward chapter books, proffering texts from series
such as *The Magic Tree House* and *The Bailey School Kids* for us to tackle together. After they’d make their choice I’d go out and buy multiple copies so we each had one to call our own. No matter what we used we’d practice strategies for decoding, figuring out word meanings, and comprehension based on what each child needed to further their development and learn to read. We also spent a lot of time talking about the narratives, finding out more about things that struck us as interesting, making connections with our own lives, and generally enjoying our time together in story. Some of the kids started reading ahead on their own.

One of the highlights of my year was when I discovered that some of my third grade students were harassing the librarian for more books to read in these and other series. By the end of third grade Martin had became a huge Matt Christopher fan even though the texts could be a little tough going at times; but the discourse of football engaged him and I benefited periodically from a personalized sports vocabulary lesson.

We also worked on spelling, writing in various genres and struggled through assignments for the general education classes that involved written or oral presentations. That year all the third graders had to make and present working leprechaun traps for social studies - including a detailed oral description of the construction process from inception to completion as well as a demonstration of their product. Some presented their work in our small class and I would pass on the graded rubric to the home room teacher; some chose to present their work for evaluation in the general education class while others chose to revisit their presentation in general education after feedback and grading had been completed in the resource room. I took pictures of them all during their presentations and we had fun looking back several years later when they were graduating on to middle school.

My fifth graders were another story. In late spring of that year, schools began to get busy
preparing for various competitions and events as usual, including a 4-H public speaking event. I approached the school organizer for the 4-H competition for more information and he told me, as my two young students stood along side, that he didn’t think Jeff and Graham should bother attempting to participate. He made it pretty clear to the three of us, and to every other student and teacher in the room, that not only did he not think that Jeff and Graham were capable of competing, but given their history of troublemaking they were not particularly desirable as competitors. Privately, I went to the principal, but he had little to say; he didn’t want to make a fuss and besides, wasn’t the 4-H organizer right about Jeff and Graham?

I convinced my fifth graders to enter the competition. The principal shrugged and gave his blessing for us to use our class time to prepare. The focus was on presenting a ‘how-to’ and I explained the stages that we would go through researching, writing up, making a poster board detailing the how-to, and practicing to present whatever activity the boys chose.

Jeff and Graham chose technology based tasks. Jeff worked on explaining the steps involved in using a computer for researching topics in general and Graham focused on the steps involved in narrowing your research to a particular topic; his example was a project comparing and contrasting Canadian candy and American candy. A month later, the boys tied for second place at the district level, earning the right to go to the state level competition. Though neither decided to go on, it was a major coup - for the school as well as for them individually - and they puffed up with pride when the principal announced the wins over the loudspeaker.

Everyone was working. Everyone was making progress. And as the school year moved forward, their Individual Education Program (IEP) goals were beginning to appear attainable, self-esteem was starting to grow, and we were even having fun!
Then came the state tests.

“Do you think your students will pass the tests?”

Then came their fear and, ultimately, their failure.

Suddenly all their progress was concealed, hidden from view, as if it had never been.

As if it never would be.

These are the stories that haunted me. Indeed, they lead me to view our nation’s assessment and accountability system as dogmatic and oppressive in nature while we, we Kantian slumberers, function in tacit acceptance of the fidelity of our practices. And I began to wonder whether high stakes testing practices could ever be of any real significance and service to students such as mine, to their parents, and to their teachers, while also remaining true, in form and function, to the federal mandate from which they arose and, in turn, inform the administrators for whom such data is meant as a tool to help build our nation’s schools and citizens? Even further, could the existing tests be transformed in order to be of consequence with regard to student development and learning?

From wondering to wandering, my avenues of exploration led me to a theoretical investigation into the possibility of approaching a redesign of a high stakes test of elementary reading and language arts for children with learning disabilities using the Vygotskian based process-activity of dynamic assessment. From that point on the path was clear and as my mentor, now my friend and colleague, Jim Lantolf so simply and eloquently put it, “Well, now you have to try it, don’t you?”
Introduction

You’re invisible now, you got no secrets to conceal…

- Bob Dylan, *Like a Rolling Stone*

Proving that children with disabilities can and do learn, develop, and make progress towards the academic objectives of the general education curriculum is challenging and often impossible when it comes to demonstrating this progress through the practices involved in state mandated, standardized assessments, such as high stakes tests. Frankly, it can seem a lot like pulling the proverbial rabbit out of a hat – but we all know that the secret here is that the rabbit must already be in the hat. In other words, it’s more a matter of what is and is not made visible to the audience.

So, too, the progress children with disabilities are making. If we accept the possibility that progress is underway, then it becomes more a matter of structuring the conditions conducive to rendering this progress visible. The purpose of this research is to offer that hope. That is, the hope that there is a way of reaching beyond what schools, districts, states and the nation seem to be concealing with regard to the progress that children with disabilities are making – as it is measured by state mandated, standardized testing practices.

In chapter one, I will address aspects of the broader historical evolution and current status of the federal policy frameworks as they apply to children with disabilities and state accountability and assessment practices, examine some of the inherent conflicts particularly with regard to the notion of progress, and consider specific concerns that arise for children with disabilities. Dynamic assessment will be introduced here as an approach to transforming a state mandated, standardized test of reading that speaks to these concerns and may offer the hope that, soon, there will be no secrets to conceal.
In chapter two, the focus is on back grounding the research with regard to the work of Vygotsky and dynamic assessment. Chapter 3 brings the practical and theoretical to bear upon the design for engagement in a dynamic assessment version of a state mandated, standardized test, a Dynamic Standards of Learning Assessment. The research methodology, writ large, is developed in chapter 4. Chapter 5 brings us into the world of Corey, Lawrence, Helen, and Anita as they engage in the process-activities of dynamic assessment. Finally, in chapter 6, conclusions are drawn, often surprising in their relevance to critical policy as well as the everyday lives of children and other stakeholders in the American education system.
Chapter 1: Change is one thing, progress is another

Change is one thing, progress is another. Change is scientific, progress is ethical.

Change is indubitable, whereas progress is a matter of controversy.

- Bertrand Russell

In the American public school system mass educational goals set within rigid timeframes do not generally correspond to the cognitive and affective development of children with exceptionalities. One of the attempts towards ameliorating this has come through legislation for children with disabilities, the most recent of which is the Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004). It is through this law that the federal government has endeavored to further hone the legislative structures and supports established to ensure that children with disabilities are provided with not only free, but appropriate public education.

At the same time the federal government continues to enact sweeping policy measures for general education, the most recent of which is the No Child Left Behind Act of 2001 (NCLB). Embedded in the latter are goals in the areas of accountability and educational achievement that specify federal government expectations for schools and schooling vis-à-vis ensuring that all children reach certain curricular milestones within specific timeframes. Thus there appears to be a fundamental disconnect between the very principles that underlie special education legislation and the goals of NCLB. That is to say, while the provisions outlined in IDEA 2004 are structured in an effort to work with the child with disabilities to ensure that the individual’s differences are not a barrier to education, the mandate of the NCLB Act appears to overlook one of the fundamental consequences of these individual differences: children with disabilities do not necessarily learn and develop, and therefore progress at the same depth, to the same degree, and within the same timeframes as other children.
Policy Background

The tension between special education policy and general education policy can be traced to a common heritage: Public Law 89-10, the Elementary and Secondary Education Act (ESEA), signed into law by President Johnson in mid-April 1965. Directly afterwards a wave of legislative fine-tuning poured through Congress, including Public Law 89-313, the watershed legislation that spawned the development of what was to emerge as dual federal governance over the education of children with disabilities. This impact aid bill, signed on November 1, 1965 as the School Disaster Aid Act, included a small section modifying the ESEA by authorizing grants “to state operated public schools which provided, on a non-school district basis, free education for handicapped children [as] schools for the handicapped that were operated by the state were not included under the provision of Public Law 89-10” (Congressional Quarterly, 1965: 3). As a result, a precedent setting introduction of categorical aid for the education of handicapped children opened the door to further legislation for large scale federal funding and subsequent monitoring of the education for children with disabilities apart from children in general education. And, indeed, by 1975 a more definitive legislative bifurcation in American education policy materialized with the passage of Public Law 94-142, The Education for the Handicapped Act, most recently reauthorized as IDEA 2004.

This partitioning came to pass as the issue of funding for ‘handicapped children’ was essentially bypassed during the passage of the ESEA. History reveals that Congress may have been led to believe that children with handicapping conditions in low income areas would simply share in the benefits of ESEA. Federal records reveal that Republicans Winston Prouty of Vermont and Jacob Javits of New York, both members of Senator Morse’ Subcommittee on Education of the Senate Committee on Labor and Public Welfare, wanted the interests of
physically handicapped children made explicit under the law. Senator Morse, determined to keep the bill intact, requested an opinion by Assistant Health, Education, and Welfare Secretary Cohen and Commissioner Keppel. Cohen and Keppel, keeping the momentum of P.L. 89-10 moving through Congress, “both assured the committee that the bill was broad enough for this type of coverage” (Eidenberg & Morey, 1969: 156). This suggested that handicapped children would be included in projects under Title I and, further, funding under the other titles would automatically improve their lives, even though the primary thrust was toward the economically disadvantaged or the general education community.

However, the ESEA did not adequately cover handicapped children. “For the several hundred thousand handicapped children in State operated or supported schools, however, Title I participation [under the ESEA] was not possible because State agencies were not eligible program participants” (Fraas & Osman, 1985: 197-8). Not surprisingly, after the ESEA passed through Congress, the president of the Council for Exceptional Children (CEC) sent out a rallying cry that it was okay to ‘do good with what we have’, but that those involved with handicapped children needed to work towards categorical funding, to keep the ball rolling (Reynolds, 1965: 211-212). And indeed the swift passage of PL 89-313 suggests that this may well have already been underway. Hagerty and Howard (1978) note that

[b]efore the guidelines were even written for the original Elementary and Secondary Education Act, an amendment was made to the act (P.L. 89-313) which set aside a percentage of each state’s allocation for use in educational facilities operated by agencies of the state such as departments of mental health and mental retardation. (Hagerty & Howard, 1978: 6)

As a result, there is now a federally legislated mandate that specifically addresses the
education and other support services considered essential for these children now woven into the fabric of schooling for all children in America. This mandate, now known as IDEA 2004, includes key interlocking policy frameworks such as “free appropriate public education” (FAPE), conformity to the “individualized education program” (IEP), and determination of educational placement with regard to “least restrictive environment” (LRE) which have revolutionized the position of children with disabilities with regard to access to the general education curriculum, consideration of individual progress, and possibilities for participation in public schooling. By the same token, however, the education of children with disabilities still remains subject to the umbrella of federal policies that regulate general education, the ESEA.

**Accountability Umbrella**

Prior to the No Child Left Behind Act of 2001 an earlier reauthorization and revision of the ESEA, the 1994 Improving America’s School Act (IASA), inaugurated the federal government’s interest in state mandated standardized assessments as a means by which to tackle the desire for accountability in American schooling (National Conference of State Legislatures, 2007). Now the ESEA policy framework includes among other things an accountability requirement that necessitates states establish grade-level standards for academic achievement and that they develop ways to evaluate and assess progress towards these standards. More specifically, schools and school districts, as well as states, are to be held accountable for and must show evidence of Adequate Yearly Progress (AYP) towards the goal of proficiency or grade level achievement of the academic standards by all students. In other words, each state establishes its own standards and its own definition of AYP in order to make decisions about the progress of its schools and districts. These standards and definitions are subject to federal approval and, indeed, definitions of AYP can include more than academic assessments, however
NCLB mandates that the definition, and therefore the progress of schools and districts, be based primarily on academic assessments (U.S. Department of Education, 2001: NCLB Sec. 1111(b)(2)(C)(iv)). More specifically, these academic assessments of “student progress and achievement will be measured according to state tests designed to match those state standards and given to every child, every year” (U.S. Department of Education, 2004; italics added). As a result, the directive geared towards fulfilling the federal promise to “change the culture of America's schools so that they define their success in terms of student achievement” (U.S. Department of Education, 2004) is being satisfied, for the most part, by using state tests to measure individual grade level achievement. It is a large scale accountability framework that essentially comes to rest upon the test results of individual children.

Testing System

State mandated standardized assessments usually involve criterion-referenced tests intended to measure what is known relative to a standard body of information in various domains of interest." They are static, summative measures intended to give a snapshot of what individuals can demonstrably reveal about what they independently know, understand and are able to reason out at a particular point in time and space. As such, assuming that these tests are designed to measure what it is that the tests are supposed to measure, the state mandated standardized testing of students can be considered a reasonable way to discover what has been learned by a given population in comparison to what it is that population is supposed to have been taught. Thus the tests offer a means of summarizing, by way of a simple black and white score, the individual competency of each child at a particular moment relative to particular curricular goals as expressed in a particular test. However, as Cobb suggests, it is “an evaluation [which] occurs when a single score or grade is used to publicly report student learning. In it
you’re looking at what has already occurred, with no possibility of intervening, reassessing, and changing eventual outcomes” (Cobb, 2003: 386).

In theory, the state test provides data that can be used as a measure of the individual child’s progress towards grade level performance while also providing information that can be used to monitor districts, schools, and teachers - addressing their accountability for the timely delivery of the required curriculum. In other words, it generates a corpus of records that purports to offer a succinct data-driven way of screening for the Adequate Yearly Progress of schools towards the goal of proficiency for all children who have access to the general education curriculum. Essentially, it is testing done at the level of the individual student that provides a form of accountability threading student to teacher, teachers to schools, schools to districts, districts to states and even to the nation as a whole; indeed it would seem that the results of these tests are used to monitor the working order at every level of the public education system. Purportedly it is intended to “give policymakers and leaders at the state and local levels critical information about which schools and school districts are succeeding and why, so this success may be expanded and any failures addressed” (U.S. Department of Education, 2004). In addition it is also meant to provide for the monitoring of individual children to ensure that they are making “substantial academic progress every year” (U.S. Department of Education, 2005-a) much in the same way a dentist can monitor, diagnose and fix teeth.

The tests will give teachers and principals information about how each child is performing and help them to diagnose and meet the needs of each student…

We need to test children on their academic knowledge and skills for the same reason we take them to the dentist to see whether or not they have cavities—because we need to know. As caring adults, we want the children in our lives to have healthy
teeth because we know that their teeth have to last a long time. If the dentist finds that their teeth are not healthy, then we get the cavity filled, and we teach them how to brush correctly, to use dental floss and avoid too much sugar.

Children don't like going to the dentist, and we don't like the expense, but we do it because it's the right thing to do. The same is true of annual academic assessment. Because education lasts children a lifetime, leads to their financial security, and gives them a chance to pursue the American dream, we want to know which children are catching on and which ones are not. Then we want to take the ones who are not and teach them how to read, how to add, how to study, and how to learn.


It is a testing system calculated to identify successes and failures at multiple sites, including the initiating data point: the individual child. According to the government, it is creating a “definition of AYP [that] is diagnostic in nature, and intended to highlight where schools need improvement and should focus their resources” (U.S. Department of Education, 2002).

Moreover the federal government adds that

[t]he tests will give teachers and principals information about how each child is performing and help them to diagnose and meet the needs of each student. They will also give policymakers and leaders at the state and local levels critical information about which schools and school districts are succeeding and why, so this success may be expanded and any failures addressed.


In other words, there is a built in understanding that failure, at any level, can be remedied if the appropriate course of action is taken. Remedies can vary widely from state to state. Many
states prescribe corrective action for schools identified as needing improvement with options “rang[ing] from more limited consequences such as hiring an outside expert to advise a school on how to make adequate yearly progress, to more significant measures such as replacing school staff or restructuring the internal organization of a school” (U.S. Department of Education, 2002). In some states, teachers’ jobs may be placed in jeopardy; in other states teachers are offered bonuses based on proficiency rates.

These supposed curative actions do not stop at the level of the teacher. In some states, children who do not score at grade level (proficient or advanced) may have to go to summer school or repeat tests; some may even be refused a high school diploma. As a result, the utility of the tests for teachers in terms of being “purposeful, ongoing assessment that guides and directs subsequent instruction” (Cobb, 2003: 386) for individual children becomes somewhat questionable. Rather, the NCLB driven assessments and accountability process, so heavily weighted by summative scores, is primarily an evaluative testing system embedded with high stakes consequences for children and their parents, teachers and schools, districts, states and consequently the nation as a whole.

**Subgroup Data**

The accountability umbrella and the testing system also address specific subgroups of children who have been identified as disadvantaged. This is to ensure that these subgroups of students - identified as children from low-income families, children with limited English proficiency, racial minorities, and children with disabilities – are not left behind. To make certain the government has directed that testing results from historically underachieving subgroups be disaggregated from total scores in order to closely monitor these test scores to determine whether particular subgroups are making progress. Each state can define the size of subgroup in order to
ensure that small groups do not skew the data. This means that some schools and districts may have less than the minimum number of children in a subgroup participating in accountability tests. These subgroups are therefore not counted in measures of AYP – although the children are deemed to have participated in the general education curriculum.

Originally some states had defined the subgroup of children with disabilities as larger than others which meant that many children with disabilities were not being included in measures of AYP and it became apparent that as a result of the difference in subgroup sizing some schools were not being held accountable for the performance of children with disabilities (U.S. Department of Education Office of Elementary and Secondary Education, 2005). Indeed, as Lynn Olsen of Education Week reported in 2005, “a yet-to-be-published analysis, based on test score data in five states, found that more than 80 percent of schools that made AYP under the federal law in 2003 or 2004 did so without having to meet standards of proficiency for their special education students as a separate subgroup” (Olson, 2005). Consequently, the government is proposing changes and will “no longer permit states to have different group sizes for different subgroups when calculating AYP” (U.S. Department of Education Office of Elementary and Secondary Education, 2005).

Nonetheless, states may still define subgroups in such a way as to circumvent the potential impact of subgroups they perceive as not being able to demonstrate progress via state accountability tests. Simply increasing the size of all subgroups is one such option. For example, in one analysis, using data from five states, the Center for Assessment discovered that subgroup minimum of 60 children would result in excluding over half of the states’ students with disabilities from AYP calculations (Olson, 2005). It begs the question as to whether subgroup data is collected to monitor the progress of disadvantaged children or collected to remove a
barrier to achieving Adequate Yearly Progress for schools and districts.

**Children with Disabilities**

In any event, NCLB, and now IDEA 2004, maintain that children with disabilities must be included in the state accountability system and therefore in the mandated assessment practices that are now a part of the government’s efforts to align IDEA 2004 with NCLB. The government specifies that participation by all students, including those with the most severe cognitive disabilities, is required because

1. “it is established law”;

2. “students with disabilities, including those with the most significant cognitive disabilities, benefit instructionally from such participation”; and

3. “to ensure that appropriate resources are dedicated to helping these students succeed, appropriate measurement of their achievement needs to be part of the accountability system”…(U.S. Department of Education, 2005-b: 8-9)

That is, it is to “help to ensure equity, accountability and excellence in education for children with disabilities” (U.S. Department of Education, 2006). Yet we know that children with disabilities are progressing towards the goals of the general education curriculum in ways that may vary in pace, degree and depth. Indeed, it is expected that every state

establish goals for the performance of children with disabilities that are the same as the state’s definition of adequate yearly progress (AYP) and are consistent with any other goals and standards for children established by the state…. [and] the special education provided to children with disabilities must be specially designed instruction to meet the unique needs resulting form the child’s disability and *must enable the child to be involved and make progress in the general education*
The federal government’s most recent response, therefore, is to allow children with disabilities to participate in the assessment process via several different accountability technologies:

- Regular assessment
- Regular assessment with accommodations
- Alternate assessment based on grade-level achievement standards
- Alternate assessment based on alternate achievement standards
- Assessment based on modified achievement standards (under the proposed rule)


For a very small percentage of all children with disabilities this means an alternative performance or portfolio assessment instead of the state test. Further, the assessment is based upon state formulated alternative achievement standards that provide access to the general education curriculum although they “differ in complexity from grade-level achievement standards… [and, in fact,] there is no significant overlap between alternate achievement standards and grade-level achievement standards” (U.S. Department of Education Office of Elementary and Secondary Education, 2005). The students who participate in this variation of the state test are likely to have severe cognitive disabilities (such as autism or traumatic brain injury, for example, but likely not ‘mild mental retardation’) which “may prevent them from attaining grade-level achievement standards, even with the best instruction” (U.S. Department of Education Office of Elementary and Secondary Education, 2005). There is no limit as to the actual numbers of children with special needs who may participate in this form of alternate assessment at the school level although there is a cap of 1.0% of the total tested student population, at state and district level, whose alternate assessment score can be included towards
AYP as proficient or advanced (U.S. Department of Education Office of Elementary and Secondary Education, 2005). According to the government, this “[o]ne percent of all students is approximately 9.0 percent of students with disabilities” and thus Department of Education expects that no more than 9.0 percent of students with disabilities will participate in an assessment based on alternate achievement standards (U.S. Department of Education, 2003-a). This means that 91% of all children identified as having a disability under IDEA 2004 will not be taking alternate assessments.

Other children with disabilities are considered to be receiving their instruction at grade-level, with a subset of these children expected to demonstrate proficiency in “modified achievement standards [which] may reflect reduced breadth or depth of grade-level content…[with] significant overlap between modified achievement standards and grade-level achievement standards” (U.S. Department of Education Office of Elementary and Secondary Education, 2005; italics added). The tests would allow for a ‘modification’ or change in the subject matter or performance expected relative to the standards and children would have their scores included as proficient or advanced (U.S. Department of Education, 2003-a and 2005-c). However, there is a further state and district level 2.0% cap on the total number of students whose scores can be counted as proficient or above, for the purposes of AYP, if they are being assessed based on modified achievement standards, that is using ‘an out-of-level’ test.

Capping

It is important to note that the government originally began with a cap that was based on its 2001-02 National Center for Education Statistics data (National Center for Education Statistics, 2005) which reported a state total of 13.4% of all elementary and secondary students had an individual education plan or IEP, as mandated by IDEA 1997 for children with disabilities. The
government is now considering more extensive research-based evidence that indicates the original total cap of 1% did not adequately cover the volume or range of children with disabilities participating in variations on the standardized tests. The data currently being used by the government to make their more recent policy decisions is based on, “[t]he totality of th[e] research [conducted and reviewed by Reid Lyon at the National Institute for Child Health and Human Development and Jack Fletcher at the University of Texas which] notes that there are about 1.8% to 2.5% of children who are not able to reach grade level standards, even with the best instruction” (U.S. Department of Education, 2005-a). As a result, the government will allow for up to a grand total of 3% of the total scores based on alternate assessment or out-of-level tests at the state and district level to be included as proficient or above (U.S. Department of Education, 2005-d). Again, while this provision is flexible in that it does not restrict the number of children who are assessed through alternate or modified achievement standards, it does limit the number of children with special needs who are participating in alternate and modified assessment practices and who are actually counted as being proficient or advanced when included in schools AYP data.

Ideally only those with the most severe disabilities will be considered as participants in the general education curriculum via participating in the accountability and assessment practices in ways that substantially vary the content, process, and product of the tests. Other children will participate in the general education curriculum via a modification to the ‘breadth and depth’ of curricular goals, but this too is expected to be a very limited population. And while these new directives seem to offer states and districts important flexibility in terms of demonstrating the AYP of their schools, there seems to be a fundamental disregard for children and teachers. If the state and district have more than 3% of a total test-taking population for whom demonstration of
progress via an alternate procedure or modified achievement test is the best course of action, any scores over that percentage are not counted as proficient or above (advanced). Statistically this may make sense, but those scores represent the progress of children and the efforts of teachers. It seems that in order to make the numbers work, progress is irrelevant.

**Accommodating**

The other option for children with special needs is to take the general education tests as written. The 2005 data collected by U.S. Department of Education Office of Special Education Programs (2006) reveals that a total of 6,022,722 children were identified as having a disability under IDEA 2004 and that 5,784,501 of these children received special education services while in the public schools. This means that well over 5,600,000 children with special needs would likely have had to take the general education tests rather than alternate assessments. This is supported by information we have from the U.S. Government Accountability Office that states: “[i]n the 2003-04 school year, more than 6 million students with disabilities – approximately 13 percent of all students – attended U.S. public schools” and “[s]tudents with disabilities were most often included in the general reading assessment, and relatively few took alternate assessment” (U.S. Government Accountability Office, 2005: preface, i).

However, students with disabilities are, ideally, offered a variety of accommodations to compensate or ‘even the playing field’ when it comes to participating in instructional processes and products, including the state mandated, standardized tests. And, while “some states have developed policies that limit or prohibit accommodations and modifications despite federal law and regulations that prohibit this policy (Wright & Wright, 2005); others offer a range of allowable accommodations and modifications when it comes to participating in these state wide testing practices. Allowable accommodations vary from state to state, but in general they fall
within the areas of:

- Presentation (e.g., repeat directions, read aloud, use of larger bubbles, etc.)
- Response (e.g., mark answers in book, use reference aids, point, etc)
- Setting (e.g., study carrel, special lighting, separate room, etc)
- Timing/Scheduling (e.g., extended time, frequent breaks, etc.)
- Equipment and Materials (e.g., amplification equipment, calculators, magnification equipment)

(National Center on Educational Outcomes, 2005; Thurlow, Lazarus, Thompson & Morse, 2005)

The accommodations are not meant to change the *substance or content* of the test, but are offered as a form of scaffolding to support the child with disabilities to negotiate the procedure. Yet this creates the false impression that children with disabilities, with the aid of well chosen accommodations, will now be able to demonstrate that they have achieved progress at the same pace, degree and depth as children in general education. That is, that they will be able to contribute, via demonstrations of proficiency, to the Adequate Yearly Progress of schools.

In some cases, this may be true. Consider that, according to IDEA, a child with a disability is defined as follows:

```
(3) CHILD WITH A DISABILITY-

(A) IN GENERAL- The term `child with a disability' means a child--

(i) with mental retardation, hearing impairments (including deafness), speech or language impairments, visual impairments (including blindness), serious emotional disturbance (referred to in this title as `emotional disturbance'), orthopedic impairments,
```
autism, traumatic brain injury, other health impairments, or specific learning disabilities; and

(ii) who, by reason thereof, needs special education and related services.

(B) CHILD AGED 3 THROUGH 9 - The term `child with a disability' for a child aged 3 through 9 (or any subset of that age range, including ages 3 through 5), may, at the discretion of the State and the local educational agency, include a child--

(i) experiencing developmental delays, as defined by the State and as measured by appropriate diagnostic instruments and procedures, in 1 or more of the following areas: physical development; cognitive development; communication development; social or emotional development; or adaptive development; and

(ii) who, by reason thereof, needs special education and related services

(U.S. Department of Education Office of Special Education and Rehabilitative Services, 2004: IDEA, Sec. 602, Definitions).

Given the range of disabilities encompassed, there will clearly be children for whom the variety of accommodations available will offer the necessary and sufficient means for successfully tackling a state mandated, standardized test of the general education curricular goals. Yet even many children identified as having mild disabilities (such as a specific learning disability) will still have affective and cognitive delays such that they are not able to develop and learn at the pace, degree or depth required to be evaluated as successful in the general education
curriculum. Most of these children are still taught with some form of modification to the
curriculum. In other words, “the specific subject matter is altered or the performance expected of
the student is changed” (Nolet & McLaughlin, 2000: 74). As a result, it may be that the
curricular goals are maintained, but how these goals are translated into particular objectives for
the individual children may be substantially differ from each other and from expectations for
students in a general education course at the same grade level. As a result, while the student with
special needs may indeed be making progress, this progress will translate somewhat differently
when it is evaluated in terms of the general education curriculum as it is manifest through state
mandated, standardized testing practices. Nonetheless, if a child is being taught under the rubric
of the general education curriculum, regardless of the pace, depth, or degree of their learning and
development, they will be expected to take state mandated, high stakes, standardized tests as
written, either with or without the scaffolding offered by allowable accommodations.

**Assessing Progress Towards or Evaluating Attainment Of…?**

There is no doubt in my mind that those initially responsible for the forward movement of
large scale federal funding for the education of children with disabilities in the early 1960’s
were tirelessly seeking to advance the equitable treatment of children with special needs within
the framework of American schooling. This equity came to include such rights as a public
education, participation in the least restrictive environment, and opportunities to be educated
with non-disabled children. By 1986, with the advent of the Regular Education Initiative (REI), a
call for “more integrated general and special educational systems in order to provide effective
and appropriate education to the full range of students in the context of general education
classrooms” (Hasbrouck, 1998) became de rigueur, expanding the cascade of services well
beyond its original inception (Deno, 1970) and increasing the continuum of accepted models for
educating children with special needs within public schools.

The current vision of equity now includes access to the general education curriculum itself, ostensibly allowing the student with special needs entrée into mainstream America as it is socially and culturally constructed in our nation’s schools. Thus, it would seem that children with disabilities have been granted a form of justice; they have been positioned as insiders in America’s system of schooling. Yet this form of sanctioned membership in American society is one which has come at a price: all children with disabilities must participate in NCLB state assessment and accountability practices. That is, “[r]egardless of where students receive instruction, all students with disabilities are to have access to, participate in, and make progress in, the general curriculum. Thus, all students with disabilities must be included in the measurement of AYP toward meeting the State's standards” (U.S. Department of Education, 2003-a). In other words, children with disabilities, regardless of their individual education plans, must be included via some form of state mandated, high stakes, standardized test or alternative performance in order to establish access, participation, and progress in the general education curriculum.

For some children with low incidence or severe disabilities, the documentation involved in an alternate performance assessment may establish access and provide for a form of participation in the process of state accountability (although whether such assessments speak to progress in the general education curriculum is questionable). For others, modified tests may soon address access, participation and a measurement of progress in the general education curriculum that may allow for variation in the pace, degree, and depth of that progress. But for most children with disabilities, especially those with high incidence or mild disabilities such as a specific learning disability, it means taking the general education state mandated, standardized
tests with or without accommodations. This may well be a test which measures and evaluates the attainment of curricular goals at a point far beyond the academic achievement of the child at that time. As a result, it begs us to ask: if the child with a disability is supposed to be making progress towards the curricular goals in general education, why are they being tested by a mechanism that is meant only to evaluate their attainment (or not) of those goals?

According to the federal government, “The purpose of requiring participation in assessments is to improve achievement for students with disabilities” for, as Secretary Spellings has stated, “What gets measured gets done.”” (U. S. Department of Education, 2005-e: 3). But if something can’t be measured what does get done? Understanding the misuse of subgroups may shed some light on the matter. Consider:

- The majority of children with disabilities must participate in the assessment and accountability process by taking general education tests.
- Children with disabilities are supposed to be making progress towards grade level proficiency.
- The general education tests are used to measure grade level proficiency by evaluating the attainment or not of curricular goals

Are children with disabilities likely to test out as making progress, much less proficiency, on a test that appears to defines progress as mastery?

The state mandated, standardized tests that most children with disabilities take are simply not designed as assessments of their performance, but as evaluations of school performance. Nor are they designed to be sensitive to progress towards curricular goals; they are designed to measure mastery or achievement of curricular goals. As a result, children with disabilities are unlikely to contribute to the proficient or advanced level test scores that schools need in order to
demonstrate AYP. Now consider:

- Schools are scrambling to make AYP.
- Federal policy has allowed the states flexibility in establishing subgroup size.
- One of those subgroups is children with disabilities who are unlikely to test out as making progress under NCLB.

As a result, by legally manipulating the size of subgroups, states can legitimately authorize schools and districts to render mute the overall participation of children with disabilities in AYP. In other words, when something cannot be measured, in this case the progress that children with disabilities are making towards the goals of the general education curriculum, it doesn’t have to count.

Once again, children with disabilities are positioned as outsiders in American schooling. And while we hope that schools, districts and states still consider the data from their participation in the assessment and accountability process, the question must be asked--what do they actually learn that they didn’t already know about their students with disabilities and the general education curriculum? State mandated, high stakes, standardized tests are not assessing the progress of children towards curricular goals. State mandated, high stakes, standardized tests are evaluating the attainment of the goals.

As a result, one of the consequences of the historic uncoupling of special education from general education is that tensions are amplified at the site of assessment and accountability where the processes and products turn on various understandings of progress. We know that IDEA 2004 is now ‘aligned’ with NCLB in terms of AYP and directing the goals of children with disabilities. That is, under IDEA 2004, children have IEPs that include
- “academic and functional goals designed meet the child’s needs that result from the child’s disability to enable the child to be involved in and make progress in the general education curriculum” (U.S. Department of Education Office of Special Education and Rehabilitative Services, 2004: IDEA, Sec. 300.320 (a) (2)(i)(A));
- “a description of how the child’s progress toward meeting the annual goals described in paragraph (2) of this section will be measured; and when periodic reports on the progress the child is making toward meeting the annual goals (such as through the use of quarterly or other periodic reports, concurrent with the issuance of report cards) will be provided” (U.S. Department of Education Office of Special Education and Rehabilitative Services, 2004: IDEA, Sec. 300.320 (a) (3) (i) and (ii)); and
- “a statement of special education and related services…that will be provided to enable the child to advance appropriately toward attaining the annual goals; to be involved in and make progress in the general education curriculum” (U.S. Department of Education Office of Special Education and Rehabilitative Services, 2004: IDEA, Sec. 300.320 (a) (4) (i) and (ii)).

The alignment is meant to ensure that the progress children with disabilities make towards their annual goals will help them make progress in the general education curriculum. Unfortunately, however, AYP is not based on the individual’s progress in individualized annual goals or progress towards the general education curriculum. AYP, the driving force in the assessment and accountability process, is based primarily on tests that evaluate and therefore consider only the individual’s success or failure. As a result, the current testing framework effectively conceals any progress that children with disabilities are making towards these goals and potentially keeps secret their progress in the general education curriculum.
Nonetheless, there is a belief that when children with disabilities participate in assessment and accountability practices it advances equity [because it treats all children the same!] and promotes achievement. There are many who believe that this is not only a just, but a good thing for children with disabilities. And there are certainly endorsements to be found by teachers, parents, and even children. In the spring of 2002 one of my own students wrote this poem as a response to a prompt about the best day of school:

“The Best Day is
sol\textsuperscript{xiii} testing Because I learn
and I can thank about stofe.
I’V never thote before.
And I Like taking test and Using my brain.
I Like Looking for the anwers in the problom or
the story.” (Michaela, grade 5)

My interest, however, is not to argue whether or not we should be including children with disabilities in government assessment and accountability practices. Rather I wish to argue that the current practices are not sensitive enough to be an appropriate means of revealing the progress being made by children with disabilities and, as a result, these tests are not fair measures of these children or the effectiveness of their teachers and schools.

**Revealing Progress Towards**

Given the potential differences in cognitive and affective development of children with special needs it is more meaningful from the standpoint of assessment and more useful from the
standpoint of evaluation, for children, parents, teachers and administrators to uncover the child’s progress towards grade level proficiency rather than merely evaluating their attainment of (or not) the particular curricular ends that are the benchmarks of AYP. This research suggests that the principles and practice of dynamic assessment may offer the structural penetration needed to uncouple pace, degree and depth from the state mandated, high stakes, standardized testing framework without compromising the underlying accountability purposes of the tests.

Briefly, dynamic assessment (DA) is anchored in Vygotsky’s concept of the zone of proximal development (Vygotsky, 1978) and is a form of ‘interactive assessment’ (Haywood & Lidz, 2007: 1) that teaches while it tests. As a result, the focus in not simply to evaluate a child on their domain-specific knowledge; rather it is an approach to assessment that seeks to uncover the child’s learning-on-the-move by collaboratively engaging in tasks that are actually beyond the individual’s ability to complete independently. Vygotsky suggests that “what children can do with the assistance of others might be in some sense even more indicative of their mental development than what they can do alone” (Vygotsky, 1978: 85). By engaging in this process with a more knowledgeable other, one who can provide mediational supports (leading questions or hints) that are responsive to the variability in the child’s learning and development over and above an attentiveness to the child’s domain-specific knowledge, the child is able to complete the task. As a result, engaging in assessment that focuses on the zone of proximal development (ZPD), is to engage with the child in “those functions that have not yet matured but are in the process of maturation, functions that will mature tomorrow but are currently in an embryonic state” (Vygotsky, 1978: 86). Therefore, dynamic assessment can tell us more specifically where learning is budding and reveal to us, via the mediations we provide, the future direction we may want to take instruction to promote the learning and development of the child. As such, I suggest
that DA, through the dialogic and dialectical process-activity involved in the use of mediations, will be able to illuminate and reveal progress towards, not merely attainment of (or not), grade level proficiency in domains of interest.

**Revealing Reading Progress**

One of the domains of particular interest and spotlighted in the accountability and assessment process is reading proficiency. Here the federal government has pledged “to help every student in every state become a successful reader”; its goal “to improve reading instruction for K-3 students and to ensure that all children learn to read well by the end of third grade” (U.S. Department of Education 2005-b). As a result, under NCLB, states are required to test all students on their reading achievement relative to the state standards, beginning in grade three. However, if the underlying purpose of state mandated, standardized testing is to demonstrate progress then developing appropriate methods of distinguishing how close individuals, and therefore particular subgroups such as children with disabilities, are in terms of meeting the standards for reading proficiency makes more sense than an all or nothing score.

The goal of this research is to present a pilot study in which a state mandated, high stakes, standardized test of third grade reading was redesigned as a dynamic assessment in order to reveal the progress that children with learning disabilities may be making towards the reading goals of the general education curriculum. Four elementary school children with disabilities, all reading below third grade level, participated in the study. Using the publicly available state mandated, standardized tests of third grade reading from Virginia as a basis, four shortened versions of these static tests were constructed, each comprised of a passage and 10 questions covering text comprehension, applied word/language structures, and word-level analysis strategies. Two of these tests were redesigned as dynamic assessment, what I term ‘Dynamic
Standards of Learning Assessment’ or DSLA and used mediations that would teach strategies that ‘good readers’ use when they read.

I worked with each child individually in their school over the course of several days to administer a static pre-test (regular version of the shortened state test), a DSLA (which was videotaped), and a static post-test. The goal was to determine if there was any difference when the children were given a more sensitive assessment, but it was also to gather information on their learning that could inform instruction, and to begin to construct a scoring framework. Afterwards, I interviewed (audiotaped) each child to discover their perceptions of the different processes. Following this segment, I used the information I had gathered about each child and constructed an individualized tutoring session meant to follow-up on budding areas in reading as revealed in the DSLA. I provided three such tutoring sessions (videotaped) that built upon what I was learning about each child as we proceeded. The materials used varied somewhat with each child, but all included real world texts bringing learning into use and practice rather than focusing on teaching children to simply take state tests. Finally, I provided a closing tutoring session (videotaped) in which I administered another DSLA to determine if the application of the information I had learned and then translated into instruction had made a difference in the child’s progress towards reading proficiency.

I recognize that even a DSLA, administered as a one-time snap-shot process- activity, can not be all things to all people. However, this research will argue that a dynamic assessment approach to state mandated, standardized tests of reading for children with disabilities is both promising and possible by offering multiple advantages to different stakeholders. To this end, I believe that the DSLA can be considered, on the one hand, a pragmatic approach to educational reform that challenges us to seek incremental change rather than to overthrow the current
assessment and accountability system willy-nilly. On the other hand the DSLA may also be laying the foundations for a more revolutionary approach to educational reform as it challenges us to consider our definitions of assessment and testing, our understanding of progress and, perhaps, our assumptions and prejudgments about children with disabilities.
Chapter 2 – Beyond Horseshoes and Handgrenades

A defect is strengthened, nourished, and reinforced by its social consequences.

- Lev Vygotsky

My interest in applying dynamic assessment techniques to state mandated, standardized tests for children with disabilities came as an ‘aha’ moment. It was my first semester as a doctoral student and we - ten of us, including the two instructors - were gathered as usual ‘round the smooth, oblong table in our small, book-lined seminar room; a room without a view I might add. We had been reading the work of Campione, Brown, Ferrara, & Bryant (1984) and, as the professor held forth for a moment, I recall a kind of lightness of being and feeling of excitement. I swiveled my chair to the right, looked past the two students beside me to stare at the bent head of the professor and, with a big intake of breath, just barely stopping myself from yelling out loud, “Hey! This could work for high stakes tests!”

Needless to say, it takes more than an aha moment of consideration to commend an alternative way of demonstrating educational accountability unless we are willing to live with an endless cycle of flash-in-the-pan responses to the social and political pressures wrought by NCLB. More particularly, we need to be cognizant of the implications both practically and ideologically. Generally speaking a test is an all or nothing kind of event. Questions have correct answers, responses are considered right or wrong and, as the cliché goes, close only counts in horseshoes and hand grenades. In a dynamic assessment, on the other hand, close does count. Here the emphasis of analysis switches from product to process (Campione, 1989) as the dynamic assessment captures, with some detail, not only how close a child may be to the so-called ‘correct’ answer, but perhaps more importantly what that closeness reveals about the level of the child’s cognitive development and the kind of calculated support needed to further that
development. As a result, an evaluation given at a particular moment in time is transformed; it becomes an intentional extension of the collaborative learning process by using mediated learning responses (Feuerstein, 1979) to realize the latent possibilities in the child’s cognitive and emotional development. Thus, dynamic assessment as a means of measurement moves well beyond a merely summative score and offers a practice that is rich in terms of guided, purposeful and successful learning experiences while opening the door to a wealth of data possibilities for multiple stakeholders.

State mandated, standardized tests, an outcome of the No Child Left Behind legislation, do not offer these possibilities. Nor were they intended to. However, for children with disabilities, it may make sense to consider a dynamic redesign of such testing practices. This chapter will attempt to make this argument for the reader by introducing the cultural-historical theoretical foundations of dynamic assessment, providing an overview of various models of dynamic assessment and design considerations, and investigating domain specific dynamic assessment relevant to reading. From this foundation, reading and state tests are considered, particularly for children with disabilities, and a dynamic standards of learning assessment (DSLA) for 3rd grade reading is developed.

**The Foundations of Dynamic Assessment**

According to many advocates the heart of dynamic assessment lies anchored in Lev Vygotsky’s theory of the zone of proximal development or the ZPD. However Vygotsky himself was not the originator of dynamic assessment per se. Dynamic assessment is, for the most part, an outcome of a lineage of successors interested in his cultural-historical approach to understanding the development of higher psychological processes or mental functions. Understanding this connection between dynamic assessment and the development of higher
mental functions is important from a pedagogical perspective as well as a psychological one and becomes especially crucial to answering the question, “Why dynamic assessment?” To do so requires some general idea of Vygotsky’s cultural-historical theory. However, before moving with the reader into a discussion that introduces some of the essentials of Vygotsky’s cultural-historical approach, laying the groundwork for dynamic assessment, it’s important we orient ourselves to the issue of nomenclature vis-à-vis the various labels given to the framework(s) spawned in the name of Vygotsky. This is, by no means a given!

*What’s in a name*?  

Historically speaking, Vygotsky’s productive time was during post-revolutionary Russia, in the 1920’s and early 1930’s, when he and other psychologists, including colleagues A.R. Luria and A.N. Leont’ev, became aroused by Marx’s “Theses on Feuerbach” and began to consider alternatives to psychoanalysis and behaviorism to understand what it is to be human and to engage in the world as an agent (Center for Activity Theory and Developmental Research, 2004). In the decades since a variety of theories have become historically linked and often attributed to Vygotsky including cultural-historical theory, sociocultural theory, and activity theory to name but a few. It’s important to recognize that these terms are not synonymous. They reflect Vygotsky’s work but also interpretations by his colleagues and generations of other thinkers who have taken up his ideas and have begun to develop them in different and sometimes quite dissimilar directions. Not surprisingly this causes confusion and sometimes quite heated debate on the legitimacy of one’s claims in the name of Vygotsky.  

As a result, it’s important to establish some clarity regarding these terms and to position this work from that respect.

Indeed, authors more cognizant of these issues are beginning to give at least a nod to the issue of ‘name’ or the positioning of their work in these theoretical camps. For example, Lantolf
& Thorne (2006) briefly discuss their decision to use the term sociocultural theory (SCT) in their text *Sociocultural Theory and the Genesis of Second Language Development*. They cite the preference (and influence) of Wertsch and the pressure of their publisher to use ‘sociocultural’ but also note that others have chosen the term sociocultural in order to avoid what some have argued as the accompanying “colonialist and evolutionist overtones that position industrialized societies as superior to developing societies” that may resonate in the term cultural-historical (Lantolf & Thorne, 2006: 2-3; see Rowe & Wertsch, 2002, for more discussion of this concern). By way of codicil however, they make a point of noting that it is unlikely that Vygotsky himself ever used the term sociocultural in reference to his own work.

Wertsch himself states that he chose to use the term sociocultural to anchor his focus on mental action as “situated in cultural, historical and institutional settings” and because he believed it to be more encompassing, readily embracing the work of “Vygotsky and his colleagues” as well as others whom have since contributed to frameworks relevant to mental action (Wertsch, 1991:16).

Not surprisingly SCT has garnered considerable favor in educational circles; it offers a simpler understanding of Vygotsky’s cultural-historical theory and frequently excludes Marxist frameworks both of which make it more amenable to the practicalities of educational institutions especially in North America where incorporating the concept of the ZPD into teacher discourse has become quite fashionable (Robbins, in press: 4). Certainly SCT seems to operate more as a blanket term, as in “a vast family of sociocultural theories” and, as such, it may be the term that is amenable to most, a kind of overarching name for theories “united in a quest to overcome the pitfalls of traditional cognitivist thinking about human development” (Stetsenko, 2005: 70, discussing cultural historical activity theory or CHAT. Roth & Lee, 2007, also use the term
“sociocultural family of learning theories”; see Vygotsky’s Neglected Legacy: Cultural-Historical Activity Theory). At the very least, one might consider, as Daniels suggests, that sociocultural theory and activity theory are “near relatives” as “both traditions are historically linked to the work of L.S. Vygotsky and both attempt to provide an account of learning and development as mediated processes” (Daniels, 2001:1). However, he adds that

[i]n sociocultural theory the emphasis is on semiotic mediation with a particular emphasis on speech. In activity theory it is activity itself which takes the center stage in the analysis. (Daniels, 2001:1)

Elsewhere, Robbins (2006a) argues that in fact there are “core values” that can be differentiated in cultural-historical theory, sociocultural theory and the various activity theories (here I ask the reader to bear with the content and consider the gist of the discussion at hand). For example,

[i]nternalization is one of the core values of cultural-historical theory, not representing the external/internal as the same isomorphic phenomena (as in activity theory), nor replacing it with conscious (versus subconscious) elements of mastery and appropriation (as in sociocultural theory). (Robbins, 2006a: 11)

Kozulin would seem to support this. Although more in the domain of psychology, his article, “The Concept of Activity in Soviet Psychology” (1996), gives a very clear and straightforward outline of Vygotsky’s cultural-historical theory as differentiated from activity theory as originally developed by A.N. Leont’ev, ultimately noting that

Vygotsky’s theory views higher mental functions as a subject of study, semiotic systems as mediators, and activity as an explanatory principle. In Leontiev’s theory, activity, now as activity, and now as action, plays all roles from subject to explanatory principle. (Kozulin, 1996: 119)
Interested readers might note another source for varying perspectives on cultural-historical theory and activity theory through the lens of psychology in the edited volume *Voices within Vygotsky’s Non-Classical Psychology: Past, Present, Future* (2002) by Robbins & Stetsenko (editors). This volume seeks to open up discussions of perspectives, including European/International understandings of Soviet/Russian activity theory.  

However, my goal here is not to focus on these and other rich discussions, but to briefly indicate that there is a lineage of theory-building. In this work, I have chosen to preserve Vygotsky’s use of cultural-historical in reference to his approach, or theory, writ large, acknowledging, of course, that his ideas evolved over a productive lifetime (albeit a short one: thirty-seven years). One reason for doing so is my attempt to capture Robbins’ notion that cultural-historical theory is more a metatheory. Robbins claims that one of the basic differences between cultural-historical theory, activity theory, and sociocultural theory is that the latter two cannot be viewed within the same level of metatheory as cultural-historical theory. (Robbins, 2006b: 19)  

I would argue, as Robbins seems to suggest, that situating cultural-historical theory as metatheory emphasizes the link between Vygotsky the philosopher and Vygotsky the psychologist, a theorist and a practical scientist, who sought to realize and engage in a holistic understanding of our human selves that could be used practically to “change individual consciousness and social structures such as education, and work with the handicapped” (Robbins, 2006b: 24). Thus, I suggest that sociocultural theory and activity theory are more the progeny of cultural-historical theory, moving Vygotsky’s work forward in interesting and valuable directions. As a result, to lay down the theoretical foundations for dynamic assessment it seems to me that it is best culled from the source rather than the departures made by others.
The latter will become important later as the theoretical and practical development of dynamic assessment as a process-activity is organized and subsequently applied in the context of state mandated, standardized assessments.

**Beginning with Cultural-Historical Theory**

Identifying the foundations of this work with cultural-historical theory is important with regard to retaining Vygotsky’s associations to culture, as he understood it and the historical and, hence, dialectical quality of his thought and method, an understanding of the historical so often set aside in the rush to filter out any sedimentary hints of Marxist theory.

Regarding the former, Vygotsky, in an early, unpublished manuscript\textsuperscript{xix}, lets us know that “all things cultural are social” and that “cultural development = social development *not in the literal sense*”, but in the sense that cultural development - as the interaction with the mature ‘biotype’ - “*is the principal driving force of all development*” (Vygotsky’s emphasis; Vygotsky, 1929/1986: 59). That is to say not only is our engagement in development a social activity, but the social is not - cannot be! - outside of the cultural… nor can the cultural be separate from the social. Here Vygotsky makes an important distinction for us in using the term cultural rather than social as the overall context for the development of higher psychological functions, such as perception, voluntary memory, speech, thinking, logical memory (Chaiklin, 2003; Wertsch, 1985).\textsuperscript{xx} Cultural accentuates for us a larger and contextual understanding of the social as well as the more limited, and potentially relativistic, form of social relationship(s) between individuals. Vygotsky aims for synthesis in his use of cultural. Furthermore, in terms of these higher psychological functions, if the development thereof is cultural and therefore social then, as Vygotsky suggests,
it is ridiculous to look for specific centers of higher psychological functions or supreme functions in the cortex (or the frontal lobes; Pavlov);

they must be explained not on the basis of internal organic relations (regulation), but in external terms, on the basis of the fact that man controls the activity of his brain from without through stimuli;

they are not natural structures, but constructs;

the basic principle of functioning of higher functions (personality) is social, entailing interaction of functions, in place of interaction between people. (Vygotsky’s emphasis; Vygotsky, 1929/1986b: 59)

Thus, several fundamental elements of Vygotsky’s theory emerge: a distain for/ disbelief in the purely behaviorist and purely psychoanalytic approaches to understanding the psychology of human kind, a consideration of the distinctly human ability to use and create cultural stimuli (signs) to promote the development of mental functions, that these mental functions are constructs and therefore conceptually born, and that we engage in social activities through our mental functions. The notion of ‘cultural’, then, reflects the particular process-nature of the development of our mental functions and the way that social interaction - personality interaction - is mediated by our cultural signs. Note that here, personality does not refer to the sum total of relationships of a single individual, but is actually a construct transcending the biological and the social. There is a feeling of shared development between the cultural/social, outside world, as well as relations to other individuals and artifacts, and intra-mental/ developmental growth, all of which is connected through synthesis. (Robbins, 2007 in press: 2).

Van Der Veer & Valsiner (1991: 220) add that signs are the “stimuli-means”, or cultural
instruments, that are our uniquely human means of controlling both “the psyche and behavior” of ourselves and others. That is, signs have an instrumental function in that they are mediations to help us control and organize ourselves intra-personally and inter-personally. In addition to signs we also create material tools to control and organize the material world. For Vygotsky, these signs and tools are the intermediaries in our subject-object or subject-operation activities. In other words, “human mental processes, just like human labor, are mediated by tools” where language, signs, and symbols are special psychological tools as differentiated from labor tools (Karpov, 2003-a: 139; Vygotsky, 1978: 54-5). Vygotsky reveals examples of psychological tools and their complex systems: language; various systems for counting; mnemonic techniques; algebraic symbol systems; works of art; writing; schemes, diagrams, maps, and mechanical drawings, all sorts of conventional signs; and so on. (Wertsch & Tulviste (1996), quoting Vygotsky, 1981: xxii xxii

Not surprisingly, these tools are culturally and historically saturated.

With regard to history, Vygotsky saw history as having two meanings:

1. a general dialectical approach to things – in this sense everything has its history; this is what Marx meant: the only science is history (Archives. P. X); natural science = the history of nature, natural history;

2. history in the strict sense, i.e. human history. (Vygotsky’s emphasis; Vygotsky 1929/1987b: 55)

As a result history is both dialectical and material in nature and it is in the synthesis of the two that Vygotsky saw the development of the higher psychological functions occurring. Truly, this rich notion of ‘historical’ captures the intra-mental and the inter-mental levels of development-
as-process and can be understood with dialectics. That is, we can use dialectics as a method for understanding the change-nature of history-in-progress on multiple levels as well as in regard to the fabric or substance, the result as it were, of this change-in-progress. It allows us to investigate the process of change itself – in this case, the process of the development of the higher psychological functions. Thus, for Vygotsky, it becomes crucial not only to focus on the process of development but to do so in situ. Simply said,

To study something historically means to study it in the process of change; that is the dialectical method’s basic demand. (Vygotsky, 1978: 64-5)

Here we have the emergence of Vygotsky’s method/methodology for understanding and investigating the development of higher psychological functions and, for Vygotsky, it is

[t]he search for method [that] becomes one of the most important problems of the entire enterprise of understanding the uniquely human forms of psychological activity. In this case, the method is simultaneously prerequisite and product, the tool and the result of the study. (Vygotsky, 1978: 65)

Thus we can credit Vygotsky with addressing one of the difficulties in Marx’s methodology: the “how of setting up the study of a particular ‘historical-material constellation’” (Reuten’s emphasis; Reuten, 2000: 141). Vygotsky makes use of a shift into what has been more recently (Reuten, 2000) referred to as Marx’s ‘systemic dialectics’, one in which we begin with the whole while also looking at the parts, looking at simple categories before complex ones while also looking at abstract to concrete concepts, always searching for ‘concretization, foundation and reproduction’ that returns us back to the whole. As a result the process can seem, at points, a kind of “chaotic conception of the whole” (Reuten, 2000: quoting Marx, 1973, Grundrisse, der Kritik der Politischen Okonomie, p.101). In this regard, I’ve come to understand Vygotsky’s
methodology to be a form of design-based research (The Design-Based Research Collective, 2003) wherein the process nature of the methodology is dynamically intertwined with the process nature of the object of study. It is vigorously recursive and reflective, it is dialectical in process and product, it is a synthesis of culture (with the social), history (as dialectical and material), and systemic dialectics. It is his ‘tool-and-result’.

Newman & Holzman (1993) clarify this by addressing the nature of the tool, in this case, as a toolmaker’s tool and therefore inseparable from the “productive activity which defines both – the tool and the product (the result)… [f]or their function is inseparable from the activity of their development” (Newman & Holzman, 1993: 38-9). In other words, method then, is a dialectics of practice and therefore, adds Vygotsky (echoing Marx here), a messy, uneven business. He notes:

We are dialecticians. We do not all think that the developmental path of science follows a straight line, and if it has had zigzags, returns, and loops we understand their historical significance and consider them to be necessary links in our chain…”

(Vygotsky, 1927/1987b: 336)

Vygotsky speaks similarly about the process of child development, child development is a complex dialectical process characterized by periodicity, unevenness in the development of different functions, metamorphosis or qualitative transformation of one form into another, intertwining of external and internal factors, and adaptive processes which overcome impediments that the child encounters (Vygotsky, 1978: 73).

It is not surprising, therefore, when Robbins tells us that

[t]he vision for understanding Vygotskian cultural-historical theory is one of a
dialectical focus, where two levels are viewed simultaneously, within asymmetrical patterns of development. Some examples are: the higher explanatory principles together with tools of analysis; the whole with the parts; sense and meaning; spontaneous and scientific concepts; internal/external, among others.

(Robbins, 2006b: 19)

Indeed, there is a permeation of the dialectical in theory, process, and product in Vygotsky’s work. Therein, it is important to note that while Vygotsky was influenced by numerous psychologists of his time as well as philosophers of his past, he was profoundly captivated by Spinoza’s monism as well as clearly influenced by Hegel and Marx, among others, the result of which became a cultural-historical approach that reflects an underlying search to divest us of the Cartesian monkey on our backs using a method/ methodology to engage in working towards a holistic understanding that is ever evolving and not rooted in irreconcilable dichotomies.

**Developing Higher Psychological Functions**

To this end, recall that Vygotsky was interested in understanding how higher psychological processes developed, that is, how these mental functions come to develop over the course of a lifetime - the domain of ontogenesis - and how they form during shorter periods of time - the domain of microgenesis. These domains of ontogenesis and microgenesis, along with the phylogenetic (biological) and sociocultural (historical) domains are the foundation of Vygotsky’s genetic framework for making sense of the way humans cognitively and affectively mature (Kozulin, 1990: 213). Note, that genetic, for Vygotsky, meant developmental (Vygotsky, 1925) and, for interested readers, Lantolf & Thorne (2006) offer a nice discussion of Vygotsky’s overall genetic or developmental method. Here they note for us that “in ontogenesis the
phylogenetic and sociocultural domains merge so that the individual human organism arises from the interaction between our biological and cultural inheritances… allowing Vygotsky to overcome the dualism” of mind and body in development (Lantolf & Thorne, 2006: 45). To be sure this is not to say that either mind or body overtakes the other at any point – indeed, from a Vygotskian perspective this doesn’t really make sense. Rather, as Ratner (1991) suggests, the “biological phenomena provide a general, potentiating substratum for mental phenomena rather than directly determining them” (Ratner, 1991: 3).

It is important to be aware, as well, that the higher psychological processes are not simply a continuation or extension or a simple aggregate of lower processes but are new psychological systems that include a complex merging of the elementary functions that will be included in the new system, and themselves begin to act according to new laws...[Each is] a unit of a higher order determined basically by a unique combination of a series of more elementary functions in the new whole.

(Vygotsky, 1925/1999: 42)

This process is ongoing and, as a result, development is not static, but is ever emerging as the process spirals through a dialectic course, forming a new psychological being as psychological processes are reconstructed (Vygotsky, 1978: 57).

*Internalization*

The way human development comes about is through an *internalization* of cultural ways of being and it is this “internalization of socially rooted and historically developed activities [that] is the distinguishing feature of human psychology” (Vygotsky, 1978: 57). As Luria states,
It is through this interiorization of historically determined and culturally organized ways of operating on information that the social nature of people comes to be their psychological nature as well. (Luria, 1979: 45)

Hence it is the “relationships among people that genetically [developmentally] underlie psychological functions” (Vygotsky, 1925/1999). Development, then, as dependent upon internalization, is a process that is both dialectically and dialogically construed and is “primarily the transition from social forms of relations among people (interpsychic level) to individual forms of mental activity (intrapsychic level)” (Puzyrei’s notes in Vygotsky, 1929/1986: 74).

Briefly, borrowing Vygotsky’s example (Vygotsky, 1978: 56-6), internalization may be understood as follows: A child tries to reach an object that she cannot and her arm is outstretched toward it. An adult interprets the movement to be instrumental, a gesture with meaning and therefore a sign stimulus, and presents the object to the child. When the child comes to understand that her attempt to grasp what is beyond her results in a response from another person (the adult, in this case) this “object-oriented movement” of the child offers the child a learning experience: the movement of her arm in the direction of any object signifies, it becomes for the child “an act of pointing”, a culturally relevant and socially constructed meaning, a goal-directed activity. As a result the child begins to gain a measure of control over her mental activity and environment: she is able to use the pointing gesture referentially and instrumentally, as a semiotic sign. This reflects “the intrinsic bonds between external tasks and the developmental dynamics” which results in “learning to direct one’s own mental processes with the aid of words or signs” (Vygotsky, 1986: 108).

The latter reflects the new use of words or signs, which is connected to the process of concept formation and the development of higher psychological functions (although concept
formation itself does not begin to reach full development until adolescence) (Vygotsky, 1986: 108). Thus, for Vygotsky, the role of psychological tools is fulfilled by signs, where “a sign is a symbol with a definite meaning that has evolved in the history of a culture” (Davydov, V.V. & Radzikhovskii, 1985: 54). These signs are created by humankind and mediate our understandings; that is they mediate our elementary psychological functions which are transformed in their foundation for our higher psychological functions.

Here again there is some evidence of the split between sociocultural theory and activity theory. In the former, the dialogic and dialectical process is focused on mediations where language plays the critical role of psychological tool in the process of appropriation relative to internalization. This harkens back to Vygotsky’s interest in the “union of word and thought” and the evolution of word meaning as the unit of analysis in discovering how higher psychological functions develop and how they interact as consciousness (Vygotsky, 1986). Indeed, Vygotsky argued that

[t]he problem is that thought is mediated by signs externally, but it also is mediated internally, this time by word meanings. Direct communication between minds is impossible, not only physically but psychologically. Thought must first pass through meanings and only then through words. (Vygotsky, 1986: 252)

In an activity theory, however, the emphasis is on labor, on practical activity as per Marxist theory, and the unit of analysis is activity. Interestingly, Vygotsky notes for us that “[t]he word was not the beginning – action was there first; it [the word] is the end of development, crowning the deed” (Vygotsky, 1986: 255). Though seemingly at odds with one another, the two theoretical orientations bear important connections to each other. Lee (1985) clarifies:
The semiotic mediation of practical activity, primarily through speech, transforms humans and creates the possibility of human society. Human labor differs from animal tool use because humans are aware of and plan their actions using historically transmitted and socially created means of production. This awareness and planning ability is a form of generalization made possible only through speech. (Lee, 1985: 75)

In other words, the dialogic and dialectical nature of external, inter-mental activity can be considered not only in terms of goal-directed activity, but also in terms of intrinsically semiotic engagements of a linguistic nature. Here Vygotsky’s focus on language in interactions speaks to the instrumental aspect as well as the referential aspect of language as a dynamic psychological tool and, as a psychological tool, it becomes fundamental to understanding intra-mental development as in the case of the child who is able to attend to and use language for self-control and planning rather than acting impulsively (Vygotsky, 1978: 35; Lee, 1985: 80-81). As Sokolov (1969) suggests, we can discover that

[h]uman thinking originates on the basis of actions with objects and gradually begins to abstract from them. It then becomes verbal speech activity, first in the form of “external” speech (aloud) and then in the form of “internal” speech (latent articulation), characterized by fragments of verbal expressions and often by the presence within them of individual symbols (figurative code)... [Here] we are better able to understand the great significance of word articulation in the child’s mastery of various cognitive operations. (Sokolov, 1969: 568-9)

As a result, the ability to verbalize thinking becomes significant within the teaching-learning activity; it opens the window onto internalization and consciousness.
This reflects Vygotsky’s method of ‘objective psychology’ which is not based on a distinction of ‘what I the scientist observe’ about the person/process as being more scientific than ‘what you observe about yourself’, rather objective psychology includes as scientific ‘what I the scientist observe’ and ‘what you are aware of and can tell me’. In other words, the combination of my observation and your subsequent report (not interpretation) of an experience allows the experience to pass through a “double lens”. Herein, it is speech that operates as both a system of “reflexes for social contact” and a system of reflexes of consciousness, for

[t]he mechanism for knowing oneself (self-awareness) is the same as the mechanism for knowing others…The individual aspect of consciousness is constructed as derived and secondary, based on the social and exactly according to its model…. [hence] [o]nly the objectification of the inner process guarantees access to specific forms of higher behavior as opposed to subordinate forms. (Vygotsky, 1925/1999)

Thus development and the methodology for understanding development are both dialogic and dialectical and neither can be broken down into a purely sociocultural framework or an activity framework to understand the whole.

**Learning, Development and the ZPD: Connecting Dynamic Assessment**

Not surprisingly, “learning is a necessary and universal aspect of the process of developing culturally organized, specifically human, psychological functions” and, as a result, it becomes important from the schooling perspective for teachers to provide ‘good’ learning engagements with students such that the collaborative activities can provoke, press, and promote development (Vygotsky, 1978: 90). Indeed, Vygotsky argues
that an essential feature of learning is that it creates the zone of proximal
development; that is, learning awakens a variety of internal developmental processes
that are able to operate only when the child is interacting with people in his
environment and in cooperation with his peers. Once these processes are
internalized, they become part of the child’s independent developmental
achievement. (Vygotsky, 1978: 90)

Thus the zone of proximal development (ZPD) can be “generally understood as where and/or
how the transformation from the inter-psychological to the intra-psychological plane takes place

More specifically, Vygotsky conceptualized the ZPD as “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” (Vygotsky, 1978: 86). It is a learning milieu which emerges as the
child and the more proficient collaborator seek to promote the child’s cognitive development
through a learning process that takes into consideration the course of internalization.

The ZPD is revealed in practice “if we offer leading questions or show how the problem is
to be solved and the child then solves it, or if the teacher initiates the solutions and the child
completes it or solves it in collaboration with other(s)” (Vygotsky, 1978: 85). Ideally, the
positive and successful experience of this collaborative learning process presses the child and
provides the fertile ground that enables cognitive and affective development. This development
occurs when we are able to tap into a ‘budding’ point of cognitive readiness and propel the
development. Thus, in this joint space of problem solving, “the final product of this child-adult
cooperation is a solution, which, being internalized becomes an integral part of the child’s own
reasoning” (Vygotsky, 1986: xxxv, introduction by Kozulin). Importantly, as Zuckerman notes, these collaborations are

interpsychological or internmental, because they do not belong completely to any participating individual. They are also nonadditive: They cannot be reduced to a sum of operations performed by all of the participants… [as]… each human ability is born not within an individual, but in the interpsychological space of human interactions. (Galinka, 2003: 186)

More boldly, the ZPD is not simply a turn of phrase used to denote an instantiation of Freire’s “banking concept of education” whereby students are positioned as receptacles-in-readiness awaiting an encapsulated canon from above to be regurgitated upon demand (Freire, 2003: 72).

Rather, the ZPD is the open collaborative learning space that opens up the possibility for a shift in control over a problem promoting the child’s development capitalizing on the interpsychological plane that may move to the intrapsychological plane or internalization (McMahon, 1996: 73-4).

A classic example of this shift in control is revealed the early work of Palincsar & Brown (1984), Palincsar (1986), and Brown & Palincsar (1987) on reciprocal teaching and comprehension strategies. The reciprocal teaching process involves a dialogic turn-taking approach between teacher and learner(s) to develop learner use of and control over strategies for promoting text comprehension (categorized as summarizing, question generating, clarifying, and predicting). Outcomes of the research demonstrated not only that learners were more capable in criterion-based performances, but “qualitative changes were observed in the dialogue that occurred daily. For example, the experimental students functioned more independently of the teachers and improved the quality of their summaries over time. In addition, students' ability to
write summaries, predict the kinds of questions teachers and tests ask, and detect incongruities in text improved” (Palincsar, 1986: 20). In other words, there was a taking-over by the student from a collaborative to a more independent level of functioning with regard to texts and meaning making that subsequently saw transfer to other classrooms and types of text. Thus, reciprocal teaching engages the student within their ZPD and moves them forward in their development as meaning makers.

Unfortunately, Vygotsky himself did not live to realize the application of the concept of the ZPD to the development of evaluative techniques. However, he considered the work of learning, specifically concept formation, in school or educational settings, as vitally important and “argued that the progress in concept formation by a child achieved in cooperation with an adult would be a much more sensitive gauge of the child’s intellectual abilities” than other forms of routine testing (Vygotsky, 1986: xxxv, introduction by Kozulin). Certainly it is clear that he believed that by engaging a child in learning activities that were beyond their independent means, but which also involved the use of external mediations that could be used by the child, that the child’s use of the mediation(s) would act as a ‘second stimuli’ and a temporary link allowing the child to complete a task. “In this way,” suggested Vygotsky, “we are able to study the process of accomplishing a task by the aid of specific auxiliary means; thus we are also able to discover the inner structure and development of the higher psychological processes” (Vygotsky, 1978: 74). This method, Vygotsky felt, would help to “objectify inner psychological processes” so that they could be analyzed while underway through the intentional use of signs.

These understandings of learning, development, and internalization, particularly with regard to the concept of the ZPD, form the fundamental theoretical foundation of the approaches now collectively known as dynamic assessment (Kozulin & Gindis, 2007: 352).
Chapter 3: A Dynamic Standards of Learning Assessment

Design is not just what it looks like and feels like. Design is how it works.

- Steve Jobs

A dynamic assessment can be considered a teaching-testing-learning process-activity that helps us understand where a child is developmentally by engaging in a collaborative venture that uses mediations to open the window onto the processes under development - as they are underway – thus providing the assessor (e.g. teacher) with an awareness of a child’s progress - as it is underway – and directing us towards the child’s potential through the joint accomplishment of external tasks. It is the application of a collaborative teaching-learning framework within that conceptual site of the child’s cognitive and affective readiness to develop that creates the ZPD and provides us with the means of understanding the child’s development at the microgenetic level (and thus the ontogenetic level as well).

Brown & Ferrara (1985), in their landmark paper, “Diagnosing zones of proximal development”, note the “important educational implications” of applying the zone of proximal development in ‘measuring’ the learning potential of children for diagnostic purposes in general intellect and in specific areas of achievement, and for devising instruction that would be ‘aimed’ at the “upper bound of a child’s zone” (Brown & Ferrera, 1985: 301). Chaiklin (2003) adds that these engagements within the ZPD are to be used to “to identify the kinds of maturing psychological functions needed for transition from one age period to the next…[and] to identify the child’s current state in relation to developing these functions needed for that transition” (Chaiklin, 2003: 48-49). He notes that this development may occur relative to “academic or school concepts… because this development is relevant in relation to school age” (Chaiklin, 2003:57). Thus, the ZPD can aid in diagnostics and instructional planning via and within
particular academic domains resulting in the possibility for domain specific dynamic assessments in reading or mathematics, for example. Certainly Vygotsky saw that “[e]ach school subject ha[d] its own specific relation to the course of child development, a relation that varies as the child goes from one stage to another” (Vygotsky, 1978: 91).

To clarify, we need to move somewhat beyond Vygotsky’s own theoretical work. If we shift towards sociocultural theory for a moment and consider internalization as mastery and appropriation (and therefore use) of psychological signs or tools we can begin to identify that the relevance of content to development is not to say that the “appropriation of psychological tools” is the same as the “process of content learning” (Kozulin, 2003: 25). Rather, the mastery and appropriation of such tools involves,

(a) a deliberate, rather than spontaneous character of the learning process;

(b) systemic acquisition of symbolic tools, because they themselves are systematically organized;

(c) emphasis on the generalized nature of symbolic tools and their application.

(Kozulin, 2003: 25)

Thus a domain specific type of dynamic assessment should involve the appropriation of higher psychological functions which can be applied or transferred to other activities or even domains, opening up the possibility for, in the case of educational content, a different way of engaging in content learning by engaging in activity to promote cognitive development as well.

**Models of Dynamic Assessment**

Models of dynamic assessment, while they may vary considerably, do generally incorporate a teaching-while-testing element and proponents do generally agree, for the most part, on their foundational similarities to Vygotskian theory. They are interested in the learner’s cognitive and
affective development and concentrate their focus on revealing and distinguishing details about a subject’s learning potential. Brown, Ash, Rutherford, Nakagawa, Gordon, & Campione (1993) note four main principles as distinguishing features of dynamic assessment:

1. Understanding procedures rather than just speed and accuracy are the focus of assessment and instruction.
2. Expert guidance is used to reveal as well as promote independent competence.
3. Microgenetic analysis permits estimates of learning as it actually occurs over time.
4. Proleptic teaching (Stone & Wertsch, 1984) is involved in both assessment and instruction, for both aim at one stage beyond current performance, in anticipation of levels of competence not yet achieved individually but possible within supportive learning environments. (Brown et al, 1993: 218)

Brown at al. also specify that dynamic assessments are a form of individual assessment of knowledge and strategies and standardized hints that range from hard to easy are used as mediations to measure student need (Brown et al, 1993: 219). And while their main principles hold for the most part, these other specifications are not always true of every dynamic assessment.

Indeed, applications of Vygotsky’s learning theory, as filtered through various supporting theoretical orientations and practical interests, have resulted in a wide array of evaluative models and methodologies. For example, Jitendra & Kameenui (1993), as an outcome of their literature review, delineated five models of dynamic assessment: test-train-test (e.g., Budoff & Friedman 1964), learning potential assessment device (e.g., Feuerstein, 1979), testing-the-limits approaches (e.g., Carlson & Weidl 1978, 1979), graduated prompting procedure (e.g., Campione, Brown, Ferrera & Bryant, 1984; Brown & Ferrera, 1985; Palincsar, Brown & Campione, 1991),
and continuum of assessment: mediated and graduated (e.g., Bransford et al, 1987). More recently, Sternberg & Grigorenko (2002) concentrated the swelling number of leading models into what they term ‘clusters’ of dynamic testing. They distinguish four clusters: metacognitive interventions targeted at teaching generalizable concepts and principles (i.e., Feuerstein), approaches that involve learning within the test (i.e. Guthke 1982; Brown et al), methods that include restructuring the test situation (i.e. Budoff; Carlson & Weidl), and examples which involve training a single cognitive function (i.e. Spector 1992; Peña 1992, 2000). Interestingly the clusters revisit many of the same studies identified by Jitendra & Kameenui (1993).

As such, Carol Lidz (1991), as a result of her own examination of the dominating models of dynamic assessment, cautions that we need to be careful in our descriptions to note which type of dynamic assessment procedure relates to which type of criterion. We must avoid lumping all procedures under the one term and then attributing research findings to a generic concept of “dynamic assessment.” The procedures differ considerably in regard to content, domains, sequencing of tasks, standardization, time involvement, and populations involved. (Lidz, 1991, p.57)

Thus, while it is not the purpose of this work to provide an evolutionary history of the models of dynamic assessment, it seems relevant nonetheless to consider the ways that researchers have begun to organize these incarnations, enlarging a developing framework for addressing the salient features emerging in the creation and analysis of dynamic assessments. By attending to an outline of these broad categories we can reflect on the preliminary advantages inherent in a dynamic redesign of a state mandated, standardized test for children with disabilities.
Differentiating Categories for the Development & Design of Dynamic Assessments

In the landmark text *Dynamic Assessment: An Interactional Approach to Evaluating Learning Potential*, edited by Carol Lidz (1987), Bransford et al notes three areas of difference that had begun to emerge in the literature on dynamic assessment: the nature of the tasks chosen, the nature of the teaching component, and what assumptions were made about the uses of dynamic assessment. Joseph Campione (1989) refined these observations, creating a condensed taxonomy hinging on the three dimensions of focus (the overall methodology used), interaction (the involvement between the examiner and examinee), and target (skills, either general or domain-specific). Broadening this classification from a practical perspective, Lidz (1991) suggested that consideration must be given not only to the underlying theory of intelligence, the processes addressed in the learner, and the principles of examiner interaction, but also the usefulness of the results in terms of improving student functioning in the classroom, the inter-assessor reliability, the ‘teachability’ of the procedure, and the feasibility of the practice with regard to the reality of educational time constraints. Fine-tuning these frameworks, Jitendra and Kemeenui (1993) developed five axes of analysis: theoretical orientation, purpose of assessment, tasks used in the assessment (specifically: general skill evaluation or domain-specific evaluation), type of instruction employed, and results. More recently, Sternberg & Grigorenko (2002), in their examination of the acclaimed models of dynamic testing developed a basis of inquiry that considered the comparative informativeness provided by a given paradigm, its predictive power, its degree of efficiency, and the robustness of the results.

However, it is especially important to be aware that when it comes to the “embedded interventions” that they “need to go beyond mere knowledge acquisition or training” in order to promote cognitive development (Haywood & Lidz, 2007: 75). Ultimately the process is of
psychological importance not simply of educational relevance and, as such, the teaching of concepts, specifically Vygotsky’s scientific concepts, becomes more critical to development than simply “subject-domain strategies and skills” for scientific concepts “transform students’ everyday life knowledge” (Karpov, 2003: 67). Here concept use can be understood as “giving definitions, finding similarities, classification and discriminating between a concept and a thing it subsumes” (Langford, 2005: 189). That said, however, the formation of spontaneous or everyday concepts take us from the concrete to the abstract, but the formation of the scientific concept “is the path from the abstract to the concrete during which the child is more conscious of the concept than of the object from the very beginning” (author’s emphasis; Leont’ev, 1997: 28). In other words, ‘scientific’ concepts are not in regard to the subject domain of science per se, but are based on logic and are “decontextual” (Gindis, 2003: 209). Thus, in regard to domain specific learning we need to be cognizant of the domain specific scientific concepts as well as procedural knowledge in content areas. Indeed,

the main features of such combined conceptual and procedural knowledge are a high level of mastery, broad transfer, and intentional use by students. Students are able to answer “why” questions, to substantiate the way in which they have solved a problem, and to defend the results. (Karpov, 2003-b: 69).

Extrapolating thus far, we can determine where the prevailing categories of consideration for dynamic assessment development and design must begin:

1. *The theoretical framework* that spawns the underlying assumptions about learning and development involved and the determination of methodological choices pursuant to research connected to these beliefs;
2. *The principles and processes* involved in addressing either domain specific or general scientific concepts, how these might be related to higher psychological processes, and how this will manifest in design;

3. *The interaction between examiner and learner(s)* in terms of the type of interface and the level of ad hoc communication involved;

4. *The judgments regarding standardization*, particularly as it relates to test design, delivery and replication;

5. *The efficiency and feasibility* of the assessment given the reality of constraints such as time, money and human resources; and

6. *The utility of the results* from various stakeholder perspectives.

**Differentiating Categories for the Development & Design of Content Specific Dynamic Assessments… in NCLB times**

In practice dynamic assessment “procedures differ considerably in regard to content, domains, sequencing of tasks, standardization, time involvement, and populations involved” (Lidz, 1991: 57). More generally, Campione (1989) suggests that they differ in target (such as general or domain-specific capabilities), focus (the way change is assessed) and interaction (the nature of the interaction between the examiner and the learner). And, as a rule, most dynamic assessments are interactive, include embedded interventions, and offer information about the responsiveness of the learner to the interventions (Lidz & Elliot, 2000: 7). Beyond the broader commonalities in principle and general practice, however, several categories for consideration with regard to developing content specific dynamic assessments for NCLB accountability purposes arise, including,

1. *target: the capabilities and processes* that are relevant to the content specific domain;
2. focus: the adherence to standardization, particularly as it relates to test design, delivery and replication, that ensures legitimacy in terms of accountability; and

3. interaction: the framework for organizing the interaction between the examiner and learner, in terms of the type of interface and the parameters for ad hoc communication.

As well, if we fuse other requirements as per state mandated, standardized tests with the principles and practice of dynamic assessment at least some preliminarily consideration must also be given to

4. the factors relevant to the efficiency and feasibility of carrying out the assessment such as time, money and human resources; and

5. the ways various stakeholders can utilize the results, including guidance for future instruction as well as a method for generating accountability data that speaks to adequate yearly progress (AYP).

As a result, in terms of a dynamic extension of a state mandated, standardized test in a content specific domain, the design methodology should include procedures for considering capabilities and processes that are relative to the content such as the graduated prompt approach of Campione, Brown, Ferrera & Bryant (1984); Brown & Ferrera (1985); Palincsar, Brown & Campione (1991), the somewhat similar learning-test approach of Guthke (1982), or the testing-the-limits approach of Carlson & Weidl (1978, 1979). These approaches, by identifying what it is we do when we “engage in thin-slicing” or the automated, accelerated unconscious finding of patterns (Gladwell, 2005: 23) that carry us to particular outcomes, help us identify the ways in which individuals could complete the same task (Palincsar, Bown, & Campione, 1991: 76), what strategies are used, and then allow us to plot the elements involved in the process rather than merely document the end product. Brown & Ferrara (1985) spell out it out: “testing the zone of
proximal development as a means of diagnosis requires a detailed task analysis of a suitable set of cognitive tasks and detailed task analysis of possible transfer probes” (Brown & Ferrera, 1985: 284).

In a review of some of the content-specific research, we see in the dynamic assessment experiments of Campione & Brown, 1990, that scripted ‘hints’ were used that were “standardized and proceeded from general to specific” (Campione & Brown, 1990: 160). The “early hints consisted of quite general indications about the problem [and the] later hints were much more specific, with the tester eventually providing a blueprint for solving a particular problem if the learner failed to catch on” (Campione & Brown, 1990: 147). Here the domain of choice was arithmetic, specifically word problems involving addition and subtraction although the graduated prompt approach of Brown et al was intended for other content-specific domains as well, including reading. A similar ‘prompting procedure’ was used by Jitendra & Kameenui (1993) in their study using dynamic assessment to support performance in solving mathematical word problems. Indeed, as Haywood & Lidz (2007) suggest,

if the results of dynamic assessment are to be directly relevant in educational settings, then the information derived from the assessment must incorporate and be directly applicable to educational content. It needs to go beyond the surface characteristics of this content, but it needs to show a clear relationship. (Haywood & Lidz, 2007: 76)

Thus, while content-specific dynamic assessment can and should have a clear link to schooling, we should not forget that the critical elements of dynamic assessment are in relation to the ZPD and learning-that-leads-development, the underlying theoretical orientation and therefore relationship of content to the development of higher psychological functions.
**Content Specific Dynamic Assessment in Reading**

One suggestion for “a plausible interpretation of the zone of proximal development in reading assessment relates to the extent to which a given strategy is used independently, or with varying degrees of instructional assistance” (Johnson, 1990: 106-7). This suggests a form of ‘task-based’ assessment (Ellis, 2003) and a way of linking what is done during the test with what it is that good readers naturally do. At first glance this understanding of how to build a content specific dynamic assessment in reading may appear to ignore the essential element of high psychological functioning, the instruction of scientific concepts as related to reading versus strategy development. However, reading itself is a higher psychological tool! Indeed understanding of print texts is achieved using the “higher-level cognitive processes that are used in the transformation of print into ideas” such as “word – and sentence-level comprehension processes and strategies for text integration” (Snowling, 2002: 394)

In research specifically involving the dynamic assessment of reading abilities, Carney & Cioffi (1990) suggested an approach using an “if…then” strategy whereby “the examiner learns not only the level at which the student functions but also the instructional intervention(s) required for success” (Carney & Cioffi, 1990: 180). However, rather than a preset hierarchy of prompts, they advocated a ‘progressive slicing’ response to the student’s efforts until the student is able to respond. In a later study involving the dynamic assessment of composing abilities, Cioffi & Carney continued to advocate ‘if…then thinking’ suggesting that “by exploring the student’s responses to these instructional episodes, the examiner learns not only the level at which the student functions but also the instructional interventions required for success” (Cioffi & Carney, 1997: 178). Kletzien & Bednar (1990) used a similar response formula in their dynamic reading assessment procedure (DAP), an intensive framework for analysis and
engagement which includes a ‘mediated learning minilesson’ as part of the overall assessment process. These two approaches to the dynamic assessment of reading capacity appear somewhat similar in nature to the Feuerstein et al (2003) procedures, even though they are domain-specific, in that they involve intensive one-on-one contact between the examiner and the learner, as well as unscripted mediating responses to the learner. To be clear, this is not to say that the examiners are untrained; examiners using the DAP, for example, “must have a firm understanding of strategies and their use, an ability to infer strategy use from reader responses, recognition of strategies appropriate for targeting in the minilesson and expertise in utilizing a range of instructional techniques” (Kletzien & Bednar, 1990: 532).

This approach is echoed somewhat in the work of Das. The target of this research has been the remediation of information processing strategies that underlie reading via a two-step testing-teaching model that incorporates metacognitive interventions targeted at teaching generalizable concepts and principles à la Feuerstein followed by a domain-specific teaching test similar in nature to the work of Brown et al. Das has proposed something similar to task-analysis, that is a taxonomic analysis of how children code information, and uses this approach to inform both components of his procedure, the PASS (Planning, Attention, Simultaneous and Successive processes) model and the domain-specific bridging component of training, the PASS Reading Enhancement Program (PREP). In each, a system of prompts is used “to ensure that tasks are completed with a minimum amount of assistance and a maximum amount of success”, first, in order to support children’s efforts at discovering and adopting strategies connected with more global processes and later to support and guide the learner in reading tasks (Das, 2000: 93). In this model children are not so much taught strategies per se with the prompts as they are guided into the self-discovery of strategies with the assistance of the prompts and by using verbalization
as a self-mediating support.

On a more specific level, Spector (1992) developed a dynamic assessment of phonemic awareness that included a specific series of prompts to be used in response to a child’s inability to segment a word. The goal of her study was to use the sensitivity of the instrument to see if a dynamic assessment of phonemic awareness could predict progress in reading. The instrument was evaluated as a successful measure in that “dynamic phoneme segmentation was a better predictor of kindergarten reading progress than any of the three static measures of phonemic awareness” and thereby speaks to the intrinsic property of dynamic assessment to penetrate domain-specific content with more insight into children’s cognitive development (Spector, 1992: 7). Interestingly, the measure itself was based on an existing instrument, the Yopp-Singer phoneme segmentation test, “but provided corrective feedback and increasingly supportive prompts and cues” (Spector, 1992:3).

A brief review of dynamic assessment in the subject domain of reading can also be found in Haywood & Lidz (2007). In one of the referenced articles, the author Meltzer (1992) situates her work on learning strategies in dynamic assessment and curriculum-based assessment. In another, Abbott, Reed, Abbott, and Berninger (1997) frame their dynamic assessment study involving second grade children with severe reading and writing disabilities as a form of response to intervention (RTI) procedure that included multiple tutorials over a span of time in the areas of orthographic and phonological awareness, word recognition, comprehension and handwriting, spelling, and composing. Their work showed gains beyond chance for most of the children on most of the measures but also showed their differential responses to the treatment. The results also generated individualized recommendations for their next school year. (Haywood & Lidz, 2007:}
This form of assessment suggests that multiple stakeholders needs can indeed be incorporated into a single assessment process.

More recently, Caffrey (2006) used what she considered a dynamic assessment approach for predicting reading achievement in kindergarten and first grade, as an alternative to RTI procedures. Caffrey noted, that while RTI has been approved by IDEA 2004 as a means of identifying children with specific learning disabilities, “most RTI models require anywhere from 10-30 weeks before the child can be considered a “nonresponder” and eligible for special education services” whereas her approach, using dynamic assessment, potentially differentiates “nonresponders” to treatment interventions more quickly allowing them to be funneled into appropriate intervention services more swiftly (Caffrey, 2006: 76). This research, however, was focused on using dynamic assessment for predictive purposes and to lead intervention service decisions, and was a form of dynamic assessment “not necessarily designed to provide a direct benefit to the child during the testing session” (Caffrey, 2006: 8).

When it isn’t Dynamic Assessment

While the latter form of dynamic assessment may seem to be more in line with the Russian distinction made between dynamic assessments as diagnostic tools in terms of learning aptitude, *diagnostika obuchaemosti*, verses dynamic assessments that are teaching-learning experiments, *obuchayuchij experiment* (Lidz & Gindis, 2003: 105), it is not clear to me that dynamic assessment, as it originates in Vygotsky’s theoretical conception of the ZPD, can in fact operate as an assessment of potential if there is no consideration of the benefit to the child during the assessment. If working within the ZPD is to collaborate in activities that allow us to ‘see’ development by providing some form of assistance to the child and, if it is a form of learning-
that—leads or provides the foundation for development, there must be some ‘benefit’ to the child when engaging in activities that ostensibly reveal development by leading development with learning— even though we are aware that “[d]evelopment in children never follows school learning the way a shadow follows the object that casts it” (Vygotsky, 1978: 91). As Haywood & Lidz (2007) note, there are “[s]ome fundamental concepts and assumptions [that] appear to underlie virtually all approaches to dynamic / interactive assessment” including the view that “[o]bserving new learning is more useful than cataloguing (presumed) products of old learning”… and “teaching within the test provides a useful way of assessing potential as opposed to performance” (Haywood & Lidz, 2007: 7). Thus I would question the legitimacy of forms of dynamic assessment that do not include some form of assistance that brings learning into the testing framework, that do not consider the activity being engaged in to be of direct benefit to the child, or engage in more of “a search for deficits rather than primarily a search for sources of strength” (Haywood & Lidz, 2007: 19). Perhaps they are something else.

However, even ‘something else’ may offer more. For example, Lipson & Wixson (2003) emphasize the importance of interactive frameworks in helping to shift our perspective “away from simply specifying deficits and toward the specification of the conditions under which a student can and will learn” and, as a result, the focus becomes more about “variability in performance within individuals across texts, tasks, and settings” and what we can do to encourage success and less about disability per se (Lipson & Wixson, 2003: 54). This approach to teaching they term ‘diagnostic teaching’ and they describe the focus as being on the teacher’s decision-making with regard to planning (e.g. methods of instruction, materials, tasks), investigating (e.g. alternative instructional methods and scaffolding), and evaluating (Lipson & Wixson, 2003: 440-446). Thus one of the crucial elements that may differentiate diagnostic
teaching from dynamic assessment is that the focus of the former is on the procedures prepared by the teacher to be applied to the student in the assessment activity versus the focus of the latter on the processes that bring the student into the collaborative frame of the ZPD.

For example, in diagnostic teaching, scaffolding is provided as a kind of “given” and as such “involves simplifying the learner’s role rather than the task” (Daniels, 2001: 107). More specifically scaffolding seems to involve modeling, prompting, and then independent imitation whereas in dynamic assessment, of reading for example, the focus is “on students’ acquisition of strategies during instruction rather than unaided levels of competence” (Walker, 2004: 45). Thus mediations in dynamic assessment seem to center more on maintaining active learner engagement in a learning-that-leads-development process that aims towards the joint completion of a task, balancing the authority or power of the teacher, the learner and the goal of the activity. Scaffolding, on the other hand, seems more oriented to task completion as an independently completed product, that is, as Newman & Holzman (1993) suggest in reference to Bruner’s use of scaffolding, more of a “tool for result-type tool and tool for result-type learning” (Newman & Holzman, 1993: 142). Other comparisons of scaffolding and mediation suggest that scaffolding may include more active involvement by the learner; however, there does seem to be agreement that scaffolding does not take into consideration the role of cultural tools (Stetsenko, 1999; Lantolf & Thorne, 2006). As a result, scaffolding does not appear to be overtly concerned with an instructional process that is founded on learning-that-leads-development and for Vygotsky,

\[ \text{Instruction is only useful when it moves ahead of development. When it does, it impels or wakens a whole series of functions that are in a stage of maturation lying in the zone of proximal development. This is the major role of instruction in development. This is also what distinguishes the instruction of the child from the} \]


training of animals. (Vygotsky’s emphasis; Vygotsky, 1927/1987a: 212)

At any rate, at least we find in the framework of diagnostic teaching a value placed on an orientation to social justice within schooling rather than the deficit model point of reference found in RTI or RTI-type ‘dynamic assessment’. Indeed, it is the social, political and even economic effects of a fundamental difference in considering learning as a process versus a product.

When it isn’t Learning-That-Leads-Development: Consequences

The social, cultural, and political consequences of instruction that does not take seriously learning-that-leads-development plays itself out on the microgenetic level of development; learning that results only in the ability of the learner to talk about the content and to learn the content, does not engage the learner in the process of recognizing him or herself as a learner and all that this can entail (Newman & Holzman, 1993: 144). Understanding ones self as a learner, understanding how one is thinking and learning and developing, evokes authority and power in ones role as learner and teacher. As a learner/teacher, understanding the self as a learner supports the development of the motivation and ability to act and, thereby, take control of one’s thinking and plan one’s actions. As a learner/teacher, understanding the self as a learner is to be able to bring to word the knowledge of one’s learning process, to recognize and express it objectively, to convey it to others. This is the self-reflexive aspect of learning that is crucial to the internalization process whereby the learner shifts from the inter-mental to the intra-mental plane, it is the ‘double-stimulation’ that forms the dialectical dance of development within the context of culture (Vygotsky, 1978). It is to be able to talk about one’s learning more so than what and how one has learned. As a result it is to develop cognitively and affectively as a human.

Indeed, instruction that does not value learning-that-leads-development is more likely
based on an understanding of development that proposes universal modes of functioning… framing children’s performance relative to either an absolute standard or to a standard that is descriptive of one pattern of development, typically that of middle-class European American children. This has lead to deficit models of intelligence that suggest that those who do not meet the standard are deficient in some way. (Gauvin, 2001: 212)

Not surprisingly, this is a perception that has come pen-in-hand with tests that claim to be able to ‘measure’ an individual’s intelligence and knowledge against particular standards and thereby be able to position the individual relative to these standards. These measures were created in order to align mental development “as a ladder of improvement that [can] directly connect the “mentality” of a worm with that of a college student” (Vygotsky, 1986: 206, referring to the 1901 text by Thorndike, *The Mental Life of the Monkeys*).

Up until the early 20th century, when the objective measurement movement began, testing in schools had been more subjectively conducted as students recited materials they were expected to master and were judged by their teacher on their performance of the teacher’s curriculum (Giordano, 2005). A century later, America’s love affair with testing has become the business of schooling as standardization in all manner of school related essentials from curriculum, to testing, and even to instruction itself is favored. Interested readers may want to investigate the complex history of the testing phenomena in America beginning with Giordano’s 2005 text, *How Testing Came to Dominate American Schools: The History of Educational Assessment*. Alternatively, a shorter, more globally considered introduction is available in the 2003 article *A History of the Development of Psychological an Educational Testing*, by H.K. Suen and J.L. French, 2003). Suffice it to say here that the current cultural bias of venerating the
standardized test in schools has been fueled by and continues to fuel an interest in sorting, labeling, and pigeonholing individuals for various reasons, including the current drive to make America’s schools financially accountable for what they should be producing. And while it may be important that all participants in our schooling system be held accountable to stakeholders – all of whom either have been or are still the participants – the current means of assessing the adequate yearly progress (AYP) of schools via the NCLB state mandated, standardized testing of individual children reflects a limited view of human development that has been further narrowed to grade level proficiency and, as a result, restricts what it can mean to make progress on both an individual and school-wide level.

From the standpoint of the theoretical framework thus far, an approach to assessment that takes seriously the co-construction of the ZPD with mediated learning opportunities that can lead development will be one that is more sensitive to the variability in an individual’s pace, depth, and degree of subject knowledge as well as their cognitive and affective developmental progress. That is, the assessment will be more sensitive to ‘seeing’ and documenting the individual’s progress towards grade level proficiency, while also engaging in a collaborative instructional activity designed to promote cognitive and affective development through learning-that-leads-development… irrespective of the labeling bestowed under the disability categorization of IDEA 2004 and/ or the subgroup classification of NCLB.

**Developing a Content Specific Dynamic Assessment of Reading for Children with Disabilities for NCLB: A Dynamic Standards of Learning Assessment**

What becomes apparent is that in the effort to generate categories of precise criteria, a framework for the development and design of dynamic assessment must first engage in
answering the most elemental question in any assessment proposal: “What do we need to know, and what will generate the appropriate information?” (Lidz, 1991: xi). In other words, the criteria that guide the initial design of any assessment should reflect the information the assessor considers of value vis-à-vis the goals of the inquiry. In the case of a state mandated, standardized test it is the priorities of the state educational administration, driven by federal policy, which set the process and practice of testing and data collection in motion with the results of hypothetical benefit to other stakeholders, namely schools and teachers, parents and students.

Yet in the case of children with disabilities what is truly discovered when the results reveal that Johnny cannot pass the state’s 3rd grade reading test, if we are already well aware that Johnny is receiving his reading instruction on the equivalent of a 1st grade reading level?

This work seeks to address this question through the development of a content specific dynamic assessment of 3rd grade reading for children with learning disabilities: a dynamic standards of learning assessment (DSLA). The Virginia standards of learning tests (SOL) of third grade reading were chosen as a basis for developing the DSLA. There were several reasons for this choice:

1. The author was already familiar with the assessments having administered them while an elementary special education teacher in Virginia.
2. The author planned to pilot the DSLA in Pennsylvania where it would be unlikely that potential participants would already have familiarity with the content.
4. The tests include questions that not only consider the child’s proficiency with regard to text comprehension and applied word/language structures but also with word-level analysis strategies (VDOE, 2000-2004).

The first three points are self-explanatory; the fourth, however, is of particular significance with regard to what we know about reading and good readers, about children with learning disabilities as readers and about what should be included in good reading instruction.

**Connecting Reading Research, Testing Reading, and Children with Disabilities**

On the broadest scale, we might say that the goals of reading are to construct meaning and develop self-regulated learning, with the reading process being the interaction among reader, text, and context, and where the role of the learner is that of an active participant and a good strategy user (North Central Regional Educational Laboratory, 2004). In terms of schooling, however, the goals of reading have been bent by federal directives more towards the attainment of grade level proficiency than towards kindling a productive reading aesthetic. One of these directives, the 1997 Congressional request to the director of the National Institute of Child Health and Human Development (NICHD) to establish a National Reading Panel, resulted in the National Reading Panel Report (2000), a document of 500 plus pages which identifies five key areas as fundamental to the development of reading proficiency: phonemic awareness, phonics, fluency, vocabulary and comprehension.

Briefly defined, phonemic awareness and phonics are aspects of the larger phonological system, the sounds of language; the former referring to the ability to manipulate phonemes or the small segments of speech sounds, while the latter being concerned with print to speech skills (Pinnell & Fountas, 1998: 63). Fluency speaks to the speed, accuracy and expression involved in the reading of texts whereas vocabulary, or word knowledge, acts as the intrinsic link between
the reader and the text and is important to text comprehension (National Reading Panel, 2000: 3-1, 4-3). Finally, text comprehension, considered the crux of reading, is the general construction of meaning from print (Bertrand & Stice, 2002: 104). Yet reading is not simply a sum of constituent parts, these or otherwise.

Reading is a process-activity. For most children these facets of reading become interconnected and unconsciously interwoven through quite varied degrees of formal to informal instruction in ways of approaching texts, or strategies, through which mastery is developed. However poor readers do not usually have, much less use, good strategies for reading; they tend to see luck and teacher bias as part of their success or failure, with the latter contributing to their perceived lack of agency and poor self-image (NCREL, 2005). Indeed, Ryba, in his work to promote the development of children with disabilities, notes that students who attribute their difficulties to external factors beyond their control, are often less active in the use of problem solving strategies and tend to avoid challenging tasks for fear of failure. Such perceptions of limited power to control and direct their thinking processes can lead to the development of “learned helplessness” in which students become inactive and inefficient learners. (Ryba, 1998: 2)

This has been evident in research concerned with reading activities where poor readers displayed characteristics indicative of learned helplessness and low self-concepts of ability. These included significantly lower initial estimates of success, less persistence, attribution of failures to lack of ability and successes to factors beyond personal control, and greater decrements in expectancy of success following failure. (Butkowsky & Willows, 1980: 408)

Perhaps not surprisingly, for some children with learning disabilities, the skills in word-
level analysis strategies represented by phonological tasks such as blending and segmenting phonemes and manipulating onsets and rimes for rhyming are particularly difficult to master. The research conducted for the National Institute of Child Health and Human Development (NICHD) has revealed that even though children with disabilities are not all the same, individuals with reading disabilities characteristically have “a slow, labored approach to decoding... the major factor impeding the development of the alphabetic principle, and thus decoding and word reading skills, is a lack of facility in phonemic awareness” (Lyon, 2002: 5).

However, state mandated, standardized tests do not necessarily include ways to gauge students’ abilities to apply word analysis strategies that pertain to phonological and orthographic analysis. In fact, “[m]ost states identifying their statewide assessments as Reading First outcome measures specify the targeted reading components... [as] ...comprehension and vocabulary” (U.S. Department of Education, 2005-c: 19).

Why is this important?

Research confirms that the strongest predictor of reading, “despite diversities of culture, language, and orthography”, is the broad umbrella of phonological awareness (McBride-Chang & Kail, 2002: 1392). “Phonological awareness indicates that the young child has developed understandings about how sounds work in words” (Walker, 2004: 84) and refers to the “ability to divide sentences into words, break words into syllables, and identify common phonemes” (Lipson & Wixson, 2003: 43). Not surprisingly, “children with phonemic awareness are good at language rhymes and know how to separate sounds in words” (Nicholson, 1997: 403). This seems to support the research conducted by the National Reading Panel which tells us that “correlational studies have identified phonemic awareness and letter knowledge as the two best
school-entry predictors of how well children will learn to read during their first 2 years in school” (NRP, 2000: 2-1).

However, according to Goswami (2002), “awareness of syllables and onset/rimes usually develops prior to learning to read, [whereas] awareness of phonemes appears to depend on being taught to read an alphabetic language” and that literacy problems, particularly for children with dyslexia, may be greater for those learning to read in languages that are orthographically inconsistent, such as English. In other words, there seems to be some confusion with regard to elements of language that are considered good predictors for the future reading success of young children and the elements of language that can help us assess an older elementary child’s current reading ability and future development, such as their understanding of the phonological and orthographic aspects of language. Lipson and Wixson (2003) explain,

orthographic skills appear to make a bigger difference in the reading of connected text (versus isolated word recognition) and also seem more highly related to fluency in reading. It also appears that the relationships between phonological and orthographic skills are developmental, with orthographic skill making a stronger contribution to word reading after first grade (that is, after the initial stages of reading acquisition). (Lipson & Wixson, 2003: 29-30)

Thus, assessments of third grade reading proficiency for children with learning disabilities should take into account the possibility for data collection that can speak to the student’s progress towards mastery of strategies related to the phonological and orthographic aspects of language as well as be concerned with measures for text comprehension and measures that consider applied word/language structures. It makes sense that as part of AYP we assess children’s abilities to exhibit control over the sounds and symbols of language through their
application of word-level analysis strategies. Therefore, the reading proficiency items in the
design of the DSLA have been selected from the framework of the Virginia Standards of
Learning test and/or developed to focus on these three areas as identified by the Virginia
Department of Education:

1. word-level analysis strategies specifically involved in the blending, segmenting and
   rhyming of words embedded in texts that are used in the assessment;
2. strategies involved in applied word/language structures such as using the text context and
   morphological awareness; and
3. text comprehension strategies that involve the active engagement of readers and can be
   associated with the standards of learning items used to measure reading proficiency and
   AYP including: identification of the main idea or problem-solution; locating information;
   making predictions; comparing and contrasting; organizing or sequencing.

**Testing Reading and Children with Disabilities**

While there is likely to be some disagreement as to what can and should be tested when
testing reading, it is not the purpose of this paper to argue the merits of state mandated,
standardized testing in general. That said, however, not only do the tests generally focus only on
examining text comprehension and applied language structures such as vocabularyxxvii, fluency
as well as phonics are not usually assessed per se at the level of state mandated, standardized
tests (fluency, for example, is more often assessed at the local rather than the state level. See, for
example, Alaska Department of Education and Early Development, *2005 Alaska standards
based assessment reading test blueprint*). Rather, children are expected to read and answer
questions that assess their ability to bring all the elements of reading into play by answering, for
the most part, multiple choice questions.
However, including questions that consider more detailed aspects of the elements that combine to bring about grade level reading proficiency in children makes sense when we consider that some children can decode well but have poor comprehension (for example, see the discussion of the research of Nation et al., 1999, which suggested that children with specifically poor comprehension may have “an underlying, non-phonological language impairment” in Wise & Snyder, 2002:3). Furthermore, some children can make meaning from texts without the ability to decode large portions of the print – at least temporarily:

the student has poor decoding skills and compensates by making exceptional use of contextual cues when reading silently. Ultimately this strategy will collapse as the reading material becomes more complex and less predictable in later years, yet unless oral reading is a regular element in the monitoring of student progress, detection may be delayed with serious consequences.

(Hempenstall, 2003, referring to the work of Hall, 1983; Mason, 1992; Spear-Swerling & Sternberg, 1994: 33)

Indeed, there are children with disabilities, such as those with dyslexia, who may have reading difficulties that are more purely phonological in nature and therefore cannot decode texts on grade level although they may reveal evidence of grade level comprehension when read to orallyxxxviii. These children, among others, may have their state mandated reading assessment actually read to them as a non-standard accommodation. (In Virginia, when this accommodation is used, the entire testing process is proctored and tape recorded for state review. This level of monitoring also occurs when reading an assessment is a standard accommodation as in the case of the math, science, and social studies portions of the Virginia SOL testsxxxix). As a result, without including measures that evaluate word-level analysis strategies, we miss the opportunity
to tease out areas of reading proficiency that may or may not have been mastered to grade level by children with or even without learning disabilities!

Unlike word-level analysis, many standards of learning tests include assessments of applied word/language structures. Popular assessment items include using strategies that involve applying a morphological awareness of language as in root and base words, compound words, contractions, and affixes. Some items require using context, such as figuring out a vocabulary word not decipherable based on a morphological analysis. Indeed, while much of the research on skill development for children with reading disabilities has focused on weaknesses in phonologically based skills, “increasing evidence points to deficits in lexical and semantic processing skills” (Wise & Snyder, 2002:3) and suggests applied word/language structures as an important site for evaluation. However, state mandated, standardized tests may also include vocabulary items that cannot be addressed through strategies or reasoning and seem to be based on a form of ‘banked’ knowledge (Freire, 2003: 72). The assessment of the latter becomes a questionable practice in terms of reading proficiency as it may speak more to a child’s socio-cultural capital than to his or her ability to read on grade level. And, while E.D. Hirsch might argue that, “if you don’t know what a porch is, you do not have a vocabulary problem; you have a knowledge problem” (Liben & Liben, 2004: 61) ultimately, in a world that is culturally and historically formed, it amounts to the same thing. As a result, particular test items may reflect less about a child’s reading proficiency than a hit or miss on their personal lexicon. Thus it’s not surprising that the National Reading Panel report revealed that “the measurement of vocabulary is fraught with difficulties” (NRP, 2000: 4-15).

On the other hand, evaluating a child’s ability to purposefully tackle an unknown word in a text speaks directly to the child’s repertoire of comprehension strategies. In their research on
collaborative strategic reading, for example, Vaughn & Klingner (1999) offer an approach to enhancing reading comprehension for children with learning disabilities that includes “click and clunk.” The click and clunk strategies specifically combine self-monitoring with a way of figuring out the meaning of an unknown word. And while “children learn the meanings of most words indirectly, through everyday experiences with oral and written language” (National Institute for Literacy, 2001: 1), evaluating receptive vocabulary and other applied word/language structures from the standpoint of the child’s abilities to deal with new words strategically makes sense.

Predictably, though, most state mandated assessments of reading proficiency center on items believed to be reflective of text comprehension, often formatted as multiple choice questions. Whether these assessments are valid measures of reading proficiency is beyond the scope of this paper, however, answering the questions correctly does seem, at least on the surface, to entail that children become actively engaged in the reading process and connect with the texts on some level. Most “children who comprehend well are able to activate their relevant background knowledge when reading… [have the] ability to actively summarize, clarify, and predict while reading and the ability to employ syntactical conventions to enhance comprehension” (Lyon, 2003: 4). However, “automatic, fluid articulation of comprehension strategies develops slowly, when it develops at all” (Pressley, 2001; 8). Thus while we know that cognitive strategy instruction is beneficial for all children, explicit instruction in strategies that include techniques that require actively engaging with the text as well as metacognitive or self-monitoring components is especially crucial for children with learning disabilities (Lloyd, Forness & Kavale, 1998; Vaughn & Klingner, 1999; NRP, 2000; Wise & Snyder, 2002). In terms of reading proficiency and progress it makes sense to evaluate children with learning
disabilities in terms of these strategies. That is, it makes sense to assess process rather than product. This suggests that we may need to consider whether the current tests are effective in gauging reading proficiency in as much as they may more accurately reflect a student’s ability to perform on a particular type of reading test. It begs the question as to whether these tests ought to be given the final say with regard to student achievement and AYP, much less to student progress.

Certainly we miss the opportunity to be informed about our students with disabilities if we do not use tests that give us the information we need to formulate instructional goals and engage in instructional activities that may more accurately promote learning and development specific to the individual’s needs. In addition, even for those tests that offer a wider range of probes into the elements that contribute to reading mastery, if we provide accommodations without addressing the underlying developmental needs of the individual, particularly in the context of the activity under scrutiny, we not only divorce the process of reading from the practice of meaning making, but we do not offer the student the opportunity to learn and to progress. In this regard, dynamic assessment not only opens up the child’s mind in a collaborative engagement with regard to the reading process, but awakens the child’s understanding and subsequent control over their thinking and reasoning processes in general, informing and directing the teacher’s responsiveness.

**Designing DSLA Mediations**

The overview of some of the domain-specific research relative to reading seems to suggest that while it is critical to have a framework for hypothesizing and predicting appropriate ways to support cognitive development with regard to strategies that are used in domain-specific assessments, the specificity of the communication and, therefore, the type as well as the content
of the contact between examiner and learner can vary. As a result, it is not out of the question to consider building in a level of standardization or consistency into the mediated responses such that the prompts are, to a degree, predetermined and reflect the task analyses related to the strategies involved in participating in an assessment of reading proficiency at the site of word-level analysis, applied word/language structures and text comprehension.

However, what the design must consider foremost is what will benefit the child the most, particularly since a detailed step-by-step skill development approach may be impractical for students with a limited range of responses given that fine slicing tasks can result in disengaging the behavior from the function (Ryba, 1998: 4). That is, “teaching may become purely task oriented with no emphasis on general principles of mediation [needed] to transform fact-oriented instruction into lessons involving thinking” (Bransford, et al, 1987: 494). Indeed, according to Campione & Brown, consideration of “metacognitive, self-regulatory skills” in the assessment supports learning and transfer (Campione & Brown, 1990: 148-149). Again, transfer is of particular importance in demonstrating development as it indicates the internalization of concepts through application in a different situation. As a result, we need to bear in mind that children with learning disabilities “demonstrate difficulties in four main areas:

(1) accessing, organizing and coordinating multiple mental activities simultaneously and in close success;
(2) lack of flexibility in the application of strategies even when they are aware of the strategies to be used;
(3) difficulties engaging in self-regulatory strategies such as checking, planning, monitoring and revising; and,
(4) limited awareness of the usefulness of specific strategies for solving particular tasks” (Ryba, 1998: 3).

In other words, we need to incorporate strategies that support metacognitive awareness into the procedure, such as planning and generating readiness, supporting existing knowledge or encouraging recall to know what you do or do not know, encouraging questioning, directing self-talk to support reflective thinking for planning and control, etc. (Guterman, 2002: 285-286). One way to do this could include arranging a common structure to the slicing of the strategies themselves so as to be generalizable to some degree and so as to afford children with the chance to quickly develop a degree of confident habituation in form and application, but not so entrenched as to promote rigidity and preclude transfer to other domains or situations where reading is involved. Thus the mediating prompts in DSLA have been developed in the following three categories:

1. *Mediations that frame the collaborative nature of the testing construct and set the expectations for the activity.*

The first mediation lets the child know that the assessment process will be a collaborative effort; this reframes the testing conditions making it a shared activity and thereby implying that the child will not have to ‘go it alone’. It also announces that there are explicit ways good readers go about understanding texts and that this is how they will approach the test. A second mediation implicitly offers a strategy to incorporate a mediating tool to support recall; it lets the child know that the text can be used. These are mediations that support the child cognitively and affectively, offering to the child the understanding that assessment and reading are shared activities, explicitly replicating the collaborative conditions available in most real-world situations.
2. Mediations in the form of graduated prompts that deconstruct the standards of learning items using task-based analysis to provide a framework for a consistent and generalizable approach to problem solving by applying strategies good readers use. These mediations are constructed to support the activation of knowledge as well as to engage in questioning and hypothesizing activities relevant to reading proficiency.

In this category, several primary mediations make explicit the process of demonstrating understanding of texts as required by standardized criterion-referenced tests. Using Karpov & Gindis’ (2000) levels of problem solving these strategies are explicitly offered from those that are most abstract to those that are more concrete.

Symbolic or Abstract→ Visual or Visual-Imagery→ Concrete or Visual-Motor

The strategies are arranged in a hierarchical format, echoing the Vygotskian based work of Karpov & Gindis (2000), such that the hints used descend from support involving more abstract reasoning to assistance that is more concretely based (visual-concrete). The mediations are purposeful in that each hint is given in rank-order for each question until understanding is achieved. Each question sequence gives consideration to the levels of symbolic or abstract concept formation, gradually transitioning towards supporting concept formation with visual-imagery stimuli (in this design, concept formation does not continue to include more concrete or visual-motor type representations however this is not to say that in following up on the indications from the DSLA that a more concrete form of mediation might not be appropriate for a given individual). Thus the meaning-making process is shored up in a step-by-step fashion until action-taking is revealed.
The element of cognitive functioning is seen here as a reflection of the individual’s level of internalized concept formation (Karpov & Gindis, 2000: 134; Van der Veer & Valsinger, 1991: 262), mirroring the status of their mental development and indicating the direction for re-awakening the development process (Vygotsky, 1978: 90). That is to say, when the student is able use the mediation abstractly then learning is considered to be taking place. However, development occurs only as the student internalizes and then concretizes their activity through externalization of the strategy. This is understood to be when the student is able to problem-solve and use the strategies independently and be able to talk about their use. This is the transformative and revolutionary aspect of dynamic assessment activity, the expansive cycle that is cultural and historical by nature as the student comes to appropriate what it is that good readers do (Engeström, 1999).

Furthermore, the assessment operates as an integrated partnership between the examiner and the child being tested (representative of Vygotsky’s zone of proximal development), but it is incumbent upon the examiner to monitor and resist his or her desire to focus on results rather than development. That is to say, each step in the assessment is designed to encourage the development of the individual’s level of internalization of concept formation not simply to prompt towards action-taking task completion as quickly as possible. The action-taking is objectively observed and identified as representative of the individual’s capacity to understand. Yet what is of utmost importance, however, is to ensure that these ways of understanding texts are not only ways that children can provide answers to tests, but ways that they can appropriate and subsequently talk about and reflect on texts, their understanding of texts, and their understanding of themselves as learners. In other words, the mediations must function pragmatically, to be used as good readers use in non-testing situations, so that these ways of
thinking become useful in the transfer to reading real-world texts in everyday settings.

In addition, these are to be keystone mediations that will organize and inform future individualized reading instruction. They are mediations shaped to provide information to the teacher about a child’s thinking processes such that a teacher can subsequently design meaningful instruction to promote further learning and development. As such, the DSLA is truly a teaching-testing-planning technique for teachers.

3. **Mediations that guide self-management strategies and avoid misinformation by reviewing and demonstrating appropriate application of the strategies.**

These mediations work through the sequence of strategies out loud in an explicit, step-by-step fashion, in order to demonstrate the thinking process for the child. The examiner reveals the solution based on the use of this strategy. A final mediation also briefly reviews the strategies. These mediations support the child in learning test-taking skills, as needed, and ensure appropriate application of strategies. It is important to note that while the description of this set of mediations emphasizes the avoidance of misinformation, avoiding misinformation is a goal for the entire DSLA.

**Standardization & Mediations**

The overall categorization of mediations does not in itself imply a particular degree of standardization of the mediating prompts. However the assessment itself, as an extension of a state mandated, standardized test, must be standardized enough to respond to the data requirements of multiple stakeholders. As a result, both scripted mediating prompts and limited unscripted examiner involvement are used. The scripted or ‘interventionist approach’ to the examiner interaction in a dynamic assessment supports a methodology of assessment that allows for a greater degree of standardized assistance and thus a less ambiguous means of addressing
the quantification of the assistance a child needs relative to the predetermined ends of the state mandated, standardized test: correct answers. Interactionist mediations, by way of differentiation from interventionist approaches, are not scripted and therefore not standardized, but rely on the examiner’s preparation as well as the examiner’s understanding of the learner’s ZPD for they are mediations devised in the moment (Lantolf & Poehner, 2004: 54). It’s important to note, however, that the goal of the interventionist approach to mediation is not to arrive at correct answers per se – indeed all the responses the child makes are ‘correct’ in the context of a dynamic assessment - rather the purpose is to determine what strategies the child can employ with mediation in order to think about the text at hand in ways the good readers do. In other words, the varying degrees of expertise within the content-specific problem-solving contexts, vis-à-vis the strategies that the child is able to learn and apply during the assessment, become the hierarchies of ‘closeness’ that offer a rich, qualitative understanding of the child’s thinking and reasoning processes and a succinct, quantifiable score – responding to the data requirements of the particular stakeholder. Thus, while the standardization of the mediating prompts and the limitations of unscripted examiner interaction in the DSLA have been designed to conform to the needs of the child with learning disabilities, the needs of other stakeholders also contribute to the drive towards standardization.

For example, the needs of the teacher may include data that generates specific guidance for further instruction as well as data that can be used for benchmarking where the child is at academically. A DSLA, due to the emphasis on metacognitive as well as domain-specific strategies for tackling items, makes this more likely as, more often than not, “items drawn from standardized tests do not necessarily represent functional behaviors that can be used to develop educational goals” (Notari-Syverson & Losardo, 1996: 261). DSLA data may also provide a way
for parents or guardians to understand their child’s development in the context of general education goals as it opens the door to new ways of addressing AYP by allowing for the divergent timelines of the individual child’s cognitive development within the framework of the NCLB mandate. While this is important for parents it also addresses administrative needs. Further, it provides a single set of data to track progress in relation to the goals of NCLB as well as the individual education goals of the child with learning disabilities as mandated by IDEA.

Table 3.1 catalogues the DSLA mediations and illustrates the way the DSLA is structured using within-test mediations and within-question mediations. These mediations reflect, for the most part, learning-that-leads-development with regard to the psychological functions of attention, perception, memory, language, reasoning, and metacognitive processes (Haywood & Lidz, 2007: 180-185). The within-question mediations are comprised of three sets of hierarchically organized mediations and scored whereas the within-test mediations are not given a weight. The latter are used with each learner to prime their attention and orientation to the task. The first of these mediations is directed towards the focus of the learner to the nature of the activity as collaborative and to the nature of the tasks as involving the use of strategies. The second mediation encourages selective attention to the test material itself and its potential use as a mediating artifact; the mediation also reiterates the first mediation.

The within-question mediations fall into two categories, those that are weighted and involve learning-that-leads-development in reading and 0-score mediations. The weighted within-question mediations function to promote the development of perception, memory, language, and reasoning and are arranged hierarchically, but they are given equal weight as no single within-question mediation is considered more ‘valuable’ as the merit is relative to the
learner not the task. The within-test mediations are specific to each question set:

- **Comprehension Set**: This section of the assessment includes five questions focused on text comprehension strategies that consider: identification of the main idea or problem-solution, locating information, making predictions, comparing and contrasting, and organizing or sequencing. Mediations involve:
  - Rereading the question/student rephrasing the question
  - Examiner rephrasing the question
  - Recall of story
  - Sequence of story
  - Rereading with a purpose

- **Applied Word/Language Structure Set**: This section of the assessment includes two questions, one that relies on using the text context and one that considers the learner’s morphological awareness. Mediations involve:
  - Rereading the question/student rephrasing the question
  - Examiner rephrasing the question
  - Considering the word in the context of the story

- **Word-Level Analysis Set**: This section of the assessment includes three questions involving blending, segmenting, and rhyming of words used in the texts. Mediations involve:
  - Rereading the question/student rephrasing the question
  - Examiner rephrasing the question
  - Word-to-word oral repetition by learner

Within the 0-score series are two mediations. The first of these is a form of learner
scaffolding that directs the examiner to teach the multiple-choice-question elimination strategy as a test-taking skill thus simplifying the learner’s involvement in the task rather than mediating with learning-that-leads-development. This scaffolding is only used when all weighted mediations have been exhausted.

The second mediation in the 0-score series is quite different. This mediation is always used and is the final mediation for each question. It involves promoting the development of metacognitive awareness using a process of repeat, answer, and review. This mediation is included at the end of each question, regardless of other mediations used (or not), and can be verbalized by the examiner alone, the learner alone, or by the examiner and learner together. The purpose of this mediation is to encourage the learner’s verbalization of his or her cognitive activity in order to promote the development of self-regulation and executive thinking.
Table 3.1:

Overview of the Hierarchy & Weighting of Within-Test and Within-Question Mediations

<table>
<thead>
<tr>
<th>Score</th>
<th>Within-Test Mediations</th>
<th>Within-Question Mediations</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Correct Response – no mediations</td>
<td>mediation 1 = we will work together</td>
</tr>
<tr>
<td></td>
<td>mediation 2= pointing to and stating that the story can be used</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>rereading/student rephrasing the question</td>
<td>mediation 3</td>
</tr>
<tr>
<td>0.83</td>
<td>examiner rephrasing the question</td>
<td>mediation 4</td>
</tr>
<tr>
<td>0.67</td>
<td>recall of story</td>
<td>mediation 5</td>
</tr>
<tr>
<td>0.33</td>
<td>sequence of story</td>
<td>mediation 6</td>
</tr>
<tr>
<td>0.17</td>
<td>rereading with a purpose</td>
<td>mediation 7</td>
</tr>
<tr>
<td>0</td>
<td>elimination</td>
<td>mediation 8 = test taking skill</td>
</tr>
<tr>
<td>0</td>
<td>repeat, answer and review</td>
<td>mediation 9</td>
</tr>
</tbody>
</table>

**Question 1-5: Text Comprehension**

<table>
<thead>
<tr>
<th>Score</th>
<th>Question Mediations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Correct Response – no mediations</td>
</tr>
<tr>
<td></td>
<td>mediation 3</td>
</tr>
<tr>
<td>0.83</td>
<td>examiner rephrasing the question</td>
</tr>
<tr>
<td>0.67</td>
<td>considering word in context</td>
</tr>
<tr>
<td>0</td>
<td>substitution strategies</td>
</tr>
<tr>
<td>0</td>
<td>elimination</td>
</tr>
<tr>
<td>0</td>
<td>repeat, answer and review</td>
</tr>
</tbody>
</table>

**Question 6-7: Applied Word/Language Structures**

<table>
<thead>
<tr>
<th>Score</th>
<th>Question Mediations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Correct Response – no mediations</td>
</tr>
<tr>
<td></td>
<td>mediation 3</td>
</tr>
<tr>
<td>0.83</td>
<td>examiner rephrasing the question</td>
</tr>
<tr>
<td>0.67</td>
<td>word-to-word repetition strategies</td>
</tr>
<tr>
<td>0</td>
<td>elimination</td>
</tr>
<tr>
<td>0</td>
<td>repeat, answer and review</td>
</tr>
</tbody>
</table>

**Question 8-10: Word-Level Analysis**

<table>
<thead>
<tr>
<th>Score</th>
<th>Question Mediations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Correct Response – no mediations</td>
</tr>
<tr>
<td></td>
<td>mediation 3</td>
</tr>
<tr>
<td>0.83</td>
<td>examiner rephrasing the question</td>
</tr>
<tr>
<td>0.67</td>
<td>word-to-word repetition strategies</td>
</tr>
<tr>
<td>0</td>
<td>elimination</td>
</tr>
<tr>
<td>0</td>
<td>repeat, answer and review</td>
</tr>
</tbody>
</table>
Decisions regarding the format of the DSLA are also guided by the needs of the various stakeholders. For the child with learning disabilities, a DSLA should not be a protracted affair, placing undue stress on regulatory abilities, but an encouraging, engaging, and helpful collaborative event that can make good use of instructional time by incorporating the positive outcomes of cognitive and affective development into the assessment framework. This also speaks to the concerns of parents or guardians who may be worried about the emotional vulnerability of their child particularly in response to the stress of state mandated testing practices. Further, the needs of both the child and the examiner warrant a format that allows for an individualized assessment that can be efficiently and feasibly administered. This leads into administrative issues of time, money, and human resources that, ultimately, must also be taken into account. As a result, the more widespread dynamic assessment format of pretest-intervention-posttest, also known as the ‘sandwich’ approach by Sternberg & Grigorenko (2002: 27-28), may be too long and drawn out for the child and too resource heavy for administrative controls. Thus the DSLA has been developed using the ‘cake’ approach (Sternberg & Grigorenko, 2002), a more succinct single test format that includes, in this case, a series of scripted, graduated prompts to be extended in response to the individual’s need at the site of each item (Sternberg & Grigorenko, 2002: 27-8; Lidz & Gindis, 2003: 103-4; Lantolf & Poehner, 2004: 55) This means that although the prompts are scripted ‘vertically’, that is from abstract to more concrete (Karpov & Gindis, 2000), some leeway is allowed. Thus the ‘interactionist’ approach may come into play as we realize the child is very ‘close’, needing very little mediation to nudge him or her forward to complete the task. In this case, we can amplify the mediating prompts ‘horizontally’, in a more unscripted fashion, opening the door to some mediational ‘tweaking’ to bring the child over the threshold to completion of the task while remaining within
the ZPD and passing up the next scripted prompts.

Examples might begin with something as simple as repeating the mediation or rewording the mediation, activities we regularly engage in during everyday conversations when we are attempting to establish a meaningful interchange. In other words, horizontal mediations are more oriented to establishing the collaborative frame on a discursive level. What becomes important in unscripted horizontal mediation is to be cognizant of when the next mediation is warranted but to avoid, as always in dynamic assessment, overtaking the child.

**Standardization of Mediations, Correct Answers, and the Merits of Closeness**

One of the concerns to emerge in regard to the design of the DSLA is in relation to the dynamic nature of the assessment and the repercussions of standardizing the prompts and limiting the examiner interaction. It begs the question as to whether the DSLA is simply a more detailed version of the static state mandated, standardized test. This is compounded by the appearance of the DSLA as task-driven where the task is getting to the correct answer. However, if we consider that the child’s cognitive and affective development is the true goal and that “aiming instruction at the upper bound of a child’s zone” (Brown & Ferrara, 1985: 301) is the collaborative horizon of the process, then in practice, standardization matters much less than the examiner’s skill. In other words, regardless of whether the contact is interventionist, interactionist, or both, the onus is always on the ability of the examiner to develop a collaborative engagement with the learner so as to co-construct the learner’s ZPD and frame the instruction in the subject-specific domain in that precise place of growth within the ZPD. Thus, it is for the examiner engaged in using dynamic assessment techniques to ensure that the focus is maintained on the instructional quality of the mediations so that, “in keeping with Vygotsky’s research methods, this would promote tracing the development of processes rather than a mere
description of behavior… [and] when the task is at the point of difficulty at which the learner’s automatic processing breaks down… processes come into the open” (Johnson, 1990:105). By remaining cognizant of the process-nature activity of content-specific progress in reading and the process-nature activity of dynamic assessment and cognitive development, the examiner is ever poised in relation to the child to be responsive to within-assessment learning and development. Thus, by keeping the activity grounded in the child’s ZPD, we shift the assessment and steer it towards the possibility of an imagined future rather than letting it endlessly hover on the accomplishments, or not, of the past. (Lantolf & Poehner, 2004: 52-53).

Standardized mediations serve as distinct points that shift the focus of the mediation-as-directing-future-instruction and, as a result, so-called ‘correct answers’ serve instruction in two ways. They direct instruction in the context of state mandated, standardized tests where correct answers are valued from the standpoint of learning what knowledge is legitimate according to the state and how to access that knowledge, but they also direct instruction towards real-world thinking processes in the context of real world activities. Real world activities in reading print include reading real world texts rather than test passages, include reading for authentic purposes rather than to measure for grade level proficiency, include reading for life whether for aesthetic or efferent purposes (Applegate & Applegate, 2004). If the strategies and thinking processes that form the instructional backbone of the dynamic assessment are indeed reflections of what it is that good readers do and what it is that promotes the development of higher psychological functioning, then working together on understanding how our strategies and our thinking processes lead us to successful task completion is an important part of the instructional activity. As a result, so-called ‘correct answers’ become part of the instructional activity, part of a process rather than a goal; they are used to link texts with our strategy use and our thinking processes and
assist in distancing us from the dire straits of relativism and conjecture. For children with learning disabilities especially this helps to overcome what appears to be the random nature of ‘getting it’ and the infrequent, but powerful, success of guessing.

Static tests on the other hand, tests such as those currently used under the NCLB assessment and accountability framework, may inadvertently promote guessing, habituate poor strategy selection or application, and even bring about lowered self-esteem when they are administered to children who are not academically and/or developmentally ready. Indeed, for children with disabilities who are routinely being subjected to tests beyond their academic and/or developmental understanding the entire federally driven assessment and accountability process might be construed as unjust and even cruel in terms of what the process unconsciously conveys as well as how it is consciously conducted.

In counterpoint, the DSLA seeks to bring testing into the realm of humane and useful assessment by focusing on learning and development which includes disclosing and discussing answers from a process-activity approach that addresses the text and strategy use in combination. As a result the parameters of participation, that is “parameters of joint problem-solving and how they lead to improved individual problem-solving,” must be defined, as the correct answer does not necessarily imply that the activity involved in arriving there has been understood (Wertsch, Minick & Arns, 1984: 158-159). Hence, the incorporation of thinking about learning, the ‘how did I figure that out’ and ‘what did I think about’ discussions, becomes absolutely vital on the part of both the examiner in the context of teaching-that-promotes-development as well on the part of the child in the context of learning-that-leads-development. Thus it becomes important from both a social justice as well as developmental position to ensure that the learner understands that his or her ‘closeness’ is valuable with regard to making progress, that is in
doing what it is that good readers do and discovering and understanding the evidence of one’s thinking rather than simple looking upon a numerical score relative to a zero.

**A Brief Note on Test Validity and Reliability**

Test validity and reliability are problematic concepts in educational research; indeed, validity is especially slippery, its definitions hotly debated (Winter, 2000; Suen & French, 2003; Moss, Girard & Haniford, 2006). However, test validity and test reliability are particularly problematic with regard to dynamic assessment, compounded in the case of the DSLA which ‘crosses boundaries’ in terms of “all the activity systems in which the assessment functions” (Moss et al, 2006). This suggests that an appropriate analysis of the DSLA in terms of test validity and reliability might include positioning the DSLA as a kind of ‘boundary object’, “a particular kind of cultural tool that not only crosses boundaries of activity systems, such as mandated assessments, but also is plastic enough to adapt to local needs while maintaining a common identity across sites” and therefore “enables communication and cooperation across these worlds” (Moss et al, 2006: 146-7 referring to the work of Bowker & Star, 1999 and Star & Griesemer, 1989). However, this theoretical framing will continue in the next chapter.

At this juncture my goal is for the reader to understand what may be considered challenging with regard to test validity and reliability and dynamic assessment in general. Thus I will briefly consider the broadest of questions that test validity and test reliability ask and remark on those.

Test validity, in general, asks “Does this test really test what it says its does – can I make reliable inferences from the results?” Haywood and Tzuriel (2002) suggest that the test validity of dynamic assessment might be established by administration of the assessment as a static test. In this regard, the results of a DSLA, which is based on static state mandated, standardized tests, might be compared to Virginia SOL results by children with disabilities, as one possible means
of establishing validity.

Test reliability is meant to support test validity and asks, “Are the results of this test dependable over repeated administrations?” One of the difficulties in considering test reliability with dynamic assessment is that the assessment is deliberately meant to change the individual in regard to what is being assessed and this may even happen during the administration of the test! Again, Haywood & Tzuriel suggest that “[a]t least a partial solution is to insist on very high reliability of the tasks used in DA when they are given in a static mode” (Haywood & Tzuriel, 2002: 58). To this end, the test reliability of the DSLA is beholden to the test reliability of the state mandated, standardized assessment.

Making Close Count

We are aware that the priorities of state educational administrations, driven by federal policy, have set the process and practice of the state mandated, standardized testing and data collection in motion and that the current results are really of only limited benefit to stakeholders. One special education teacher told me that she never looks at the test scores of her students; for her they are irrelevant to her students’ learning and development and, in fact, are completely disregarded in terms of her school’s AYP because of subgroup score disaggregation. However, the application of the principles and practices of dynamic assessment to a state mandated, standardized test of third grade reading seems to offer a multidimensional way to meet the specific needs of these varied stakeholders within the assessment and accountability process. Through a dynamic assessment approach the underlying capabilities basic to the development of the reading proficiencies being evaluated can be exposed and a child’s command over these elements can also be extended as “we expand our notions of abilities, and recognize that when we measure them, we are measuring developing forms of expertise” (Sternberg & Grigorenko,
Given these considerations, the DSLA can offer the possibility of making close count when it comes to making progress in the general education curriculum by looking at progress in the context of learning-that-leads development and attaching a score to that closeness that can be used in the context of AYP. From the standpoint of the theoretical framework, an approach to assessment that takes seriously the concept of the zone of proximal development will be one that is designed to be more sensitive to the greater degree of variability in individual pace, depth and degree of content knowledge while adhering to the principles of cognitive and affective development via learning-that-leads development. Thus it would appear that while a single test cannot be all things to all people, it does seem that a dynamic assessment approach to redesigning a state mandated, standardized assessment for children with disabilities is both possible and promising with regard to offering distinct advantages to different stakeholders:

- It benefits the child:
  - it makes the most of instructional time
  - it uses assessment for cognitive and affective development

- It benefits the teacher:
  - it generates guidance for further instruction
  - it provides data for benchmarking where the child is at academically

- It benefits the parent:
  - it provides a way to understand a child’s development in the context of regular education goals
  - it addresses the emotional vulnerability and affective development of children

- It benefits administrations:
o it allows for the divergent timelines of the individual’s cognitive development within the framework of the NCLB mandate
o it provides a single set of data to track progress in relation to the goals of NCLB as well as the goals of IDEA 2004

- It benefits all stakeholders:
  o it addresses the ethics of testing children with special needs on curricular objectives that are not developmentally appropriate by breaking down the objectives into learning that can lead development

As a result, stakeholders concerned with state mandated, standardized assessments and adequate yearly progress towards closing the achievement gap can also attend to a child’s specific progress relative to particular and individualized curricular goals. In addition, by honoring and supporting each child’s cognitive development, stakeholders promote affective development; no longer simply and judgmentally responding to test results, there is consideration of the fabric of the moment as stakeholders can seize and make use of the directionality that the assessment can point towards. Ultimately, for children with disabilities, the emphasis of the assessment is transformed into an assessment focused on the progress towards, not the attainment of, the gold standards set by NCLB. How close the child is becomes the critical factor from all standpoints.
Chapter 4 - A Journey of Methodological Proportions

It is a magnificent feeling to recognize the unity of complex phenomena which appear to be things quite apart from the direct visible truth.

- Albert Einstein

I believe that by engaging in a variety of quantitative and qualitative research activities conceptualized from within the activity theory paradigm, a theoretically monist orientation to research is possible, one that embraces the purposeful integration of data culled from the pool of ontologically and epistemologically diverse methods and techniques, yet preserved in their integrity within activity writ large, under one overarching paradigm.

Using activity theory as a research paradigm is not simply about a syncretic approach to method arising out of disparate theoretical orientations; it’s also a synthetic approach to designing a research process that embraces the dialogic and dialectical nature of the complexity of our world. Specifically it refers to the practical-critical nature of the phenomena of study and the practical-critical nature of the method of study (Newman & Holzman, 1993: 33), providing a more ecologically valid understanding of research consistent with a Vygotskian standpoint.

This is especially true in this inquiry due to the iterative nature of working within the zone of proximal development (ZPD), a collaborative activity which requires a true process orientation to learning and development. The dynamic standards of learning assessment (DSLA) involves the intersection of teacher and learner ZPDs, demanding learning on the part of the examiner/teacher/researcher as she responds to the learning-that-leads-development needs of her learners, learners that move forward in response to mediations provided, supporting the learning and development. As a result, the process-nature of the activity spirals in on itself as new data reframes old, ever pointing us towards the future. The practical nature of this activity is
meant to result in substantial change, not only in the way a static test can be used, but also in those engaged in the activity as well as others who are concerned about results, results that can be obtained to satisfy a broader range of structural demands in the existing public education framework.

The DSLA pilot study began in August 2005 when permission to conduct research in the schools was granted by a participating Pennsylvania school board. The school district employs a calendar window of opportunity during which approved research can be conducted in the schools. I was able to begin by seeking participants in October, began working with the children in mid-December, and I concluded our work together by March of 2006.

**The Research Question**

Recall that the purpose in designing the Dynamic Standards of Learning Assessment is to find out if a dynamic assessment version of a state mandated, standardized test could be a better way to assess the progress that children with disabilities may be making in the general education curriculum. The process nature of learning and development that is intrinsic to dynamic assessment means that a ‘better way to assess’ could potentially involve not only a more practical and useful assessment for students, teachers, parents, and administrators with regard to the federally mandated assessment and accountability framework of NCLB, but that it should necessarily include developmental benefits to the student (and, I would argue, to the teacher or examiner who administers the DSLA).

Ensuring that the research question is faithful to the original drive of the research helps to extract the ‘what’ from the ‘why’. This in turn provides a foundation for operationalizing the inquiry by generating transitioning questions. As Maxwell suggests, it’s the difference between “what you want to *understand* by doing the study” and “what you want to *accomplish*”
(Maxwell, 1998: 82).

The original research question was framed to investigate the practical-critical activity of the DSLA as well as to consider pragmatic and functional outcomes: *Will students with learning disabilities exhibit evidence of cognitive and emotional development during the administration of a state mandated, standardized test for third grade reading/language arts that is redesigned as a dynamic assessment and will the dynamic standards of learning assessment results offer stakeholders data that could be used to satisfy the demands of NCLB as well as IDEA?* In other words, will we be able to see evidence that children with learning disabilities are making progress when we use the DSLA and is this evidence useful to children, parents, teachers, and administrators in the current accountability context?

**Shaping Design: Deconstructing the Research Question**

Deconstructing the original research question into several smaller, more specific questions can break down the areas of interest into the constructs that shape the research design:

1. **What can be used as evidence of cognitive development?**

   Given that development, according to Vygotsky, is preceded at some point by learning, then at minimum the best evidence for the construct of development should begin with evidence of learning. In terms of cognitive development, I considered that some form of experimental procedure could be used to address the causal nature of the underlying question: Does the student learn during the DSLA? However, if learning includes more than answering test questions, if it includes the capacity to apply what has been learned and, further, if development involves the ability to transfer this learning to another situation, then the best evidence must also include use of what has been learned both inside and outside the testing framework. This ability to transfer suggests internalization. Ideally this would also come to be externalized in some way – perhaps
through verbalization – as the expansive cycle of the activity advances (Engeström, 1999: 35).

In addition, this development should lead to more development (Newman & Holzman, 1993: 199). Therefore, the nature of the construct embedded in the question suggests:

1.1. some form of experimental method to address the null hypothesis: *Students with learning disabilities do not learn during the administration of a state mandated, standardized test for third grade reading/language arts that is redesigned as a dynamic assessment*, and

It is important to note that learning is not always learning-that-leads-development. Frank Smith, 1998) differentiates between learning as an outcome of a process versus learning as product that can be measured. The former he terms as classic; it is the learning we do in the company of others, it is internally organized, and often less difficult. The other type of learning is official learning and Smith (1998) characterizes it as ‘coercive’, ‘manipulative’, and ‘discriminatory’ (Smith, 1998: 3). As a result it is often linked to systems of reward and punishment, or external motivation, and frequently measured by tests. This official form of learning is based on the teacher as authority, similar to Freire’s (2003) notion of “the banking concept of knowledge, [whereby] knowledge is a gift bestowed by those who consider themselves knowledgeable upon those whom they consider to know nothing” (Freire, 2003: 72). Thus I offer two extreme types of learning:

- *Process learning*: Learning-that-leads-development undertaken as a process-activity with others. It is something that is underway – literally – in which progress is something that is happening and changing our cognitive structure. One is able to apply this learning to new situations, demonstrating learning with transfer.

- *Consumable learning*: Learning-that-is-memorization where facts are consumed, stored, and
retrieved, and progress would be the ability to demonstrate that one has accumulated more facts. Learning can be measured and therefore can be demonstrated by recall.

1.2. some form of ‘real world’ use to authenticate the student’s learning outside the testing framework, to promote transfer and cognitive development.

2. What can be used as evidence of emotional development?

In this work, emotional development is considered in relation to the object of the activity and must be experienced as what is relevant and engaging in real life (Leont’ev, 1981) so we need to ask, what is the object of the activity and how does it play out in the student’s life? Generally speaking the object in the activity of a state mandated, standardized test is to reveal the progress that a student is making towards the curricular goals: what a student can demonstrate in a particular content domain by answering questions on a test. The activity is product oriented and correct answers are highly valued. In the DSLA, the object of the assessment is to work together to reveal what a given student is in the process of learning. The activity is process oriented and collaborative engagement is highly valued as it uncovers what the student is ready to learn next. That is, the relative degree of closeness to correct answers is valued for its directionality in terms of future instruction not so much for its literal ‘almost right-ness’. That said, however, the value of closeness for the student is in offering windows of acknowledgement that say, “Yes, you are learning and you can show it!” These windows are not available in a static test that tells you either you know it…or you don’t.

This is a critical junction in our consideration of evidence. Vygotsky, explains Yarosheveky, “felt especially keenly the need to comprehend the unity of the cognitive and the affective-motivational in the activity of the personality” (Yaroshevsky, 1999: 265). He did not think that emotional life could be wholly grasped in a dualistically limited framework, relegated
to a descriptive psychology or to a causal-explanatory psychology largely based in physiology, rather Vygotsky saw a unity wherein affect is connected to motivation and self-actualization and, most importantly, is not disconnected from cognitive development (Vygotsky, 1999: 224-225). Thus neither affective development nor cognitive development can be adequately considered apart from each other. In addition, this cognitive-affective development cannot be readily considered apart from a consciousness of development as “experience is accessible to only one person – the person experiencing his [sic] own experience” (Vygotsky, 1925/1999: 15). That is, “consciousness must not be separated from its physical conditions: they comprise one natural whole that must be studied as such” (Vygotsky, quoting Ribot, 1999: 228). Hence, to speak of the student’s cognitive and affective development must necessarily involve access to the student’s experience of the experience. For Vygotsky, this includes what the student can verbally report about the experience via the reflex to “a new irritant (a new questioning)” – mediation that is of dialogic and dialectic significance to further development - as well as what an observer can detect (Vygotsky, 1925/1999: 15-16).

As a result, the underlying question might simply be which activity does the student prefer and why? As well as directly asking the student about their experience, recording student participation could also provide evidence for considering emotional development from the standpoint of revolutionary engagement. Indeed, spontaneous conversation initiated by the student could be especially revealing if it challenges the cultural and historical positioning of the child with learning disabilities and requires both participants to function differently, to “perform the activity of changing the determining totality of our societally produced subjectivity” (Newman & Holzman, 1993:195). Thus, the nature of the construct augurs for
2.1. some form of questioning or discussion with the student about their experience of the experience, and

2.2. some form of observation and study of the student’s experiences.

3. What kind of data does the DSLA provide that stakeholders could use?

To understand what progress could be for different stakeholders, I deconstruct this element from the research question by looking at what an assessment of progress could and should provide each stakeholder and how this characterizes particular understandings of progress.

A. For the student:

A.1. it makes the most of instructional time

A.2. it promotes cognitive and affective development

A.2.1. progress is individually considered and collaboratively promoted

A.2.1.1. progress is dynamic and is happening

A.3. it provides an opportunity to participate in the general education curriculum

A.3.1. progress is standardized against a collective

A.3.1.1. progress is static and has happened

B. For the teacher:

B.1. it generates guidance for further instruction

B.1.1. progress is individually considered and collaboratively promoted

B.1.1.1. progress is dynamic and is happening

B.2. it is a benchmark for where the child is at academically in terms of the general education curriculum

B.2.1. progress is standardized against a collective

B.2.1.1. progress is static and has happened
B.3. it is a benchmark for where the child is at academically in terms of their individual goals
  B.3.1. progress is individually considered
    B.3.1.1. progress is static and has happened

C. For the parent:
  C.1. it provides a benchmark for understanding a child’s development in the context of general education curriculum
    C.1.1. progress is standardized against a collective
      C.1.1.1. progress is static and has happened
  C.2. it provides a way to understand a child’s development in the context of individual goals
    C.2.1. progress is individually considered and collaboratively promoted
      C.2.1.1. progress is dynamic and is happening
    C.2.2. progress is individually considered
      C.2.2.1. progress is static and has happened

D. For administrators on various levels:
  D.1. it provides a benchmark for the divergent timelines of the individual’s progress within the framework of the NCLB mandate
    D.1.1. progress is individually considered
      D.1.1.1. progress is static and has happened
    D.1.2. progress is standardized against a collective
      D.1.2.1. progress is static and has happened
  D.2. it provides a benchmark in reference to AYP in relation to the goals of NCLB
    D.2.1. progress is standardized against a collective
      D.2.1.1. progress is static and has happened
D.3. it provides a benchmark in reference to progress in relation to the goals of IDEA

D.3.1. progress is individually considered

D.3.1.1. progress is static and has happened

D.3.2. progress is standardized against a collective

D.3.2.1. progress is static and has happened

Three types of progress are identified and characterized as follows:

a. data that can capture progress on the move, that is individually considered and collaboratively promoted, is dynamic and is happening, providing data for purposes of directing further learning and development. This type of progress is connected to process learning that is on the move, it is progress-towards;

b. data that can capture progress that is individually considered, is static and has happened, providing benchmark data that satisfies the mandate of IDEA and may include IEP goals. This type of progress may be considered in terms of process learning and consumable learning, but it is clearly ‘fossilized’ as Vygotsky might suggest; it has happened, it is progress-to-a-point; and

c. data that can capture progress that is standardized against a collective, is static and has happened, providing benchmark data that satisfies NCLB goals in terms of AYP This type of progress may be considered in terms of process learning and/ or consumable learning, it is fossilized and progress-to-a-point.

These three types of progress are related to the data needs of stakeholders. Relative to progress defined by data needs, however, is progress as it is connected to the constructs of cognitive development and affective development. Progress and the data results are based on each student’s cognitive and affective development; that is process learning rather than consumable
learning. Thus the constructs of cognitive and affective development define progress as a whole and must also be considered, suggesting some form of individual case study with the embedded units of analysis of progress 1, progress 2, and progress 3.

In summary, an interrogation of the research question offers two embedded constructs (cognitive development and affective development), three embedded units of analysis (progress 1, progress 2, progress 3), and an overarching case study approach in a mixed methods model of inquiry.

**Mixed Methods in the Activity Theory Paradigm**

**Perspectives and Mixed Methods Educational Research**

Greene and Caracelli caution that while “[m]ethods are not intrinsically linked to any particular paradigm”, a “[m]ixed method inquiry intentionally combines different methods – that is, methods meant to gather different kinds of information” and, as a result, “the various methods are linked to different inquiry paradigms” and therefore it becomes especially important to consider that “[t]he underlying rationale for mixed method inquiry is to understand more fully” the perspectives our questions reflect (Greene & Caracelli, 1997: 7).

In her presentation to the Mixed Methods Special Interest Group Business Meeting at the 2007 American Education Research Association Annual Meeting, Jennifer Greene discussed the possibility of mixed methods social inquiry as a distinctive methodology. As part of her presentation she outlined a framework for a “paradigm stance” on mixed methods as a method of inquiry. This framework examined various “views on the character and value of traditional paradigms or mental models” as well as “what most importantly guides practical inquiry decisions” resulting in various stances on mixed methods (Greene, 2007). One of the emerging
conclusions was the proposition that new or alternative paradigms can reconcile “historical philosophical incommensurabilities among paradigms” as “the assumptions and stances of new paradigms…actively promote the mixing of methods” while also valuing context and theory (Greene, 2007). This is similarly implied in the work of Mark, Feller & Buttons (1997) who argue, in their characterization of emergent realism as an alternative paradigm, that “a synthesis across different method types will sometimes provide richer and more accurate understandings” (Mark, Feller & Buttons, 1997: 58). Characterizing alternative paradigms as ‘synthetic’ in nature seems compatible with Greene’s framework; indeed it seems to capture what may be intrinsic to alternative paradigms as they broker traditional paradigms through other ontological and epistemological chutes.

Gutiérrez and Stone (2000) opt for a somewhat similar path in what they call a “syncretic framework… the principled and strategic use of a combination of theoretical and methodological tools” (Gutiérrez and Stone, 2000: 150) brought in under, in their case, the overarching frame of cultural-historical activity theory (CHAT) to examine the phenomena of interest. What was of particular interest to me was their desire to ensure a “goodness of fit between their theoretical constructs and the complexity of the social phenomena” they chose to investigate (Gutiérrez and Stone, 2000: 152). Indeed, how they would be able to concretize what they discovered seemed crucial and by extending the research design in order to “examine the mutual and interdependent relationship between the individual and the social world” they were able to “shift in focus or unit of analysis from either the individual or the larger social context to an activity system” (Gutiérrez and Stone, 2000: 151). This ability to move “across and within levels of analysis” (Gutiérrez and Stone, 2000: 152) begins to open the door to an examination of the parts without parsing them entirely from the whole itself. In other words, the parts of a phenomena of interest
are not left as discrete fractions of the whole – rather, the approach is elastic as the ‘parts’ are supple and pliant, retaining their form or perceived connection but also reflecting a more conceptual connection within the larger phenomena. However, to this end, I would argue that CHAT, rather than an ‘overarching frame’, might be best considered as belonging to a larger alternative paradigm under the mixed methods umbrella: the activity theory paradigm. Figure 4.1 shows how this might be considered in terms of a partial ‘family tree’ of research paradigms.

Figure 4.1: A Partial Family Tree of Paradigms

Activity Theory as an Alternative Paradigm

A paradigm is concerned with knowledge claims (Creswell, 2003: 6) and can be considered more of a meta-theory, laying down particular principles that are relative to the how and the what of the research methodology and potentially providing a conceptual framework for the integration of techniques, methods, and the data they yield. In other words, a paradigm provides orientation and conceptual understanding to the research process and products. In a syncretic approach to designing a mixed methods inquiry a dialectically hinged door is opened
for a dialog of sorts - however the potentially disparate ontological and epistemological perspectives in engaging research methods that reflect multiple paradigms still require a basis for final synthesis.

Activity theory as an alternative paradigm can make sense when considering different foci within activity systems, including different units of analysis and different levels of analysis (molar, action, operation) that are intertwined within the larger activity system(s). Recalling Engeström’s classic description of “activity theory as a unit of analysis [that] calls for complementarity of the system view and the subject’s view”, the activity theory paradigm brings to research methodology the Vygotskian framework for objective research, including the possibility of research that incorporates dialectical and dialogic interactions and investigations that can probe the “collective, multivoiced construction of [the activity system’s] past, present and future zones of proximal development” (Engeström, 1987).

In other words, the door is opened to engagements in educational research that embrace the culturally and historically threaded nature of a multiplicity of participants, both directly and indirectly, and the education structures, permit the researcher to allow these real interconnections that are variously construed on multiple levels of analysis. Activity theory as an alternative paradigm, much like design-based research, offers the possibility of working within the messiness of actual practice, replacing what is not appropriately delimited by dichotomous paradigms or well characterized simply as mixed or multiple methods. To that end, the activity theory paradigm allows us to continue our understandings of the human activity in environments resonant with the commotion of lived experience.

This makes eminent sense if we consider that none of us can see the entirety of a phenomenon, but perhaps we can at least see much more than we could before if we consider it
from a paradigm that allows us to explore similar and dissimilar lines of inquiry not only by using different methods to collect a mixture of information, but by interrogating from multiple spaces and times. Remaining vigilant, we must ask: Does (a) investigating the phenomenon from such a paradigm lead to an understanding of parts that in turn leads to (b) a cobbling together, simply a sum of those parts and calling it the whole? Certainly in my mind there will remain an artificiality to an operation that simply mixes paradigms and research techniques; it begs us to question what it is we are actually left with if there is no foundation for synthesis. As a result, there must be a demand that we orient our work to an overarching paradigm to process our decision making when mixing the technical methods so that there is still a means of recursively orienting our research to ensure that we haven’t left out what may be decidedly important to the concretization of our understanding of phenomena.

**Overview of the Research Design**

This research is best described as mixed methods research within an activity theory paradigm using case study as the overarching methodology with the embedded units of analysis progress 1, progress 2, and progress 3 that are investigated via data collected using single-subject experiment, structured interview, and a design-based tutoring component. This is visually represented in Figure 4.2, The Research Triangle.
Figure 4.2: *The Research Triangle*

Research Activities
- Pretest
- DSLA
- Posttest
- Interview
- Tutoring
- DSLA

Artifact

Researcher  
Participant

Units of Analysis
- Progress 1
- Progress 2
- Progress 3

Individual Case Studies
Table 4.1 provides a general overview of the sequential order of the research activities in relation to the research design and the research methods.

Table 4.1: *Overview of the Relationship of Activities and Research Methods in Sequential Order*

<table>
<thead>
<tr>
<th>Activity</th>
<th>Research Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Test</td>
<td>A1 Single Subject Experiment</td>
</tr>
<tr>
<td></td>
<td>30 min.</td>
</tr>
<tr>
<td>DSLA 1</td>
<td>B1 / A1’ Single Subject Experiment</td>
</tr>
<tr>
<td></td>
<td>30 min.</td>
</tr>
<tr>
<td>Post-Test</td>
<td>A2 Single Subject Experiment</td>
</tr>
<tr>
<td></td>
<td>30 min.</td>
</tr>
<tr>
<td>Structured</td>
<td>C (Single Subject Experiment)</td>
</tr>
<tr>
<td></td>
<td>30 min.</td>
</tr>
<tr>
<td>Tutoring</td>
<td>D (Single Subject Experiment)</td>
</tr>
<tr>
<td>Sessions</td>
<td>3 x 30 min.</td>
</tr>
<tr>
<td>DSLA 2</td>
<td>B2 / [Single Subject Experiment]</td>
</tr>
<tr>
<td>(Post-Test)</td>
<td>30 min.</td>
</tr>
<tr>
<td></td>
<td>A2’ Case Study</td>
</tr>
<tr>
<td></td>
<td>Design Based Research</td>
</tr>
<tr>
<td></td>
<td>Case Study</td>
</tr>
</tbody>
</table>
The pretest was comprised of a text and 10 questions from and/or similar to the reading questions in Virginia standardized, state mandated test for 3rd grade reading/language arts (5 text comprehension, 2 applied word/language structures, 3 word-level analysis).

The Dynamic Standards of Learning Assessment comprised of a text and 10 questions from and/or similar to the reading questions in Virginia standardized, state mandated test for 3rd grade reading/language arts administered as a DSLA (5 text comprehension, 2 applied word/language structures, 3 word-level analysis).

A posttest comprised of a text and 10 questions from and/or similar to the reading questions in Virginia standardized, state mandated test for 3rd grade reading/language arts (5 text comprehension, 2 applied word/language structures, 3 word-level analysis).

The reflection discussion based on a structured interview questionnaire used to stimulate participants’ thoughts on their experience of the procedures used.

The individualized follow-up tutoring session, broken into 3 time periods of 30 minutes each, with instructional activities based on the results of the DSLA, reflection discussion and each subsequent meeting.

In addition, a final tutoring session with a DSLA comprised of a text and 10 questions from and/or similar to the reading questions in Virginia standardized, state mandated test for 3rd grade reading/language arts administered as a DSLA, but not initially framed as a DSLA for the students (the first two mediations are not included), but the hierarchies of mediations used in the DSLA were offered during the testing procedure on an as-needed basis as judged by the examiner and/or the student.

Note: The assessments used in each given stage are not repeated in any other stage although all participants receive the same pretest, DSLA, posttest, interview questions, and final DSLA.
tutoring sessions were not pre-designed. All participants received the accommodation of having the test read to them (a nonstandard but allowable accommodation in Virginia). During the pretest, DSLA, posttest, and tutoring component (including final DSLA) each participant sat at a table, perpendicular to the examiner, with several orange number 2 pencils, an eraser, and the print materials relevant to the activity. The eraser used had a grape aroma and was also used as relationship building and behavior management tool, giving the participants a possible topic of discussion with the examiner as well as a sensory alternative to the testing and assessment materials that was still proximal to the work space. The DSLA and all tutoring sessions are videotaped. The reflection discussions are audio taped.

**Participants**

This project involved four participants: four children who participated in the entire research project. Originally, in order to find participants who might qualify and be interested in participating in the pilot study of the DSLA, I applied and received Institutional Review Board (IRB) approval and then approached a local school board in Pennsylvania for assistance. With the support of the Assistant Superintendent and the Director for Special Education Services, I was able to secure the support of the school board to conduct an open call for participants via a letter of invitation sent home with every child with an Individual Education Plan (IEP) in grades 2-6 as well as permission to conduct my research in the participants’ schools. Table 4.2 itemizes the qualifications necessary for participation.
Table 4.2: Participant Qualifications

1. elementary student in grade 2-5 under age 13 (through the length of the study);
2. have a current Individual Education Plan (IEP);
3. identified as a having a specific learning disability (SPL), developmental delay (DD) or other health impairment (OHI) under the Individuals with Disabilities Education Act (IDEA);
4. is not a candidate for ‘alternative assessment’;
5. considered to have a reading ability that is between grade 1.0 and grade 3.0 according to their home school, and
6. monolingual (English).

Initially I had hoped for ten participants but the realities of my time and resources precluded that possibility. Instead, I chose the first five children who met the qualifications and whose parents/guardian gave consent to their participation. However, research protections also obliged me to secure not only parent/guardian consents, but the consent of each child participant as well and it was during this process that one of the children chose not to participate. Ultimately, I secured the participation of four children, two male and two female, in three different grades, from three different schools, resulting in a small multiple-case design (Yin, 2003a: 23).

Regarding the qualifications for participation, note that the first qualification for participation was administrative, allowing me to avoid potential concerns with having to re-administer consents a for a child aged thirteen, as the consent needs to be more detailed at this age and older (The Office for Research Protections, Penn State, IRB Guideline I, 2007). In terms of the other qualifications, I wanted to narrow the pool to children with learning disabilities, but
often times a label such as developmental delay, for example, is a catch all for young children and I might miss an opportunity to work with a child if I only requested a specific learning disability designation. On the other hand, I wanted to ensure that I was working with children who struggled with reading and were not going to be able to complete the DSLA without support; hence the reading level was important to identify. The decision regarding monolingual children was to avoid the possibility that reading difficulties in English might in some way be connected to other language use or could potentially be construed as a problem with English as a second language use.

Setting

Initially, the project was to be conducted entirely in the comfort of each child’s home school and for all participants the pretest, DSLA, and posttest were conducted privately in their home schools in small rooms (support services room, principal’s office, guidance office, music room, special education resource room). However, in the case of the two female participants, the schools were unable to provide spaces where the activities could be continued without interruption. Rather than risk the interruptions, I sought and received permission from the ORP and the parents/ guardians to complete the study in their homes. This allowed the participants to remain in a place that they were familiar with and comfortable in.

The Research Methods

This section will acquaint the reader with the methods employed in the study: single-subject experiment, structured interview and design-based tutoring, all of which come together under the larger umbrella of case study. As the unfolding of these nominally quantitative and qualitative research methods are borne out over the pages to come, I challenge the reader to keep in mind how much we can truly rely on well chosen methods not only to compliment, but to
build our understandings. Each method is not simply a different lens through which to see but, when put together, can provide a new range of clarity much in the same way an optometrist is able to carefully choose lenses until we can see both near and far with an almost magical transparency. The research is exploratory with its emphasis on qualitative data, but also explanatory in operation of collecting the quantitative data first (Creswell, 2005: 514-517). However, both are used to refine the results of the other. Thus my purpose in using these methods is to bring this magic to research that involves complex human activity. Figure 4.3 provides a visual representation of the embedded research methods.

Figure 4.3: Visual Representation of the Research Methods

![Visual Representation of the Research Methods](image)

**The Single-Subject Experiment**

Single-subject research remains somewhat controversial in an empirical research world partial to control groups and random assignment, however, single-subject experiments certainly make sense from a very practical and pragmatic end. For an individual researcher it can keep costs down and indeed this type of research is considered especially “useful in the early stages of group research as a means of generating pilot data”, but single-subject research is also particularly significant from a microgenetic approach, “when one wishes to intensely study the
process of change” (Franklin, Allison & Gorman, 1996: 2). Herein one can consider more deeply the effects of a particular intervention, such as the DSLA, and the difference it can make to an individual life. The latter has actually been constructed as a form of validity, social validity, and evidence of social validity establishes the importance or acceptability of intervention programs from a societal perspective… which can be accomplished through the collection of subjective, qualitative information (such as subjects’ attitude toward the intervention), implying a potentially powerful role for case-study methodologies within the context of a single-subject design. (Bisesi & Raphael, 1995: 114)

To this end, I believe that the opposite research framework is also true, that there is a clear and important role for single-subject experimental research within the context of case-study design. Horner, Carr, Halle, McGee, Odom & Wolery (2005) define the genre of single-subject research as follows:

[s]ingle-subject research is experimental rather than correlational or descriptive, and its purpose to document causal, or functional, relationships between independent and dependent variables…. [experiments] may involve only one participant, but typically include multiple participants (e.g., 3 to 8) in a single study. Each participant serves as his or her own control. (Horner et al, 2005: 166-7)

In addition, Neuman & McComick (2002) identify several key characteristics of single-subject experimental research, including:

1. individual data analysis or personalized data analysis in order to “uncover and carefully examine variability”;

2. direct manipulation of independent variables, where “the focus is on altering conditions, rather than on describing existing conditions;

3. planned and monitored interventions. (Neuman & McCormack, 2002: 107)

It’s important to note that in this research I am simultaneously trying to uncover variability and change in behavior as it is manifest in the results for each test question and across the test as a whole. To this end the independent variables are the mediations in the DSLA and the dependent variables are the answers – where the answers of interest are the so-called ‘correct answers’.

Neuman & McCormick (2002) add that there should be “data collection over several sessions to establish a baseline to account for day-to-day variability in human responses” (authors italics; Neuman & McCormick, 2002: 107). However, there is some difference in the literature as to whether single-subject experiments need involve baseline data, could involve a single-point baseline (such as a pretest) or whether they should involve multiple samplings to establish a baseline (McCormick, 1995; Richards, Taylor, Ramasamy & Richards, 1999; Neuman & McCormick, 2002). Richards, Taylor, Ramasamy & Richards (1999) as well as Kennedy (2005) argue that the goal of baseline data is to establish stability and in cases where “the dependent variable is unlikely to change until the independent variable is introduced… the baseline may be extremely abbreviated” (Richards et al, 1999: 9).

This research study is modeled on what Kennedy (2005) qualifies as brief experimental designs, “variants of the A-B-A-B and multielement design types”, and are often used in educational settings (Kennedy, 2005: 169). I use an A-B(A’)-A-C-D-B(A’)) framework (see the previous section) with the initial baseline data abbreviated to one pretest and, although Richards et al (1999) note that “the baseline may be shortened or skipped altogether when ethical treatment demands so”, it will certainly remain a potential point of contention. Nonetheless, I
would argue that while I cannot guarantee 100% that the dependent variable would not change over the course of several baseline data point collections, given the logistical constraints and the ethical considerations - I would certainly suggest that putting children with disabilities through additional state mandated, standardized tests qualifies as at least questionable practice on humane grounds and I stand by this decision. Future research considerations should include the possibility of establishing baseline data in multiple ways.

That said, however, there are additional elements of design that must factor into judgments to be made about this study and any future studies that are particular with regard to dynamic assessment.

One of the difficulties with a dynamic assessment that has any level of ad hoc interaction with the participants is the threat to internal validity. Here the threat pertains to the changing nature of the instrument, potentially creating a problem with inadequate procedures; in regard to DSLA, using an established test as a basis for the DSLA and standardizing, for the most part, the assessment protocols via a predominantly interactionist approach help to counterbalance this threat to some degree. Yet, “[t]he threats also can arise from characteristics of the participants (e.g., participants mature during an experiment and change their views or become wiser or more experienced)” (Creswell, 2003: 171). However, internal validity threats that can be linked to the learning and development of the participants are actually a good thing when it comes to dynamic assessment! We want to ‘see’ change in our participants! Thus I believe that what will become more relevant to an analysis of internal validity will be a focus on a discussion of the null hypothesis vis-à-vis any causal or functional claims to be made. Here Bisesi & Raphael (1995) note that the inclusion of other research techniques offers distinct advantages in literacy research: qualitative data can aid literacy researchers in identifying and controlling potentially
interfering for confounding variables...[as well as] gathering additional evidence related to their intervention claims, allowing them to more confidently address alternative explanations of their findings and strengthen the internal validity of their study. (Bisesi & Raphael, 1995: 116)

Clearly the use of mixed methods allows for the potentially balancing of evidence that might otherwise have been misconstrued if the research study was limited to an experimental format.

External validity is also a concern and in single-subject experiments it can be “improved if the study includes multiple participants, settings, materials, and/or behaviors” (Horner et al, 2005: 171) as threats to external validity “arise when experimenters draw incorrect inferences from the sample data to other persons, other settings, and past or future situations” (Creswell, 2003: 171). Not surprisingly, case-study research suffers from “similar criticisms concerning generalizability, [but] case-study designs tend to be strong in one aspect of external validity: ecological validity” (Bisesi & Raphael, 1995: 117). I address some of these concerns by using four participants in three different settings and also by locating my research as much as possible during school hours and in the participants’ actual schools.

Another point of contention with regard to the single-subject experiment is in terms of statistical conclusion validity. In single-subject designs inferential statistics are used by researchers with “the visual analysis of data as the primary means of examining their data” (Kennedy, 2005: 192). This visual analysis of data is in the form of simple line graphs and is regularly used in single-subject research to examine performance (level) and trends among other things (Tawney & Gast, 1984; Richards et al, 1999; Creswell, 2003). One constraint on the analysis that is particularly relevant to dynamic assessment is in terms of “carryover, or order effects, [which] refer to the influence of one treatment phase on the next” (Franklin, Forman,
Beasley & Allison, 1996: 136). In the case of dynamic assessment when a pretest-intervention-posttest format is used, if there is a change in the participant that cannot be undone there will be a change in response such that there will be no return to baseline when the intervention techniques are no longer used – as in the posttest portion(s) of this research. Once again, if this occurs in dynamic assessment it is a good thing! If the effects are temporary it may still be a good thing in terms of the cyclical nature of internalization. One way of resolving this statistically is to use multiple baselines. Returning to the A-B(A’)-A-C-D-B(A’) design of this research I have established multiple baselines with each participant. In two cases, I have used the ‘multiple baseline across behaviors design’ where the same intervention is applied to similar behaviors in the same individual in the same setting; in the other two cases ‘multiple baseline across settings design’ is used, where the same intervention is applied to the same behavior in the same individual in different settings (Richards et al, 1999: 171). In addition, the B segments, the dynamic assessments, have a layering effect in the overall design as the inclusion of C (the structured interview) and D (the design-based tutoring) must be considered as new interventions. As a result, there is baseline data for the dynamic assessment itself, where the intervening activities of structured interview and design-based tutoring are meant not only to provide the researcher with additional data, but also to offer the participants a window onto their learning and development by providing them with an opportunity to discuss the dynamic assessment process from an affective standpoint and then to engage in using what we hope they are learning in applied, real world reading activities.

To some extent it may be questionable as to the usefulness of single-subject design with dynamic assessment – there seem to be many conflicts between sound experimental form and what it is one hopes will occur for the participant during a dynamic assessment. That said,
however, I believe the confluence of research methods may relieve these tensions to some degree.

**The Reflection Discussion: A Form of Structured Interview**

This segment of the research is a brief ‘reflection discussion’ with the participant. There are two purposes: to induce recall of strategies and to elicit thoughts and feelings with regard to the DSLA process. Each participant is individually asked the same questions using the same protocols, but the focus is on creating a dialogue with the participant that is reflective thus the examiner has leeway to follow-up leads from the participant. As a result, the labeling of this segment becomes somewhat fuzzy.

Lichtman (2006) identifies a “standardized or structured interview [as one] where the questions and format are the same for each individual” (Lichtman, 2006: 118). However, she argues that this format is more like a survey and compares it to what she calls a ‘guided interview’ that is much more open in terms of formatting the questions in response to the participant. Lichtman dichotomizes the these two types of interviewing techniques as quantitative and qualitative in part based on the amount of researcher involvement – hence the structured interview is considered to be more quantitative in nature due to the emphasis on objectivity, meaning that the “interview is designed to eliminate the role of the researcher” (Lichtman, 2006: 118).

For the most part, questionnaires ask the same questions of all participants in writing, interviews are orally conducted and recorded in some way (Gail, Borg & Gall, 1996; Murray, 2003) and the term survey can be used as an umbrella term for all such research as it pertains to making generalizations from a sample to a population (Gail et al, 1996: 289; Bickman & Rog, 1998). Gail et al (1996) focus on the latter characteristic, generalization, as indicative of
quantitative research and link it to questionnaires due to the highly structured nature of the design; an interview, on the other hand, is considered to be more qualitative as “it permits open-ended exploration of topics and elicits responses that are couched in the unique words of the respondents” (Gail et al, 1996: 290).

However, much of the discussion can be leveraged by contextualizing the activity. Yin (2003b), for example, includes in his discussion of interviews specifically for use in the context of case studies: the ‘open-ended’ type of interview, the ‘focused interview’, and the survey. The focused interview is usually short and meant to “corroborate certain facts that you already think have been established” (Yin, 2003b: 90). In this research, however, the design of tool reflects questions that will augment understandings from quantitative as well as qualitative data within the overarching context of case study. Indeed, the reflection discussion is meant to bring new data to the research, provide bridging with data collected from other sources, and bring clarity to the understandings that develop. Thus, I suggest that ‘reflection discussion’ is the best descriptor of this portion of the research, but it is clearly part of a family of data sources that include surveys, questionnaires, and interviews. Table 4.3 includes the questions and general protocols and of the reflection discussion.
Reflection Discussion Questions

This is a brief, 30 minute probe to see what strategies the student is able to spontaneously recall and to consider the student’s affective response to the dynamic intervention assessment.

1. *The first point of discussion is to elicit recall of any strategies.*

“How do you remember the test we did where we worked together?”
[Present the test to help the student remember]

“I’d like to talk about what you remember from that test and also what you liked or didn’t like. Let’s start with the test. Let’s try to remember the strategies we used to work out the answers. Look at this question.”
[Point to each question and reread.]

“What strategy or strategies do you remember for answering this kind of question?”
[Go through each of the questions. Offer encouraging nods, smiles, help with descriptions if the student is stuck. If the student cannot recall, simply offer an ‘okay’, smile, and move to the next question.]

“Okay!”

2. *The second point of discussion is to elicit the affective response to the test.*

“How do you think the test was easier or harder?”

“Can you explain why you think that is?”

“Do you think that you learned more doing the test with me or doing the tests by yourself?”

“Can you give me an example of something you learned?”

“What would you change about the test you did with me?”

“Why?”

“Did you like doing the test with me or did you prefer doing the tests by yourself?”

“Why is that?”
The Design-Based Tutoring

After each participant completes their interview portion of the research I design an individualized follow-up tutoring session. The total amount of time for the tutoring, 2 hours, is broken into 3 time periods of 30 minutes, with each session comprised of instructional activities based on the results of the research completed up to that point, and with the final tutoring session including a final DSLA. The initial tutoring session is designed based primarily on the results of the DSLA and what areas are budding for the child. The purposes behind this segment of the research include these opportunities:

1. to offer the child follow-up learning-that-leads-development as an ethical consideration,

2. to offer the child transfer engagements – from a framework based on answering questions about texts that have so-called ‘correct answers’ to a framework based on engaging with texts where meaning making opportunities are not restricted by a prefabricated formula for what counts as reading, and

3. to consider learning goals and instruction possibilities that a teacher could reap from the DSLA.

Note that one difference in the final DSLA versus the first DSLA is that during the administration of the final DSLA the first two mediations which frame the process are not included. All the hierarchies of mediations used in the DSLA are available on an as-needed basis as per the examiner or child’s decision. This opens the door to more control over the assessment process for the child as well as potentially offering indications that the child is aware of when they need support, how to ask for it, and possibly what to ask for. Otherwise, each tutoring session is an individually planned literacy engagement that includes ‘real world’ texts or
everyday children’s texts that can be found in most elementary school classrooms and/or school or local libraries. There is no preplanning in this regard. This segment of the research is best categorized as a form of design-based research within the activity theory paradigm, reflecting both the iterative nature of working within the ZPD with its recursive dialogic and dialectical expanses as well as the process-nature of linking the DSLA to practical outcomes for both students and teachers in the classroom.

“Design-based research (Brown, 1992; Collins, 1992) is an emerging paradigm for the study of learning in context through the systematic design and study of instructional strategies and tools” resulting in “linking processes to outcomes in particular settings” (The Design-Based Research Collective, 2003: 5-6). These “[d]esign studies are typically test-beds for innovation” (Cobb, Confrey, diSessa, Lehrer & Schauble, 2003: 10). The evidence collected is predictably rich in its thick descriptive data as it includes extensive documentation of participant activity, may involve a wide range of materials, including interviews and questionnaires, and incorporates an “attempt to carry experimentation into real life settings in order to find out what works in practice” (Shavelson, Phillips, Towne, and Feuer, 2003: 26, quoting Collins, 1999: 290). Furthermore, analysis involves careful retrospective explanation (Shavelson, et al, 2003; Cobb et al, 2003). Shavelson et al (2003) provide clarity to these types of educational studies; they are iterative in that they involve tightly linked design-analysis-redesign cycles that move toward both learning and activity or artifact improvement. They are process focused in that they seek to trace both an individual’s (or group’s or school system’s) learning by understanding successive patterns in the reasoning and thinking displayed and the impact of instructional artifacts on that reasoning and learning. They are interventionist in testing theory and instructional artifacts by designing and
modifying real-world settings. They are *collaborative*…. often *multileveled* in that they link classroom practices to events or structures in the school, district, and community. They are *utility oriented* with the intent of improving the effectiveness of instructional tools to support learning… they are *theory driven* in the sense of testing (“placing them in harm’s way”)… (Shavelson et al, 2003: 26).

However, design-based research still dips into fairly uncharted waters. A recent publication by Schoenfeld (2006) discusses several construct models for design experiments, including the earlier work of Cobb et al (2003), who offer key features of design experiments that are similar to Shavelson et al. Ultimately, in summing up, Schoenfeld (2006) states that the method is one such that

> [t]he action of creation is one of design. If the creation is done with an eye toward the systematic generation and examination of data, and refinement of theory, the result may be considered a design experiment….[however] educational design experiments have been conceptualized as such for little more than a decade…[and] are still evolving. Relevant methods for conducting such work have not been codified, and their theoretical underpinnings have not been settled. (Schoenfeld, 2006: 194)

It is of interest to note that the design experiment approach in connection with dynamic assessment has some history, most notably in the work of Brown et al and reciprocal teaching (e.g. Palincsar & Brown, 1984). Indeed Brown’s 1992 seminal paper, *Design Experiments: Theoretical and Methodological Challenges in Creating Complex Interventions in Classroom Settings* (1992), has provided the field of social science research with important foundational navigation towards understanding this approach as valid scientific research in ecologically
synergistic contexts such as classrooms. This research, on the other hand, does not claim to involve a design experiment. Nor do I think it is best described, overall, as design-based research.

**The Case Study**

I chose to use a case study approach to umbrella this research in order to give voice to “a concrete instantiation of a theorized phenomenon” (Dyson & Genishi, 2005: 116), that is, to tell the story of my work in such as way that the reader can begin to see the whole more synthetically and can see in the child the very unique person who would bravely go with me where no other child has gone before and engage with me in what I hope is pretty important stuff. I want the reader to be able to consider the impact of our activities together in terms of the units of analysis, progress 1-2-3, but also contextually so that there is a history told that unfolds and opens up to us the possibility of understanding what the impact might be on the child’s life, how it might make a difference, if any, and why. Thus, my initial impetus was to use descriptive case study. Yet, owing to the complex nature of the constructs and of the units of analysis, as well as thy types of data gathered, the voice of the case study is also brought to bear from an explanatory focus (Yin, 2003a; Tellis, 1997). As Yin (2003b) adds,

… “how” and “why” questions are more explanatory and likely to lead to the use of case studies, histories, and experiments as the preferred research strategies. This is because such questions deal with operational links needing to be traced over time, rather than mere frequencies or incidence. (Yin, 2003b: 6)

However, as Stake (2006) suggests, it is important to consider not only the procedural dilemmas in case work, but also the epistemological dilemmas, specifically, what is worth knowing. Bohm (1957) notes that as we attempt to pin down our inquiry, we tend towards
making assertions about a phenomenon as

something with unvarying and exhaustively specifiable modes of being, if only because we cannot possibly take into account all the inexhaustibly rich properties, qualities, and relationships that exist in the process of becoming. At this point, then, we are making an abstraction from the real process of becoming. Whether the abstraction is adequate or not depends on whether or not the specific phenomena that we are studying depend significantly on what we have left out. (Bohm, 1957: 156-7)

Stake (2006) seems to echo Bohm’s (1957) concern when he remarks that cases become more worthy of study as fast as they are studied. The more a social action becomes understood, the more there is to be understood. What earlier was believed to be dismissible becomes a component when it is better seen. Whether everything actually is a part of everything, or whether we have a human capacity for seeing everything as a part of everything, it all becomes more complex as it becomes better known, and it cries out for being still better known. (Stake, 2006: 7)

In other words, the never ending study! To tackle this issue and the problem of ‘what is worth knowing’ I use the concepts of foreground and background as discussed by Dyson & Genishi (2005). Here “each case becomes an object of study – the foreground – against a particular background or problem that animates the researcher to see the boundaries of the case” (Dyson & Genishi, 2005: 43). As a result, I use progress 1-2-3 as the background to form the boundaries of the case study or, as in the research, the case studies.

Consideration of validity and reliability also play a part in case study. Yin (2003b) uses the four basic tests and considers them in light of case study ‘tactics’ and the phase of research in which they occur (Yin, 2003b, 2005: 34). Table 4.4 identified the case study tactics used in this
research to satisfy validity and reliability.

Table 4.4: Validity and Reliability Case Study Tactics

<table>
<thead>
<tr>
<th>Tests</th>
<th>Case Study Tactics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct Validity</td>
<td>- multiple sources of evidence</td>
</tr>
<tr>
<td>(collection)</td>
<td>- chain of evidence</td>
</tr>
<tr>
<td>Internal Validity</td>
<td>- pattern matching</td>
</tr>
<tr>
<td>(analysis)</td>
<td>- explanation building</td>
</tr>
<tr>
<td></td>
<td>- address rival explanations</td>
</tr>
<tr>
<td>External Validity</td>
<td>- theory</td>
</tr>
<tr>
<td>(design)</td>
<td>- replication (multiple cases)</td>
</tr>
<tr>
<td>Reliability</td>
<td>- case study data base</td>
</tr>
<tr>
<td>(collection)</td>
<td>- identification of case study protocol</td>
</tr>
</tbody>
</table>

What is important to note is that this research emerged as case study. Hence some of the tactics were not planned for case study, but were planned for the research project itself. For example, the single-subject experiment does not use sampling, as a result multiple single-subject experiments are designed to follow a literal replication protocol – one type of replication also used in multiple case study (Yin, 2003b: 47). Also the invocation of the research ‘feedback loop’ (Yin, 2003b: 50) allowed for design change involving the DSLA administration protocol for the final DSLA and, as a result, data on metacognitive development was collected. In addition, the ability to use data in multiple ways becomes interesting in terms of the mixed design and can offer windows of knowing. For example, as embedded case studies, with units of analysis considered for each case, the survey data can be analyzed in terms of each case whereas
pooling the survey data is not part of case study, but is part of survey design (Yin, 200b: 54-3). In this research, the data can be considered from both frameworks. This becomes especially important when we see cross-over, as in the way generalizations can be made from single-subject experiment and case study - via theory (Yin, 2003b: 10). Ultimately, case study became an important methodological consideration for being able to frame the work in such as way as to foster synthesis and build understandings from what might appear to be incongruent activities with individual children, even when triangulated. It is another view of the whole.

**Method of Analysis**

Yin (2003b) suggests three strategies to data analysis with case study: “relying on theoretical propositions”, “thinking about rival explanations”, and “developing a case description”. As the overarching method, it makes the most sense to consider the case study as the lead approach. However, that said, working within the activity paradigm initiates and directs the analysis from an activity perspective. Thus, the case is also a unit of analysis within this paradigm with the activity outcomes of progress 1, progress 2, and progress 3 as the embedded units. Given this framework and the variety of research methods, my analysis begins with the case description approach, but includes embedded analyses focused on the activities of progress 1, 2, and 3 to develop the case study. The data analysis steps are as follows:

1. Generate a descriptive narrative of the participant to introduce (for each case)
2. Generate a descriptive narrative of the activities (detail for one case only)
3. Generate visual statistics and analysis of the single-subject experimental data for progress 1, progress 2, and progress 3.
a. Pattern matching: examine the null hypothesis with the results of the single-subject experimental data A1-B1-A2 (effects of dynamic assessment on behavior)

b. Logic models: examine the null hypothesis with the results of the single subject experimental data A1-B1(A1’)-A2-C-D-B2(A2’) (overall effect on participant behavior)

4. Generate descriptive/explanatory data from the reflection discussion

5. Generate descriptive/explanatory data from the tutoring

6. Highlight connections and differences between cases; generate cross-case synthesis

Thus, theoretical propositions and rival explanations also play a role across the research methods. Specifically, however, they are considered during pattern matching and logic models as in the latter

the intervention could initially produce activities with their own immediate outcomes; these immediate outcomes could, in turn, produce some intermediate outcomes; and, in turn, the intermediate outcomes were supposed to produce final or ultimate outcomes. (author’s emphasis; Yin, 2003b: 127)

This is a ‘best fit’ with the research process, a linear process with recursive elements that may result in a progression of outcomes from the DSLA1 through the design-based portion of the study.

The primary evidence collected coincides with the linear process of the investigation and includes:

— discussions with parents and children during the consent processes,

— written results of the pretest and posttest,
— written and videotaped results of the DSLA-1,
— audio taped reflection discussion,
— video taped tutoring sessions including the written results of the DSLA-2,
— notes

In addition, because permission was granted by the parents/guardians to allow me to speak with school personnel, there were incidental conversations with teachers, principals, and aides. Parents also maintained informal email contact and, later on, several face to face meetings with parents and siblings when two participants completed the study in their homes. In addition, one participant’s family came to research presentation in which some of the data I had collected with the participant was included. I was also able to collect some doodling/drawings from the children. The data collected during each phase of the research plays a role in each unit of analysis.

The reporting of the results in the next chapter moves from case to within case progress 1, progress 2, progress 3, and to case again followed by a report on the multiple case studies. The first case study is narrated with detail to give the reader a clear picture of the research process and to reveal the ways that the DSLA can be used to provide data relevant to instruction as well as to reveal hidden progress; subsequent case studies highlight interesting results for particular cases. Data tables as well as visual statistics are included to reveal the difference between the DSLA and a state mandated, standardized test. Participants’ opinions about the DSLA are also included. Pseudonyms are used.
Chapter 5 – More than Meets the Eye

…the tests had given no inkling of anything but the deficits,
of anything, so to speak, beyond her deficits.

- Oliver Sacks

The absence of evidence is not evidence of absence.

- Carl Sagan

It may appear to be somewhat akin to pulling the proverbial rabbit out of a hat, but revealing that children with learning disabilities are indeed making progress towards the goals of the general education curriculum is less about what children can’t do and more about what we are willing and able to see. When it comes to rabbits and hats, we know that the rabbit is already in the hat… but some folk prefer to keep the mystery alive; they have no interest in going beyond the illusion or to look past what they are shown, to ponder what may be hidden from view. But clearly there’s more than meets eye. So, too, the progress being made by children with learning disabilities.

Unlike rabbits and hats however, acknowledging the possibility that children with learning disabilities may be making progress towards general education curricular goals is not something about which one ought to be merely expressing a preference for considering, rather it is a possibility that begs us to create the conditions that may be conducive to revealing this progress. That is, to allow our children to render visible their progress as it is underway. There should be no turning away here, no secrets concealed, no progress we are ignorant of - whether by choice or chance. This project is an attempt to respond to this demand and begin to put an end to ignorance with regard to our understandings of progress and schooling, specifically the progress
that children with learning disabilities may be making towards general education curricular goals.

In this chapter you will be introduced to Corey, Lawrence, Helen and Anita, the four children with learning disabilities who participated in this research with me. I begin by setting the stage or framing out the research process and then detailing the work Corey and I did together, developing a deeper and richer understanding of what went on during our time together, augmenting the written word with video clips, conversation excerpts, and visual statistics. As you proceed through this chapter, the detail in terms of common processes will diminish and the data representing the children’s work will take center stage. Given the process nature of this work, in some instances it will make sense to stop and discuss what I considered at the time, why I chose to follow a particular path, or what I might now do differently. The chapter will close by underscoring data-driven conclusions we can draw from the cases as well as some common elements of interest.

*Setting the Stage*

The time frame for my work with Corey, Lawrence, Helen and Anita ran from mid December 2005 to late February/ early March 2006. I worked with all of them individually but during the same time frame, juggling their schedules as well as my own in the context of three different elementary schools in one Pennsylvanian school district. Corey and Lawrence, my two second grade boys, were not only in the same school district, but were in the same school, the same homeroom class, and the same resource room. Needless to say, they knew each other, although they did not socialize together inside or outside of school. Their home school is centrally located in the more urban part of the school district and has tight connections to one of the large, local employers – a state institute of higher education. I was able to conduct all their
sessions in their home school. The pretest, DSLA, and posttest sessions were completed in two quiet office spaces and the music room was used for all the subsequent tutoring sessions, including the second DSLA.

Helen, my third grade girl, was enrolled a school located in a more suburban area and it did not have any private space available for us to work. We were able to use the special education resource room for the pretest, but we had school personnel entering the room from time to time. The school itself was fairly new, but the spaces were large and commonly used and there were literally no private spaces available to us during the school day. Unfortunately, the opening and closing of the door was somewhat distracting – for me as well as Helen – and as a result I asked Helen’s mother if we could work in their home, a place I thought would be equally comfortable for Helen, but would have fewer environmental distractions - for either of us.

As it turned out, I also ended up completing the tutoring sessions with Anita, my fourth grade girl, in her home. Her schedule, the school day schedule, and availability of private spaces in her older, rural school were difficult to juggle. We were able to complete the pretest and posttest undisturbed, in the principal’s office, but the DSLA was administered in the special education resource room. The latter was used by other teachers while we were there and, because it was also the basement thoroughfare to the boiler room, it was a busy place for this old school in the winter!

Variations in environment

It’s important to note that the variation in environment between subjects was deliberate: I wanted to be able to work with the participants in environments similar to that in which they might be placed during an individualized school assessment such as the DSLA or, failing that, in places where the participants would feel comfortable and confident. The subsequent within
subject differences gave me pause however, particularly working within the participants’ homes. Yet, these variations simply reflect the reality of the schools in which my participants are educated. And while it might be argued that working in the homes oversteps this reasoning, ensuring that these child participants were at ease in their space meant I needed to make good choices from the available options. I chose to acquire the necessary approvals to conduct Helen and Anita’s tutoring work in their respective homes on the weekends and made the best choices I could in terms of preserving not only the children’s comfort and familiarity, but also in ensuring we had reasonably quiet spaces in which to proceed.

*Arrangement of materials*

Regardless of location, however, each and every session was completed during what would be considered the parameters of normal school hours (9 a.m. - 3 p.m.) and the space was generally arranged as follows: we would sit together at a table, with me perpendicular to the student who was always seated facing away from any windows. In addition, the table was clear to begin with other than the several #2 pencils and grape scented eraser that I would place there before we began our work. The same set up was used for the tutoring portion, although the print materials were different.

*The grape eraser*

I chose to include the grape scented eraser with all the children as an intentional distraction – something that the participants could enjoy, could sniff and play with, as well as use to erase pencil markings. My purpose was to provide the children with a tool to mediate behaviors by giving them something to focus on while they were thinking or to use if they needed to avoid a task, perhaps even to employ as a means of distracting me. I wasn’t sure if it would be used for more than an eraser, but my experience as a teacher told me that if I provided
something that they could enjoy and explore and potentially have control over, it might provide additional support in stressful moments. I also kept crayons to color with in case a participant needed an additional distraction to maintain motivation and/or to provide calm.

*The physical tests and assessments*

For the participants, the physical copies of the pretest, first DSLA, posttest, and final DSLA were loose, not stapled, so we could move papers around as needed. A story or poem was on one page and each question was given its own separate sheet. I chose to do this to focus attention on the question at hand, but also to reduce the amount of print on the page which can sometimes be overwhelming for children; however, the volume of test material may have appeared unmanageable at times. In hindsight, I would consider offering participants a choice of layout.

I placed the material in front the participants, with the story on one side and the questions on the other, and we would flip the question pages as we went (sometimes I would do this; sometimes the participant would). I had notepaper, pencils, and my administrator’s copy of the tests and dynamic assessment materials in a used black binder in front of me so that I could that I could flip pages quickly. My copy included an outline of the mediations for each question so I could follow the script closely, although I had rehearsed and knew the mediations well. In addition, I had separators for each question so I could move swiftly to the next question as needed. I had tried to use a computer version so that I wouldn’t be flipping pages and potentially distracting participants, but I found that I was uncomfortable trying to use a computer and take notes at the same time.

*The testing procedure*

I read the pretest, first DSLA, posttest, and second DSLA to all the participants. I also
read the tutoring materials, but in some cases, the participants naturally joined me in a shared reading or simply took over the reading on their own.

Every session was aimed at a 30 minute maximum; we didn’t always need the full 30 minutes and occasionally we would run over during the tutoring sessions if we became engaged in an interesting conversation. During the DSLA and tutoring sessions (including the second DSLA) I videotaped our work, although naturally there were conversations that took place outside the taping. After each session I would add to my notes about the session and I would record the gist of the spontaneous conversations as well. I also audio taped our reflection discussions. In hindsight, I wish I had videotaped every session to compare both the child’s and my own behaviors, gestures, and dialogue during all the activities, especially as I discovered my automatic tendency to use a pencil to mediate attention to materials, words, etc.

At the end of each session I let the participant select a pencil or a sticker from a thank-you bag, a surprise ‘thank you’ as there was no compensation given to either the children or their parents for participating.

*The tutoring procedure*

The planning for the tutoring sessions was individualized (except for the final DSLA); however I tried to use common materials where I could. I planned the sessions as I would have done had I received the data as a practicing special education teacher. Note: in a separate research project I was able to work with a practicing special education teacher who reviewed and discussed the data with me, corroborating my thinking (after the fact) in terms of the instructional decisions I had made for the tutoring sessions. The results of this collaborative venture were presented in conference and will be reported elsewhere (Duvall & Knabel, 2007).
Case Study I: Corey – Learning about Learning

Corey was an average seven year old in second grade, with dark blonde hair and a somewhat expressionless face. He seemed to be a serious child, one who pays exceptional attention to his surroundings. He’d been identified as having a Specific Learning Disability under IDEA, short term memory concerns, and a reading ability below grade level. He was also receiving occupational therapy to help with handwriting; earlier in the year he had learned to tie his shoes and zip up his coat. The summer before kindergarten he had received speech therapy. Corey was currently receiving most of his instruction in the general education classroom and in the resource room with a special education teacher for daily reading and writing support.

Corey lived with his two parents, older brother, and a very old and well loved cat in a large, two-story home in an upper middle class neighborhood. He got along very well with his brother Jeremy, who was in general education and several grades ahead of him. His parents were both professionally employed outside the home.

Corey’s parents read to him most days and he was able to enjoy and discuss texts written several grades beyond his independent reading level. During one of our conversations he told me that his father was reading The Chronicles of Narnia series by C. S. Lewis to him and that they were on the first book, The Magician’s Nephew. His older brother was also reading the first Harry Potter book out loud to him. As it turns out, Corey was particularly drawn to imaginary worlds in play as well as text; his mother had mentioned that he was an avid Lego Bionicle fan. In addition, Corey and his brother shared a passion for the Middle Ages, and Corey would often pour over advanced informational texts, struggling to read them. He was aware that they were non-fiction and took pride in this. He was especially interested by anything to do with battles – knights, castles, armor, and weaponry, including catapults and trebuchets. During one
conversation we had at the end of one of the sessions I mentioned that I wasn’t sure what the difference between the latter two might be – in point of fact I had never heard of a trebuchet until that point - and Corey went to great lengths to explain the difference, sketching them on paper as he went.

Corey had participated in other university-based research projects in the past and had actually asked his parents if he could volunteer for this study when the invitation to participate was sent home with him from school. His mother contacted me via email and we agreed that Corey would not be removed from his general education class to participate, but that all activities would take place during resource room time. I subsequently met with Corey’s mother to review the project activities and complete the consent for Corey to participate; she also provided the school with consent to speak with me and vice versa so I was able to begin to make arrangements with the principal, support staff, and special education resource room teacher to negotiate times and spaces for us to meet. In addition, prior to beginning any activities with Corey, I went to Corey’s school to administer a child friendly consent to Corey in the presence of his resource room teacher. The consent included simple descriptions of each stage of the project as well as the goals of the pilot study. Corey rarely made eye contact during this time however he did ask a lot of questions about the timing of the tutoring sessions, and expressed concern that our work might overlap with his time in the general education classroom. I assured him that this would not happen. Once his consent was signed the support staff at Corey’s elementary school found suitable office and classroom spaces for us to use for the eight meetings we would have over what would become a 78-day engagement.

*Pretest-DSLA-Posttest-Reflection*

The next time I saw Corey was when I stopped by the resource room to escort him to the
pretest activity. Corey came willingly and chatted amiably about an upcoming vacation to an amusement park that the family was preparing for. Once we entered the small office we were going to work in, I brought out some pictures of my pets to help establish rapport with Corey and we talked a little bit about what life was like living with all my dogs, cats, birds and goats. More eye contact was established during this time and Corey seemed to relax, leaning in closer to look at the photos and talk with me about them. After a few minutes I put away the pictures and prepared the table for the pretest. The table was cleared and I had Corey sit perpendicular to me, facing away from the window. I gave him several #2 pencils and the grape scented eraser to use, then I set the pretest before him, eleven pages one on top of the other.

I read the pretest to Corey as written, with no mediations, and he took approximately 20 minutes to complete it. Corey was quiet for most of the testing, often looking away while I read. At one point, however, Corey became physically agitated - he couldn’t find the “right” answer. I told him that he should just pick the best answer he could. At the end of the testing I let Corey select something from my thank-you bag and, as I walked him back to the resource room, I reminded him that we would work through the next test together.

I saw Corey again 12 days later. I went to the resource room to pick him up and, as we walked back to our testing room, he talked about his family vacation in Florida; he was pretty pleased to be able to share his opinions about the rides he went on at the amusement park he visited. Eye contact was more frequent this time, he appeared more animated, and there were a few smiles. When we got to our room, I had already laid out the pencils, eraser and had the DSLA assessment material ready as well. I had waited to set up the taping equipment, though, so that Corey could watch, ask questions or comment, and generally become comfortable with the videotaping equipment. Corey wasn’t particularly interested in the equipment and so we went
I began the DSLA as per the opening protocol, then read the passage, and began the questions (see Appendix 1). During the DSLA, whenever Corey gave an incorrect answer, I would intervene and tell him that his answer was wrong or suggest we do something else and then slowly begin to work through the within-test mediations for that question. Whenever Corey gave a correct answer he was told that it was right; by the end of this session I also began to ask Corey to articulate how he came to his answer, right or wrong. Incorporating this line of questioning revealed not only that Corey wasn’t guessing, but that he was developing the ability to articulate his understanding of how he came to his answers. This was something that occurred only during the course of my work with Corey and the other children although I subsequently describe this as part of what the DSLA should include (Chapter 2), but this metacognitive work hadn’t been something that I had planned to do ahead of time. At the end of the DSLA, Corey and I reviewed the mediations that we had used to help him with the assessment and I suggested two strategies that seemed to be particularly useful to him to: making sure he understood what was being asked and rereading a passage with a purpose. This session took approximately 30 minutes for us to complete together. View the video clips below to see dynamic assessment in action as Corey and I work through two questions he had difficulty with.

**Corey Clip 1:** In *Corey Dynamic Assessment DSLA 1-1* (0:00-6:12) In this clip you will see me working through mediations for the first time. It’s also Corey’s first experience with this method of mediated learning. Corey and I are working on Question 3, which is a prediction question that incorporates attention to detail as well as inference skills to go beyond the text. We use the mediations up to and
including ‘rereading with a strategy, setting a purpose for reading’ before Corey is able to arrive at the ‘correct’ answer. Corey is clearly worn out after going through so many mediations; I check to see if he simply chose an answer or if he understood the text differently.

E: (nodding) Yeah. What made you decide that one?
C: I don’t know, really. (sounding tired)
E: You don’t really know why you’ve chosen that? Because you… you seem…
C: Well, um, because they got lonely, of eating alone.
E: That’s exactly right, good thinking! (with spirit)

I choose to tell Corey he was “exactly right” because I want to emphasize his rationale, his thinking, as the important element here. I also see how worn out he is; this was difficult work and he needs to know it was worth it.

Corey Clip 2: In *Corey Dynamic Assessment DSLA 1-2* (6:12-7:27) I work through Question 9 with Corey, finding a common vowel sound. In this clip Corey errs at the question level, thinking he needs to look for a rhyme. However, I follow a shortened version of the mediation for Corey, choosing not to give the entire mediation but only ask what the vowel sound is (in hindsight, I would rearrange this mediation in this way) and I discover that he needs support to notice and pick out the vowel sound, but once he articulates the vowel sound /ā/, and I agree, he picks out the matching word right away.

In *Corey Clip 2* I chose to truncate the mediation for question 9 (see Appendix A for the scripted mediation) during the assessment because Corey had already demonstrated to me that he had some awareness of sign-sound correspondence by correctly identifying the beginning sound
in the pretest (question 10) and then, by showing an understanding of rhyming (question 8) in the DSLA, I began to confirm my thinking: I didn’t need to review the difference between vowels and consonants, something else was going on. This was highlighted by his repeated success with question 10 (beginning sound) in the DSLA and his subsequent success with vowel (question 9) and beginning sound (question 10) in the posttest. As a result, I believed that he was developing control over vowels, but was confused by the vowel team patterns. This suggested to me that he not only knew the difference between consonants and vowels, but that he seemed to be on the verge of understanding more complex vowel sounds as represented in print with vowel digraphs and diphthongs.

Next, consider Corey Results, Figures 1-2: All or Nothing Results vs. Progress Underway. Compare Figure 1 with Figure 2. Note that any score of 1 is a correct answer with no mediation regardless of the activity. In Figures 5.1 and 5.2 the only other scoring option for the pretest is 0 or incorrect. In the DSLA, however, a partial score can be shown and here reveals that the participant was able to arrive at the correct answer with mediation – each time with only enough help to nudge the participant forward from their current understanding.
Figure 5.1 and 5.2: Corey: All or Nothing Results vs. Progress Underway

![Graph showing pretest and DSLA results for Corey on day 1 and day 12.](image)

**Figure 1: Visual Representation of Pretest**

**Figure 2: Visual Representation of DSLA-1**

Questions 3 (prediction) and 9 (vowel sound) were not the only questions which gave Corey trouble in the pretest. Yet, Corey didn’t have difficulty during the DSLA with any questions other than 3 and 9. Corey was definitely more capable during the DSLA, but why? At this point we can only speculate: perhaps he may have improved his test taking skills or he may have felt more comfortable and confident with me and/or the mediation framework, he may even have preferred the different text used. Certainly, he could have simply been having a better day. There is not enough information yet to speak to what may or may not have happened during this part of the experiment for Corey. Regardless, however, *the DSLA results alone* do reveal that Corey is making progress within the context of general education goals as delineated in this format. It is clear that there is learning underway and with the assistance of ‘the knowledgeable other’ he is able to demonstrate more than being right or wrong, more than an all or nothing...
Also, as a teacher, the areas of prediction and sign-sound correspondence are flagged for me. With the pretest and the DSLA results, I am pretty sure that we will be working on these areas during the tutoring, perhaps specifically on vowel sounds. I’m anxious to see what the posttest holds.

At our next meeting I administer the posttest without mediations, following the same procedure as the pretest. This session takes approximately 20 minutes. Afterwards Corey and I review every question and discuss the strategies he’s used in each case. I give Corey corrective feedback on questions he answered incorrectly by working through the mediations. Look at Figure 5.3: Corey: All or Nothing Results vs. Progress Underway.

**Figure 5.3: Corey: All or Nothing Results vs. Progress Underway**

![Figure 3: Visual Representation of Posttest](image)

Here we see that Corey has no difficulty with the comprehension questions, but still struggles with word analysis (question 8: rhyming) and now has difficulty with a word structure question (question 7: contraction). At this point, I am planning his tutoring in earnest. I know that I want to make sure Corey really does have a firm grasp on prediction by working with the underlying skills of inference and detail. This seems to be the area in which Corey is developing quickly. His inconsistency in terms of demonstrating his understanding of word structures and word
analysis in the pretest, DSLA-1, and the posttest suggest that I need to gather more information to really hone in on what is going on for Corey. I think about working on areas he may be comfortable with in order to do this, but first I want to hear what he says about his experience so far.

Several days later Corey participated in the discussion reflection with me. He states that he prefers the DSLA format for testing even though it took longer, but he notes that he didn’t actually “learn more”. Later he qualified this:

E: Do you think doing the test with me was easier or harder?
C: Easier.
E: And why do you think that was?
C: Because we were both working together?
E: Mmm. Okay. Do you think that you learned more doing the test with me or doing the test by yourself?
C: With you.
E: And why do you think that was?
C: Well, not really anything. I learned about the same exact with both.

[I went on with the questions, discussing preference, but then I went back to ask about learning.]

E: Do you think when I asked you about learning, not just learning about what we read about but also about yourself, do you think you learned more about yourself in the test with me or in the test by yourself?
C: Probably with you.

[We discussed strategies that Corey used during his independent test taking – the posttest – and then discussed what we would be going on to do next. We finished with the questions I had and then chatted about books, specifically scenes from The Magician’s Nephew by C. S. Lewis. I closed the session with an off the cuff question.]

E: What do you like about participating in this study?
C: I learn more about the way I learn.
E: Do you want to learn more about the way your mind works?
C: Yes.

This session ran for 40 minutes, much longer than anticipated, due to the quite lengthy book discussion initiated by Corey after I turned off the tape. It was after this session that I received an e-mail from his mother stating that “he [Corey] has enjoyed his time with you!”

The interview and his mother’s comments gave me pause. Given how hard the DSLA work had been I was surprised that Corey preferred doing the DSLA with me. I was even more surprised that he was enjoying his time with me, although I initially attributed this to the book talk we’d had the same day I received the email. However, as I came to know Corey I discovered that he is a very honest person and doesn’t appear to have much need to please others over telling the plain truth as he sees it. I also discovered that he really is a person who wants to learn, is eager to learn, and is interested in how his mind functions. In a subsequent email from his mother, I learned that Corey had not been given any information about his learning disability and what that might mean for him and learning. She encouraged me to talk to Corey about this; she felt he would be very interested in learning more about his mind and its functioning, so I talked to Corey about this after the first tutoring session. When I asked him if he knew how his mind worked and if he’d like to know more about it, he was very interested. It was during this conversation that I discovered his frustration with written text – he was able to articulate his irritation as a person who looked for patterns and he simply couldn’t find the patterns in written text with any consistency.

Tutoring Sessions

Corey’s individualized tutoring sessions began two weeks after the interview. Taking into consideration the results of his pretest, DSLA, and posttest, I began planning Corey’s
four 30 minute tutoring sessions by focusing on developing his word-level analysis skills, strategies for increasing word awareness and vocabulary, and practice using prediction to support understanding, beginning with prediction as a way to develop engagement with the text and provide a purpose for reading. These areas were chosen based on the data and conclusions I had begun to draw about Corey’s reading abilities.

In terms of comprehension, the data revealed that when he was read a text written above his independent reading level, Corey had been able to

- demonstrate an understanding of the main idea(s) or problem(s) of the text,
- recall or go back to locate information in the text,
- compare and contrast elements in the text and draw straightforward conclusions,
- understand a narrative as an organized sequence and recall or use the text to demonstrate this understanding.

However, Corey had had a great deal of difficulty with questions involving prediction and thinking beyond the text itself until the mediation of using rereading with a purpose, in this case for prediction itself, was explicitly taught. Not surprisingly, ways to strengthen Corey’s ability to approach texts from a meaning making stance rather than mere content retrieval became the underlying theme of Corey’s follow-up tutoring sessions. This wasn’t simply due to the early data results, but also came about due to the conversations we had in as we worked together. I became convinced that Corey was not only a very engaged learner, but that perhaps he was an aesthetic reader at heart, an orientation that would emerge once he was able to master the printed word. Meanwhile, however, school demands meant that Corey took a more efferent approach to texts as the focus was on improving his performance in the independent, oral reading of texts and accurate responses to questions about those texts.
Corey’s data results also revealed that, on a more micro level, he was developing his strategies for understanding vocabulary and for making sense of contractions but that he relied primarily on his prior knowledge more than the context clues within the text or actively thinking about the word(s) in a passage. To this end, when questioned, I found that Corey had not received much instruction about contractions – at least that he could remember.

Furthermore, while Corey appeared to have a well developed grasp of the phonology and orthography associated with consonants, specifically blends and digraphs, his understanding of rhyme, of rime in general, and vowels, particularly vowel digraphs and diphthongs, still needed a great deal of support. This suggested that when presented with written language that was orthographically consistent with the phonology, Corey would have less difficulty. Thus, at this level of working with text, I thought that developing Corey’s understanding and active recognition of patterns in the English language would help promote and expand his decoding skills and his recollection of words as it was more the literal reading of the words, by building successful experiences with pattern detection and chunking, that seemed to be at the heart of the matter.

Some general conclusions regarding Corey’s overall learning could also be drawn from the data. Corey is a child who searches for the logical, the rational, and the consistent in his world. He learns quickly when material is presented in this fashion and then can be applied in the same way. He is able to articulate his reasoning with ease. However, when material involves more divergent or lateral thinking Corey has difficulty. Thus, I believed that working to develop Corey’s ability to think beyond the literal, by promoting the development of his imagination through engagements involving more conceptual awareness of phenomenon and more evocative types of texts, was crucial to supporting Corey’s progress.
with word-level analysis, applied structural analysis as well as a deeper interest and understanding of texts. Table 5.1 outlines the final focus for each tutoring session and the materials we used.

Table 5.1: Corey’s Tutoring Sessions: Focus and Materials

<table>
<thead>
<tr>
<th></th>
<th>Focus and Materials</th>
</tr>
</thead>
</table>
| 1 | categories, prediction, vocabulary work  
   | What is the big idea? – warm up  
   | Clara and Asha by E. Rohman  
   | Tomorrow’s Alphabet by G. Shannon                                                  |
| 2 | vocabulary, prediction, rhyme, rime, vowel teams, beginning sounds  
   | “The Cat Who Caught His Own Tail” (Virginia Standards of Learning Text)            |
| 3 | prediction, rhyming, chunking, enjoying/thinking about text  
   | Time Flies by E. Rohman  
   | Sometime I Wonder If Poodles Eat Noodles by L. Numeroff                           |
| 4 | DSLA-2  
   | “Picnic” (Virginia Standards of Learning Text)                                     |

The first tutoring session introduced Exercise 1 of “What’s the Big Idea?” (see [http://www.resourceroom.net/comprehension/mainidea/mainidea1.asp](http://www.resourceroom.net/comprehension/mainidea/mainidea1.asp)) as a simple ‘warm-up’ activity. This exercise involves working with main ideas and asks the reader to consider a ‘common subject’ or a ‘good title’ for 12 groups of words, that is, it asks the reader to find the common category to which each word in a group could fit. There is more than one right answer for each and, indeed, the website does not provide an answer key. Corey was able to offer fitting categories for most of these three or four word groupings and remained relaxed and interested, even when he ran into a collection that stumped him. During these times, Corey and I would work together on the more difficult clusters, and I focused on remaining within Corey’s ZPD to prompt but not overtake his reasoning as he sought to discover underlying commonalities in each of the words in order to categorize the groups and to consider the underlying conceptual elements (where possible). The balance of the session was devoted to reading and discussing two texts: Clara and Asha by Eric Rohman and
Tomorrow’s Alphabet by George Shannon.

I initially chose these particular texts because as a reader I still thoroughly enjoy them! In addition, they are well written books with engaging illustrations and I thought they would be especially pertinent for Corey in terms of developing prediction and inference skills from picture-based, story-based, and content-based cues. Rohman’s text is a beautifully illustrated tale about a young girl named Clara and her very large fish-friend, Asha. Clara meets Asha, a statue in the park, and brings him to life in her imagined adventures. Shannon’s volume, on the other hand, while also imaginative in nature and enriched by Donald Crew’s trademark graphic touch, explores the non-fictional world of possibility as potentially grounded in our everyday experiences. This text asks us to consider effects and a cause couched in an alphabet puzzle, telling us that A is for seed, tomorrow’s….. Apple, B is for eggs, tomorrow’s….. Birds, and so forth. It carries the reader through the alphabet in sometimes simple, sometimes surprising ways. It’s a text that draws on the ability to make connections using reasoning, sometimes supported by an understanding of an underlying scientific concept, but it is also a text that relies on conjecture and, at times, one’s personal experience, all the while building new associations and potentially broadening vocabulary. Rohman’s work, on the other hand, encourages the reader’s lateral, more fanciful and imaginative thinking through enchanting, fictional narrative.

I chose Shannon’s text for Corey and I to use first because I thought the structure would capture Corey’s attention and because it offered us 26 different opportunities to try out predictions and inferences. And, while the clues offered by the pictures are useful, they are not always obvious or straightforward in their reference. Even more importantly, though, the so-called answers the text gives to ‘tomorrow’ are not always obvious, straightforward, or
necessarily the only possible responses. View the following clip to see Corey and I engaged
with *Tomorrow’s Alphabet*.

**Corey Clip 3: Corey Tutoring 1 Prediction and Experience, Inference and Details (0:00-12:14).** This clip begins with Corey and I reading *Tomorrow’s Alphabet* by G. Shannon. I let him know that we are going to work on prediction skills. I show Corey “A is for seeds, tomorrow’s Apple”, but it’s not clear that he understands the structure of the text. Turning the page to B, right away I discover that Corey is not attending to the pictures clues or really thinking about the text; he suggests that B is for bugs rather than bird, although the picture shows a bird’s nest with eggs. When he sees birds, however, it’s clear by his tone of voice that he understands the text structure now and that he needs to think about the content not just a word that begins with a particular letter of the alphabet. He begins to respond to the text. For example, in J is for pumpkin, he quickly and definitively says Jack-o-lantern. The letter K, however, reveals Corey’s limits with regard to pulling different clues together. In this scene I work within Corey’s ZPD and encourage Corey by asking questions that are connected to the picture cues and the letter-sound cues. Interestingly, Corey doesn’t make the connection between K and ketchup in the beginning, although it’s the first thing he thinks of when asked what he eats that is made from tomatoes. Later, in the L scene, I reveal the answer when I believe that Corey has exhausted his resources. I couldn’t get Corey to return to his first response, the one he discounted, “Leaves – no.”

Several important points for consideration emerge from this clip. First, when reading texts there can be alternate understandings that are equally valid, such as Corey’s ‘monarch butterfly’
response to M is for caterpillar (the book gave us ‘moth’). What's more, it’s important to acknowledge this not only in terms of validating inferential thinking, but also simply because there really can be more than one ‘answer’ even though this may not be the case in state mandated, standardized tests (in many testing situations for that matter).

Secondly, working within the child’s ZPD cannot be undervalued. In the scene with the letter K, for example, rather than simply revealing the next page I mediate Corey’s thinking by prompting him with logical questions based on the text and the picture cues, reminding him of the phonological cue that the letter K represents, and then giving him a chance to bring this information to bear upon his experience. Telling Corey that he had already said ‘ketchup’ and that this was an answer that would fit would not support Corey’s development in terms of becoming aware of and using the cues and clues available to him in this or other situations. Alternatively, in the L scene, when it became clear that we were moving beyond what Corey was able to think through, even with similar mediation, and it seemed that we were beginning to work towards getting the ‘correct’ answer rather than a well considered response, I chose to give him the answer. In other words, being aware of Corey’s ZPD, and focusing on remaining within that range of learning-that-leads-development, became important in terms of not underestimating his potential for working through a problem, but also not overshooting his understanding and proceeding beyond his capacity to make use of the mediations to move forward.

During this session I also confirmed for myself that Corey tended to respond to the face value of what was in front of him, as he made predictions and inferences based on what was immediately brought to mind from a word or a letter regardless of context (e.g. K is tomorrow’s kangaroo). This form of literal understanding was also evident during our reading of *Clara and Asha*. 
The second tutoring session involved a return to testing. I took a portion of a DSLA and used questions specifically focused on main idea, prediction/inference, vocabulary, rhyme, vowels, and beginning/ending consonant sounds. Mediation was required for the questions in the word-level analysis portion only. Corey and I discussed his thinking with regard to these questions and Corey explained:

- he had been confused in the rhyming question and had focused on the vowel sound only – he hadn’t thought about the ending sound at first,
- in the vowel sound question, he had been thrown by the letter /i/ found in three of the possible choices (the vowel sound was a long /i/) – he had focused on the letter rather than the sound, and
- in the case with the question about the beginning sound of the word based on being able to articulate the name of the item in a picture, he found the picture itself was confusing, but that he was able to come up with the correct answer using an elimination strategy.

Corey’s testing and thinking processes reveal that phonological awareness is underdeveloped in some areas. He has a strong grasp of the alphabetic principle, but has difficulties with rime and phonemic segmentation. In addition, with regards to testing these areas, Corey still needed support in understanding what these types of questions are asking of him. Thus Corey would benefit from instruction in both test taking skills using testing terminology as well as continued work with phonemes. With regard questions pertaining to main idea, prediction/inference, and vocabulary Corey articulated the following:
in the case of the main idea question, the answer was easily deduced from the title and the obviousness of the multiple choice selections – Corey noted that he didn’t think reading the story would have been necessary to answer this one correctly,

- with regard to the prediction/inference question, the detail in the story helped and Corey was able to relate his choice to specific content and verbalize his reasoning process, and

- with regard to the vocabulary question, this was a word Corey already knew the meaning of.

What is especially important from this work is Corey’s ability to clearly communicate his thinking and his recognition of this ability. We both recognized that Corey was now able to respond to the comprehension question better because he had discovered how to think about the questions in order to understand them and how to use the text to support his responses, a form of checking back. What would be important, next, would be Corey’s ability to transfer his thinking back to real world texts and reading situations.

The third tutoring session involved the reading and discussion of two texts: *Sometimes I Wonder if Poodles Eat Noodles* by L. Numeroff (a book of poems) and *Time Flies* by E. Rohman (a pictures only text). The first text, a book of humorous poetry, was used to develop awareness of rhyming and vowel sounds while the second text was used to review prediction skills and develop lateral thinking. Corey enjoyed the first text immensely. View the following clip to see Corey and I engaged with *Sometimes I Wonder if Poodles Eat Noodles*. 
Corey Clip 4: Corey Tutoring: Rhyming (0:00 – 5:24). This clip does have poor sound quality in the beginning due to the roar of the heating duct in the room, but the visual presentation is still worth viewing as it reveals Corey’s absorption in the activity of rhyme searching and discovery. I had chosen six different poems for us to read and then investigate for rhymes. I focused on asking Corey to look for rhymes rather than rhymes and vowels because I wanted him to understand rimes as a whole first. We began with the poem “Sometimes I Wonder” in which almost each line has rhyming pairs. In the clip I ask Corey identify rhymes and he proceeds to list 9 different pairs. What happens next, however, is quite interesting.

E: Can you try and find the rhyming words in lines 13 and 15? That’s this one [pointing with pencil] and this one [pointing with pencil].
C: [reads the lines 13 and 15 as I point to each word with the pencil] ‘I haven’t a clue.’ ‘Do you do it, too?’ I don’t know what you mean by rhyme.
E: Can you tell me if there are any words that rhyme in these lines [pointing to line 13] ‘I haven’t a clue’ and [pointing to line 15] ‘Do you do it, too?’
C: Too and clue?
E: Yeah, that’s right!

Then I ask if he can come up with any other words that could rhyme with clue and too and Corey offers “boo” and “two, the number two”. Finally I ask,

E: Which of these words rhymes with clue? See if you can read those. [shows Corey a list of the following words: out, cup, blue, and sun]
C: Out, cup, blue, sun

Corey chooses blue, but his reasoning is that blue has a different letter that /c/! Next I have Corey try to find a rhyme for ‘too’ from the list: song, soon, book, and our. He tests the
words and compares them and finally suggests:

C: Too-hour?
E: Do you know what rhyming means?
C: Yeah. Uh. I don’t know how to explain it. It’s like driving-diving. It’s a kind of a match
E: So back here you knew that blue and clue were the same because it just changed the beginning letter?
C: Yeah, like clue and too.
E: Well, the way we work on rhyming is that we look for the common end. In this one it’s [long] /oo/, right? Does anything end just with /oo/?
C: No.
E: No. But we have a sound in here that you thought sounded the same –
C: Oo.
E: - the /oo/ for soon, so that was the sound so that was there, so that was good, it’s good that you noticed that, but the rhyme part has to have the ending, too.

Now we have both discovered that Corey really hadn’t understood what rhyming was after all! I ask one more question, this time requesting Corey search for a word that rhymes with clue and too from the following list: grow, song, book, and grew. Corey reads the words, but isn’t sure what to do, so I rephrase the question and then I read the words to him. He’s able to find the rhyme now.

C: Grew?
E: Yeah! What helps you with that?
C: Because I know it couldn’t be any of those two because they were not fitting the pattern for the number two –
E: Yeah, that’s right –
C: - for the two and they weren’t clue so they were basically crossing out [crosses out song and book] and grew, grow didn’t make sense as grew.
E: Grew. Do you hear the common /oo/ at the end of too, blue, and grew now?
C: Yeah.
E: So you used your test taking strategies as well as your understandings of the sounds in them so that’s using two things there…okay…

After this activity, we read several more poems and, in each case our conversation included a request for Corey to find rhyming words and then tell me how he was able to figure out the
rhymes. He found rhymes easily and used the following language to describe his strategies: sounds, end word, ending sounds, ending. In the poem “Spots” he found dots-spots; in “My Friend’s Freckles” it was toes-nose; in “Dinosaur Bones” he pointed out tall-fall; in “My New Pajamas” he discovers neat-feet; and in “P.S. Did you know?” Corey finds: yap-nap, sleep-leap, swing-cling, grow-crow, chirp-slurp, soar-roar, bite-light, and sway-neigh. It seemed that Corey had finally begun to develop an understanding of rhyme that would allow him to attend to not only the structural aspects of a rhyming poem or the orthographic similarities of some rimes, but more importantly the deeper phonological consistency in rimes. During this tutoring session, Corey and I also ended up reading several additional poems together and had lively discussions connecting our own experiences to texts, using our imagination, and just having fun with the poems (for example see: Corey Clip 5: Shared Reading, 5:24 – 10:42).

Our engagement with the picture book *Time Flies* was short, but we were able to have some interesting talk about the space between reality and imagination in the text for the reader and for the main character. The story is narrated through illustrations that follow a small sparrow-sized bird as it flies out of a storm into a museum of natural history. As the bird flies through the dinosaur wing of the museum, the scene slowly transforms into Jurassic real time where dinosaurs live and breathe. At the climax, the bird is eaten by a Tyrannosaurus Rex, but the bird flies through its body, emerging at the other end where the dinosaur has now transformed back to its fossilized, skeletal frame. The sometime ambiguity of reality was well illustrated, both literally and figuratively, by Rohman and Corey struggled with this grayness of representation at times.

In the final tutoring session I assessed Corey using the DSLA-2. I administered it without the before-test mediations but with the within-test mediations - used as needed. As we
had been doing, whenever Corey gave a correct answer he was told that it was right and was asked to articulate how he came to his answer. The results of Corey’s DSLA-2 are as follows in Figure 5.4: Corey: All or Nothing Results vs. Progress Underway.

**Figure 5.4: Corey: All or Nothing Results vs. Progress Underway**

[Graph of Day 78 scores]

Corey had no difficulty with the comprehension or word structure questions and easily selected ‘they’ as the rhyme for ‘day’. However, he had difficulty with the vowel sound as represented in the word ‘few’ and said he was thrown by the letter e, choosing ‘green’ and then, when he checked the sound, chose ‘soon’. One of the interesting moments in this activity was that Corey’s first effort was to firm up his understanding of the question (see: Corey Clip 6: *Vowel Sounds, DSLA 2-2, 0:00 – 1.22*). In the ending sound question, Corey had to identify a picture first, which he correctly identified as a table. Then he had to choose from the following for ‘the same ending sounds’: butter, rabbit, kettle, nibble. He chose kettle at first, but after listening to the question again and thinking about the ending sounds, he was able to select nibble. This was an especially tricky question. Corey noted that he considered the sounds when making his decision and did not rely on the orthography alone, but that he did not look beyond the final sounds. As a result, although Corey did not pick the ‘correct’ answer for the question on ending sounds, it is clear that he has a grasp of the concept. However, I would suggest that Corey’s understanding of vowel team patterns is clearly an area that needs to be addressed - although his
ability to read texts with language using vowel teams ought to be considered as well. It may be that in context Corey is quite capable of reading words with more complex vowel teams and clusters.

**Summary**

That Corey made progress is evident. The overall results, when viewed graphically with a trend line overlay, reveal that there were gains made over the long term with the most dramatic shift occurring during the DSLA-1. See Figure 5.5: *Corey Results: Total with Trend Line* below.

**Figure 5.5: Corey Results: Total with Trend Line**

![Graph showing progress over time](image)

What does this progress look like in detail? If we look at Corey’s results overall by subsection the most stable growth appears to have been in answering questions in the area of comprehension. There is also growth in his ability to respond to word analysis queries.
Figure 5.6 – 5.8: Corey Results: Overall By Sub-Section

Figure 6: Comprehension

Figure 7: Word Structures

Figure 8: Word Analysis
However, the change in data in the word structures subsection seems to be related only to the DSLA format. Given that there are only two types of questions in this subsection, it begs the question: which area was budding for Corey, vocabulary or contractions? We can answer this by looking at the results for each subsection by question.

**Figures 5.9 - 5.11: Corey Results: Sub-Section by Question**

**Figure 9: Comprehension**

**Figure 10: Word Structures**

**Figure 11: Word Analysis**
The word structures subsection data suggests that Corey is showing progress in the area of vocabulary, but that the area of contractions is less developed. Combined with Corey’s own comments as well as my observations, we know that he has not yet received much instruction in contractions whereas he already has a good vocabulary and picks up new word meanings quickly. Furthermore, we were able to engage in some vocabulary work during the first tutoring session, activity that encouraged Corey to draw on the language he knew already and apply it in different ways.

Regarding the tutoring sessions in general, given that the tutoring emphasized Corey’s emerging prediction and inference-making abilities and word analysis skills, it’s not surprising that we see stability in the gains made primarily in the comprehension subsection and, to some degree, in the word analysis subsection. However, it’s important to note that Corey showed his initial gains in comprehension during the DSLA-1 suggesting that learning-that-leads-development in comprehension skills may have occurred as a result of the teaching-testing during the DSLA-1. This subsection remained stable from a testing perspective but the active engagement with these understandings was not limited to a testing or assessment situation alone. That is, Corey brought prediction and inference-making skills to bear upon real world texts as well, engaging in transfer type engagements with different texts in different situations. Thus, not only is it clear that this was an area of budding development; it is clear from the data that cognitive development occurred, likely as a result of the DSLA-1 activity. Certainly there were gains made in the word analysis subsection, but we know that Corey still needs support in this area, that his skills are not yet firm, nor is his understanding of the underlying concepts thorough.

It is important to restate that there was clearly an affective component to the
developmental process as born out in Corey’s positive attitude towards the work that we were engaged in, his verbalization of his interest in learning how he learns as well as learning ways that good readers work with texts, and the comments passed on by his mother. In addition, I would also propose that overall the results not only provide evidence of cognitive and affective development, but that the data also suggest that Corey’s understanding of and engagement with texts, whether with real world texts or within the framework of assessment, has begun to change with the unfolding of his potential being realized within the activity of reading. In Corey’s case, I think he began to realize that getting the ‘right’ answer does not have to overtake the text, that texts can be enjoyed and that we can also value the way we think about texts and the way we think about questions about texts. For Corey, learning about learning was a valuable ingredient in our work together as was the activity of working together itself.
Case Study II: Lawrence – Thinking and Guessing

Lawrence was a slim, shy second grade boy with a wiry physique and dark brown hair. His IEP identified him as Other Health Impaired (OHI), with reading and language delays as well as auditory processing difficulties; his mother noted that at one point there was consideration given to the autism spectrum of disorders as a possible disability diagnosis. Lawrence was currently fascinated by Star Wars, the movie, and also seemed particularly interested in how diamonds were formed and where they came from. Lawrence lived with his two younger brothers and two parents, a middle class family where mom, a former elementary teacher, now stayed at home and dad was professionally employed outside the home. Lawrence received most of his instruction in the general education classroom, but was in a resource room for daily reading and writing support. Lawrence’s participation in this project spanned a 75 day period.

Pretest-DLSA-Posttest-Reflection

When I first met Lawrence, during the initial consent signing with his parents, he seemed distant and there was little eye contact. However, during his consent signing at school he smiled and nodded throughout and seemed to pay particular attention to my face and mouth. During his initial testing, Lawrence offered very little in the way of personal interaction and was not particularly interested in the pictures of my animals. I was wearing a diamond tennis bracelet that day so he spent a bit of time diamonds in general. Overall he was very compliant and self-controlled; there was a lot of eye contact and his focus appeared constant. He readily answered the questions I read and appeared thoughtful. He asked for no repetitions although I did remind him that I could reread anything he wished. He appeared to be looking at the questions as I read them. Overall, I thought that Lawrence ‘went through the
motions’ but that he was intent on simply completing the test; he wasn’t really present with me, although he did readily engage with and enjoy the grape eraser! See Figure 5.12 for Lawrence’s pretest results.

**Figure 5.12: Lawrence: All or Nothing Results vs. Progress Underway**

![Figure 5.12](image)

**Figure 12: Visual Representation of Pretest**

We met again a week later. The DSLA-1 assessment took Lawrence close to 30 minutes and while he had been compliant in coming with me, he became very worn out during the activity. By question number 5, the last of the comprehension questions, he was ready to pack it in, his body language clear. Looking at Figure 5.12, Lawrence’s DSLA-1 results, it’s easy to see why. All the meditations were used for the last three comprehension questions and these included rereading the passage and reviewing strategies, an exhausting process and one that made me question the humanity of my own work! As a result, I chose to offer Lawrence additional mediation by way of positive, verbal reinforcements to keep him going and so I let him know that he was working hard, praising his efforts when his body language revealed he was flagging (for example, see: Lawrence Clip 7: Some of his frustrations with the DSLA 1, 0:00 – 0:44). That Lawrence was able to continue, and to clearly demonstrate that he was actually making progress in the general education curriculum
(see below, Figures 5.13 and 5.14: Lawrence: All or Nothing Results vs. Progress Underway) suggested to me that this was a child who not only needed, but benefited from this form of verbal mediation.

**Figures 5.13 – 5.14: Lawrence: All or Nothing Results vs. Progress Underway**

Day 8

![Graph showing DSLA scores on Day 8](image)

**Figure 13: Visual Representation of DSLA-1**

Day 11

![Graph showing Posttest scores on Day 11](image)

**Figure 14: Visual Representation of Posttest**

Lawrence responded positively to verbal mediations that were supportive of his efforts and this may have played a role in his responses during our reflection discussion. The following excerpts from the taped reflection discussion reveal that Lawrence had a great deal of difficulty remembering anything we did, but yet he stated that he liked working together, he preferred it – although he could give no reasons.

E: That was the spider story.
L: (pause) Yeah.
E: Do you remember who else was in that story?
L: Nn-no
E: Spider and... there’s somebody else in the story. And... Do you remember what the story is about? If I show the picture here, does that help?
L: Mmm. No.
E: So who’s the other guy that... can you see in the picture, there’s a spider and what’s...
L: Tur-turtle.
E: Turtle. Mm-hmm. Okay, do you remember anything about that test or what you liked or didn’t like? When we did it together?
L: Um. I liked doing it together.
E: You liked doing it together?
L: Yeah.
E: How come?
L: I don’t know.

At this point, I thought he might have been trying to offer me answers that would please or at least satisfy me. I went back to the text and tried to prod Lawrence’s memory by talking about some of the details of the story, but he was unable or unwilling to recall anything. As a result, I chose to reread the story to him and then review the strategies that he had used well and that I hoped he would be able to recall. Then I returned to questions about the assessment process.

E: You said you liked doing the test with me. Was it, did you think it was easier or harder when we did the test together?
L: Um, a little harder.
E: A little harder when we worked together?
L: Yeah.
E: Why do you think that is?
L: Don’t know.
E: Do you think you learned more doing the test with me or doing the test by yourself?
L: With you.
E: Can you give me an example of something you learned?
L: No.

His ability to voice that our work together was harder suggested to me that he wasn’t simply trying to give me the answers he thought I wanted and so I decided I need to figure out what he understood ‘remembering’ as and what he was able to remember in general.

After finishing my list of reflection discussion questions I now knew that the only things
that Lawrence did remember about our time together was who I was, that I had a good smelling eraser, and that we had read a story about a truck. I continued our conversation by asking him what he thought remembering was about and how he remembered things. Ultimately, he was able to tell me that he was able to remember “fun stuff”. I took this to mean that he could remember what made him feel good and that perhaps my supportive mediations and the grape scented eraser might be included in this category.

**Tutoring Sessions**

The first tutoring session with Lawrence was perhaps the most pivotal in terms of his subsequent development, both cognitively and affectively. I had decided, by this time, to use Exercise 1 of “What’s the Big Idea?” with all the participants – it has a game-like quality to it, the activities are brief, and it had the potential to offer insight into each participant’s background knowledge as well as their ability to consider details and common or significant elements in a category. The latter two were especially important for Lawrence given that the data suggested the area of main idea was budding and, as well, he seemed cognizant of detail in narratives with regard to locating information. Figures 5:15 – 5:16 reveal that Lawrence was not only able to demonstrate that he was making progress in these areas during the DSLA-1, but that we had been engaged in learning-that-leads-development as evidenced by his independent work during the posttest.
However, it was during our engagement with “What is the Big Idea?” that Lawrence discovered, for the first time, that he could think and that schooling in general and answering questions in particular were not as much about lucky guesses, but more about taking the time to give thoughtful consideration before responding. In Lawrence Clip 8: Lawrence Tutoring: Guessing versus Thinking (0:00 – 7:13), quite a lengthy clip, I finally begin to realize that Lawrence seems to understand his academic world as guesswork. As I become aware of this I am able to lead Lawrence to an awareness of his own capabilities. One of the most exciting moments comes near the end of this session, as Lawrence now realizes that he can think, that he’s not just guessing, and his language reveals this awareness. The following excerpt (taken from my chapter in forthcoming book) also includes some of my thinking during this activity:

Emily: Yeah. But for you to come up with the word basketball was pretty amazing. Okay then, I have one more in this group-

I realize that Lawrence may be able to figure out the commonality by offering another example; I’m not sure if this is due to processing, environment, etc. I may need to give him more words but I want to draw out his understanding as much as possible.

Lawrence: Okay.
Emily: This is hard.
Lawrence: Hard.
Emily: French, Spanish, English, Swahili. What are they?
Lawrence: U..mmm let me think, I may have that in my brain. Spanish words.
I really notice the use of ‘think’ here… and ‘brain’. He is trying to self-mediate. I’m going to pick up on what he says.

Emily: Like Spanish words, French words, English and Swahili, what are they all?
Lawrence: Uh...
Emily: They’re all different...
Lawrence: Dif, different…countries.
Emily: The countries and what else might they be?
Lawrence: Dif…ferent… words that they say.
Emily: That's right and you know what that word is-
Lawrence: What
Emily: -when different words and different countries? [pause] Languages.

Again, he is able to work through more, to think out loud. I didn’t give him another example; he talked around the common idea, gave a definition rather than just another example.

Lawrence: Did I get that one right?
Emily: Well you got the idea right, yes. So now I'm giving you the word to call it which is languages. So you know, what you've got, is you've got all this information in your head but sometimes you don't have the exact word. But you've got it in your brain and that's the amazing part.
Lawrence: You know who's on the one hundred dollar bill? I know him.

(Duvall, 2008)

Lawrence’s engagement shifted dramatically after this point. He became more animated, more interested, and more aware that could be thinking rather than just guessing or randomly providing some answer. There is no doubt that being ‘right’ was a concern for Lawrence, but my interpretation of this wasn’t that Lawrence was simply looking to be correct in his responses, but that he was discovering and affirming this new approach to academic activity.

We also read Clara and Asha during this session and focused in on the details in the story; we looked at the congruency between the text and the illustrations, discovered contradictions, and thought about the characters as represented in Clara’s imagination. Lawrence had some difficulty waiting – he wanted to flip through the pages quickly and just look at the pictures. I began to get the impression that he focused on illustrations rather than the narrative to
understand stories. That is, he seemed to ‘read’ the pictures.

A very different Lawrence emerged during the next session. In Lawrence Clip 11: Lawrence Tutoring, Partial DSLA and Eraser (0:00 – 2:51) there is a striking difference from his engagement with the texts in the first tutoring session to our work together on a partial DSLA in this session. It seems that Lawrence is completely distracted by the eraser. Up until this point, Lawrence had appeared to use the eraser as a form of self-mediation, using ritualized erasing to begin each session. He would also repeat the process at times during the sessions, so it appeared to be a form of external support that could assist him in focusing on our activity rather than a distraction. In addition, when Lawrence would turn his gaze away and begin to sniff the eraser quietly, I began to take this as a cue for the next mediation or that he was stuck and I should just move on. However, Lawrence had a great deal of difficulty with the second tutoring session involving the partial DSLA and the eraser and erasing seemed to be more of a diversion or way of occupying himself, as he worked with the eraser in a more frenzied way. Clearly Lawrence’s engagement was different when he was involved in the authentic reading experiences of the previous session versus the activity of testing reading, but I wondered if there was something else interfering with his ability to focus on the partial DSLA. Note that the questions we worked on during this session pertained to the main idea, prediction, vocabulary, rhyming, vowel sound, and beginning sounds.

In the next clip, Lawrence Clip 12: Lawrence Tutoring, Partial DSLA and Guessing (2:51 – 3:05), I run into the issue of guessing again and simply remind Lawrence that rereading in this case is a good strategy. At this point, given his activity with the eraser and the guessing, I am wondering if he is having difficulty with being assessed, if the content is a concern or if he’s just having a bad day. It seemed that throughout the session he could not recall or use a single
strategy for approaching the questions I gave him, particularly the two questions pertaining to comprehension.

Lawrence appears more engaged in the next portion of the DSLA when we become involved in word structures and word analysis. However, he begins to lose his interest early during the vocabulary question and resorts to guessing; he becomes frustrated - although his engagement returns when we work on word sounds (see: Lawrence Clip 13: Lawrence Tutoring, Partial DSLA Focus on Word Structure and Sounds, 3:05 – 6:47).

Given the variation in his engagement, my thinking was that the story was either not interesting or perhaps too difficult and therefore the comprehension questions were beyond his current potential, out of his ZPD, even with support. However, the word structure and word analysis questions, perhaps because they do not require knowledge of the text, seemed to be questions he could attend to and attempt - at least he appeared more willing. As a result, I did consider that the topic and/or difficulty of the narrative may have worked against us in this session. However, I also know that the reading curriculum he had been engaged in was very focused on decoding, rather than comprehension and vocabulary development, and this may have had an influence as well.

During the third session I discovered that Lawrence was able to remember stories when given some prompting – even when I held back the illustrations that might support his recall. In Lawrence Clip 9: Lawrence Retells a Story He’s Already Read (7:13 – 11:00) he actually takes over a discussion of the story line and seems to be confident in his perspective on the implications of a particular illustration. This is an interesting page as the little bird is eaten by a T. Rex and we see feathers flying outside the T.Rex’ closed mouth; then the bird flies through the T. Rex body and emerges from the bones of the T. Rex dinosaur in the museum. Somewhat
reminiscent of the conclusions we drew about story in *Clara and Asha*, Lawrence is convinced that this story takes place in the bird’s imagination. With this success in inference and interpretation I decided to introduce Lawrence to another book by Rohman, *The Cinder-Eyed Cats*. I chose this text as it takes place in a child’s imagination… or perhaps another world, but also because the text does not literally reflect what the illustrations portray; the illustrations are provocative, providing captivating detail that can take a reader well beyond the story as narrated. I wanted to see what Lawrence would do with this story. As it turned out, Lawrence had a lot of trouble listening to me read and we ended up focusing on the illustrations. Nonetheless, he demonstrated engagement with a new text and was able to make a good prediction about the story (see: *Lawrence Clip 10: Lawrence Involved in a New Story, Makes a Prediction*, 11:00 – 11:21).

During this session I also used the *Multiple Skill Series: Overview*, by Richard A. Boning, a testing booklet with short passages followed by five questions that included main idea, several recall or location of details, and a prediction or inference question. Given that during our reflection discussion Lawrence had indicated that the DSLA assessment could be improved by making it shorter I thought these texts might also give Lawrence the visual impression that they would be manageable. As well, the texts from levels A and B (grades 1 and 2) each included a detailed picture meant to support the reader’s understanding whereas the pictures given with the state mandated, standardized tests do not appear to offer that additional support. Given these modifications, I wasn’t surprised that Lawrence had little difficulty reading the stories himself and answering the questions on the two passages I gave him. The first was a story about a boy stuck in a tree, written on a 1st grade level, and the second was about the appearance of a flock of birds coming down a chimney and was written on a 2nd grade level. Lawrence was also able to
retell the stories on his own, without looking at the pictures or texts, and was especially conversant about the second narrative. It seemed to peak his interest.

I had decided to conclude my tutoring sessions with all the participants with the DSLA-2, but I was concerned about this, wondering how Lawrence would manage, not only cognitively, but affectively as well. I believed we had accomplished a great deal in terms of Lawrence’s ability to deal with the academic assessment side of text comprehension as well as the pure pleasure of reading a new story and talking about it. Table 5.2 outlines the focus for each tutoring session and the materials we used.

Table 5.2: Lawrence’s Tutoring Sessions: Focus and Materials

<table>
<thead>
<tr>
<th></th>
<th>Focus</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>main idea, looking at/for details</td>
<td>What is the big idea?</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Clara and Asha</em> by E. Rohman</td>
</tr>
<tr>
<td>2.</td>
<td>main idea, looking at/for detail, rhymes, vowels, beginning sounds</td>
<td>“The Cat Who Caught His Own Tail”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Virginia Standards of Learning Text)</td>
</tr>
<tr>
<td>3.</td>
<td>main idea, detail, story, phonemic awareness; attention</td>
<td><em>Time Flies</em> by E. Rohman</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>The Cinder Eyed Cats</em> by E. Rohman</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Multiple Skill Series: Overview</em> by R. A. Boning</td>
</tr>
<tr>
<td>4.</td>
<td>recall, phonemic awareness; attention</td>
<td>“Picnic”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Virginia Standards of Learning Text)</td>
</tr>
</tbody>
</table>

I was excited by the fact that Lawrence went beyond the literal in his narrative understandings and I knew that he had practiced new strategies, including thinking rather than guessing. However, I was concerned, based on what I had learned so far, for I knew that Lawrence

- was very dependent on picture clues and visual cues,
- had difficulty demonstrating his comprehension of texts within the constraints of the reading test,
- was more capable in reading tests when it came to tackling word structure or word analysis queries that did not rely directly on the context or content of a text,
- preferred shorter passages, and
- had difficulty with texts that were not of personal interest to him, especially if they were written at a level above his independent level.

Bottom line: I was concerned that the DSLA-2 was going to be too hard, too long, and turn into a negative experience for both of us. I was buoyed, however, by Lawrence’s positive affect when we began – he had a special artifact with him and clearly had a goal in mind. See Lawrence Clip 14: Lawrence The Eraser DSLA-2 (0:00 – 0:59).

Figure 5.17 reveals the results of this final session. Note the score for question one. This is a partial score. On this occasion in working through the first question on this assessment, I slowed down and didn’t move directly into the mediation that would involve Lawrence restating the question using his own words; Lawrence’s body language stopped me. I did some rereading of the question and the answers to support Lawrence’s memory, but I could see he was thinking and when he recalled that the characters had been in their backyard at the end of the story, I knew that he was aware that this was at the heart of the issue. My decision was to prompt him to consider which answer was closest to his response.

**Figure 5.17: Lawrence: All or Nothing Results vs. Progress Underway**

![Figure 17: Visual Representation of DSLA-2](image-url)
I believe that our work together on the value of being close in answering questions on tests was not irrelevant, but it is important to recognize that Lawrence had also been demonstrating confidence in using inference and interpretation with real world texts and was able to think about what might be going on. I would argue that both types of experience helped Lawrence to understand and reinterpret the answer choices when I provided a more subtle mediation. He understood that the answer wasn’t necessarily going to be right there – nor did it have to be. See Lawrence Clip 15: Lawrence Thinking DSLA-2 (0:59 – 3:20). This clip also demonstrates Lawrence’s use of the eraser as a mediating tool - the erasing activity as a preparation process.

Overall, this session turned out to be an exciting event for both Lawrence and I. Lawrence was not only able to demonstrate progress underway, but also to reveal development in the areas we worked on, particularly main idea, locating information, and prediction. Interestingly, the work we did on prediction was, for the most part, during the use of the real world texts. See Figure 5.18: Lawrence: All or Nothing Results vs. Progress Underway, below.

**Figure 5.18: Lawrence: All or Nothing Results vs. Progress Underway**

![Graph showing progress in Main Idea, Locate Information, and Prediction over time](image)

**Figure 18: Visual Representation of DSLA-2: Main Idea, Locate Information, Prediction**
Lawrence’s work on prediction during the DSLA-2 can be viewed in Lawrence Clip 16: *Lawrence Thinking Using a Clue* (3:20 – 4:31). What is particularly interesting in this clip is Lawrence’s statement that he doesn’t know why he chose a particular answer, but when queried he reveals the important clue he used to make his determination.

Next view Figure 5.19 below. This data reveals the limits of Lawrence’s understanding when it comes to questions about comparing and contrasting, and organization and sequencing in the context of a reading assessment. These were not areas I saw as budding, particularly in comparison to the other three types of comprehension queries we could work on, so I choose not to focus on them at this time. The data suggests that Lawrence is making some progress towards the general education goals in these areas, as measured by the assessment, but that these areas are not developed.

**Figure 5.19: Lawrence: All or Nothing Results vs. Progress Underway**

![Graph showing data](image)

**Figure 19: Visual Representation of DSLA-2: Compare/ Contrast, Organize/ Sequence**

Also, given what I had come to learn about Lawrence’s difficulty recalling narratives, it’s not so surprising that these particular skills would give him difficulty - they involve the ability to work with quite a bit of concrete memory of textual information simultaneously. As a result, it was not
until we were at the level of ‘rereading with a purpose’ that Lawrence was able to formulate his responses correctly.

Lawrence did resort to guessing at times, but I would not accept a “guessed” answer. In Lawrence Clip 17: Lawrence Identifies the Strategy (4:31 – 5:04), I articulate for Lawrence that he is having difficulty and then support his identification of a strategy to use. However, it is not until I ask where we might find the answer that he looks at the text and states, “In the book.” This is a big step for Lawrence, to consider returning to the text to find the information he needs. On the other hand, the language play in this piece is telling. When asked about a good way to figure it out, Lawrence is still stumped. When asked where to find an answer, he responds quickly. I wonder if Lawrence might consider returning to a text to figure something out if there wasn’t a specific answer to be located. In contrast, when working on rhyming, something that Lawrence is able to do well, his response is automatic (see Lawrence Clip 18: Lawrence Automatic Response, 5:04 – 5:34). Figure 5.20 summarizes Lawrence’s work on word analysis:

**Figure 5.20: Lawrence: All or Nothing Results vs. Progress Underway**

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Day 8 DSLA-</th>
<th>Day 11</th>
<th>Day 75 DSLA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhymes</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Vowel Sounds</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Consonant Beg-End</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

**Figure 20: Visual Representation of DSLA-2: Word Analysis**

Lawrence’s demonstration of rhyming seems firm and his understanding of vowel sounds
seems to be budding, however his awareness and/or understanding of beginning and ending consonants are not clear.

In Figure 5.21, the visual depiction of Lawrence’s responses to the word structure questions are strikingly similar to those of Corey – except that they are reversed for the posttest. Given that both Corey and Lawrence stated that they knew a vocabulary word beforehand, when they were able to select the correct response right away, it suggests to me that both boys would benefit from working on strategies to approach new vocabulary in texts. Contractions, on the other hand, do seem to be an area of word structure that is under development. Yet strategies for figuring out what the contraction represents are not clear, nor is it apparent that this ability makes much difference to the comprehension of the text being read. That is to say, the state mandated, standardized test questions with regard to contractions are less about the meaning of the story and more about the morphology. This requires more direct instruction and, as such, it may not be an area that either boy has received in-depth instruction.

**Figure 5.21: Lawrence: All or Nothing Results vs. Progress Underway**

![Graph showing vocabulary and contraction progress over time](image)

**Figure 21: Visual Representation of DSLA-2: Word Structures**

What is, I believe, very important about Lawrence’s experience is what his change in affect reveals; he seemed to demonstrate more resiliency by the end of the study, appeared to take mediations and corrections more in stride. The initial DSLA had been especially difficult for
Lawrence, and he frequently expressed concern that he ought to be getting back to class, and yet when queried later he adamantly preferred “working together” during the DSLA over the “regular” tests. What became apparent over the course of Lawrence’s participation was the importance of the immediate feedback to his continued focus and self-image. For Lawrence, it seemed that understanding that he was able to apply some of the skills successfully buoyed his desire to learn more. Thus, while it seems clear that Lawrence’s assessment data reveals hidden progress being made and that he was able to demonstrate learning-that-leads-development during his participation (see below Figure 5.22: Lawrence Results: Total with Tend Line), perhaps the most important event, for both Lawrence and I, took place during the first tutoring session.

**Figure 5.22: Lawrence Results: Total with Trend Line**

![Graph showing Lawrence's results with trend line](image)

The initial tutoring session marked a transformation in Lawrence’s efforts. He began to slow down his response time, to appear to consider questions, to ask more questions and to make observations about what he was engaged in doing as he thought about questions. He also became more confident socially and talked more about what he was interested in, discussed
events and generally sought to hold more conversations with me.

Broadly speaking, then, while the activity involved in using the DSLA-1 was important for Lawrence, with regard to revealing hidden progress and learning, it was perhaps the tutoring sessions that were more important from a development perspective. Yet the tutoring was a result of the DSLA: follow-up on areas found to be ‘budding’, skills and strategies that he was close to learning. For example, using the DSLA to direct instruction resulted in Lawrence working on his understanding of main idea – in this case, using what was a ‘warm-up’ activity for Corey as an instructional artifact to mediate learning and development for Lawrence. During the process of engaging in what might have been a static activity, by strategically refocusing to work within Lawrence’s ZPD, the collaborative activity Lawrence and I engaged in enabled us to reveal Lawrence’s hidden assumptions about his mind and his understanding of himself as a ‘guesser’ rather than a ‘thinker’.

Interestingly, in reading back over the notes I wrote directly after the DSLA-1 session, I noted that

He [Lawrence] seemed unable to ask for the help he needed – or to say he didn’t know. Part of the process was to let him know he could say he didn’t know. He resorted to guessing at times, but I would not accept a “guessed” answer.

Thus, the process nature of this activity also revealed the sometimes hidden role of teacher learning and development in student learning and development. Certainly Lawrence’s revolutionary discovery that he was a thinker was equally revolutionary for me.
Case Study III: Helen – Layout, Length, and Content

Helen is an energetic 9 year old girl in 3rd grade; she is slim and has shoulder-length, straight brown hair, and usually wears glasses. Helen had been identified as Other Health Impaired and reading below grade level. She had also been diagnosed as having Down Syndrome and her Individual Education Plan included a one-to-one aide as well as support from both speech and occupational therapists. Helen’s mother is a homemaker in their rural community home while her father works outside the home full-time. She has two younger, school-aged brothers in general education with whom she gets along quite well. All travel to a suburban area of the nearest large city in order to attend school. In addition, Helen’s family reads to her and she also enjoys reading stories independently, particularly about Disney princesses. Helen’s participation in this project spanned 94 days.

Pretest-DSLA-Posttest-Reflection

Unlike either Corey or Lawrence, Helen’s initial results did not form a coherent picture for me, at least initially (see Figures 5:23 – 5:25: Helen: All or Nothing Results vs Progress Underway). Patterns of learning-leading-development did not emerge in any particular area, although in terms of specific questions, I did determine that the data with respect to rhyming (question 8) revealed evidence of learning-that-leads-development. In addition, one area that was clearly not well developed, as far as the data showed, was Helen’s grasp of vowel sounds (question 9). Generally speaking though, the inconsistencies left me somewhat stumped.
Figures 5:23 – 5:25: Helen: All or Nothing Results vs Progress Underway

**Day 1**

![Pretest](image1)

**Figure 21: Visual Representation of Pretest**

**Day 28**

![DSLA](image2)

**Figure 22: Visual Representation of DSLA-1**

**Day 35**

![Posttest](image3)

**Figure 23: Visual Representation of Posttest**

Part of the confusion for me was due to what I felt were unexpected moments during the DSLA-1. For example, Helen’s ability to compare and contrast the characters of the story surprised me (see Clip 19 Helen: Compare and Contrast Surprise, 1:01 – 1:40). I might have wondered if Helen had just been guessing had she not followed up her decision that Spider and Turtle were selfish by giving her reasoning, unprompted: “They was a bad guys.” This let me
know that Helen had been able to ‘read’ the characters and respond to the question. Later, in speaking with Helen’s mother, I discovered that they had recently read a Disney story that dealt with selfishness, so Helen had some prior understanding of selfishness as a characteristic and she was able to apply her understanding to the story and to the assessment activity. As she noted, “It was in my head!”

I viewed Helen’s responses from pretest to DSLA-1 to post test as inconsistent. Yet it also appeared that the DSLA process gave Helen the opportunity to reveal more of what she was capable of, that is, to reveal her potential in terms of working with texts within a collaborative framework. Given these factors I felt that I was missing something in the equation. What was going on for Helen?

The reflection discussion gave me additional insight into Helen. I expected that Helen, like Corey and Lawrence, would prefer the DSLA because of the social nature of the process. But Helen didn’t like the dynamic assessment approach to testing! And while she was unable to articulate why in any specific way, she did clearly state that “it was hard”. Mind you, this was something that I had mentioned earlier during our work on the DSLA-1 when she was getting worn out (see Clip 20 Helen: Getting Worn Out, 1:40 – 3:33). I note this because by this time I had realized that one of Helen’s ways of being included a tendency to repeat things she’d heard from me when she didn’t have a ready answer of her own or to state what she thought I might like to hear, particularly when she wanted to get on with a task. Nonetheless, and regardless her motives, Helen did state that she learned more from the assessment we did together. Certainly this appeared to be true based on the data from the DSLA-1, but I was somewhat skeptical given the post test results. I still wondered what was going on for Helen.
Tutoring Sessions

I decided that I needed more opportunities to find patterns in Helen’s learning, learning that would lead to development. Thus, in order to determine where we ought to go next I chose to focus my initial direction on working with a variety of Helen’s apparent strengths and weaknesses. The outline of the tutoring sessions and materials used are found below in Table 5.3. Note that sessions 1 and 2 were combined. This was because Helen had so much difficulty with What is the Big Idea? that I didn’t dwell on the activity and moved on to using the Numeroff poems. Helen really enjoyed the poems; she poured over the pictures, but she also demonstrated an ability to use rhyme to support her reading of the poems. In addition she was able to find rhyming words and offer new rhymes for isolated words, but she could not articulate how she was able to do this. That is, Helen could perform the task but couldn’t explain it. Later, in working through the DSLA-2, it finally became clear to me that Helen did not understand the word analysis tasks although she could read and apply the patterns to decode, and subsequently comprehend, texts.

Meanwhile I had continued the first tutoring session with the real world text Clara and Asha and Helen and I worked on identifying the main idea and developing inference skills. Helen’s engagement with this text lead us into extra time and we spent most of the hour reading and talking about the story – what it was mostly about, the characters, and even a very lengthy discussion about which aspects of the story were real. Helen seemed to take the narrative’s imaginative story line to heart; she insisted that Asha, the fish who flew with Clara, represented a real possibility. Our discussion was also interspersed with simple activities relevant to phonemic awareness as her responses to the word analysis questions in our previous activities had surprised me given that she would often read ahead of me and seemed to demonstrate a reading ability that
belied her below grade level status. She was not particularly interested in doing word analysis however and I didn’t pursue it.

**Table 5.3: Helen’s Tutoring Sessions: Focus and Materials**

<table>
<thead>
<tr>
<th>1/2. main idea, character, rhyme, vowels, beginning sounds</th>
<th>What is the big idea? Sometime I Wonder If Poodles Eat Noodles by L. Numeroff Clara and Asha by E. Rohman</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. review comprehension skills; focus on phonemic awareness</td>
<td>“The Cat Who Caught His Own Tail” (Virginia Standards of Learning Text) Multiple Skill Series: Overview, Boning</td>
</tr>
<tr>
<td>4. rereading as a strategy</td>
<td>“Picnic” (Virginia Standards of Learning Text)</td>
</tr>
</tbody>
</table>

During the next session I brought in a partial DSLA that was about two cats. Helen quite enjoyed the story and did extremely well with the 5 questions I asked; in fact, she needed no assistance (see Figure 5.26: Helen: All or Nothing Results vs Progress Underway). This came as a complete surprise!

**Figure 5:26: Helen: All or Nothing Results vs Progress Underway**

![Figure 5:26: Helen: All or Nothing Results vs Progress Underway](image)

**Figure 24: Visual Representation of a Partial DSLA**

As a result, I wondered if content was one factor in whether or not a text might be difficult for Helen. It already seemed that when she wasn’t caught up in the text she would lose focus and her behavior would deteriorate. Often she would focus on something else, such as the
grape eraser, sniffing and smiling and laughing or, if I remained committed to our work, her behavior would disintegrate enough to distract me from the activity. One example of this was when Helen began gently poking her forehead with the sharp end of a pencil—a very effective way of disengaging me from the task at hand (see Clip 21 Helen: Using Distractions, 0:00 – 1:04)! In fact, this behavior emerged several times, in part due to my somewhat positive reaction the first time she did it, and I had to work to try to extinguish this as a means of distracting us from the tutoring and to encourage Helen to refocus. It was obvious that some of our activities together seemed to cause Helen to respond with these behaviors, whereas other activities did not. And while the difficulty of material, such as in the What is the Big Idea? exercise, may have played a roll, overall it began to seem to me that the key was in the content.

With this hypothesis in mind, I reviewed the earlier test and assessment material. The pretest had involved a story about a female truck driver with the writing more informative in nature than narrative; it had not been very interesting for Helen. The DSLA-1, on the other hand, had involved a fictional tale with anthropomorphized animals as characters, and had definitely captured Helen’s interest, although we did have to reread it several times as well. This could be another factor to consider! The post test, a poem about chickadees in the natural world, had not gone over well at all. Helen was bored and anxious to get through the testing.

I also thought about Clara and Asha, a story that Helen had enjoyed immensely. It’s a fictitious account of the imaginary friendship between a little girl and a statue of a fish she brings to life. I began to consider that imaginative stories with animal characters might be important in developing a pattern to Helen’s responses. Certainly the partial DSLA fit that pattern. Right away I wondered if non-fictional texts were problematic for Helen in general.

After we completed the partial DSLA, we continued the session using several passages in
the Multiple Skill Series: Overview material. I had already marked a number of passages involving children and/or animals for us to use, basing this on what I had begun to determine as a relationship between Helen’s personal interests and her success with texts. At this point I disregarded genre and focused solely on the criteria that each story must have children and/or animals. Given Helen’s varied results, I preselected stories from a range of reading levels. In the end, we worked with four texts, each passage rated at a grade level higher than the previous one and all involving children and/or animals. When I reviewed these pieces later I realized that there was yet another pattern to the stories: they each included some sort of problem that had occurred and/ or needed to be resolved. In this sense, they were similar in nature to the DSLA-1 and the partial DSLA! And there was one more pattern: their sheer entertainment value. The first story was about a little boy stuck in a tree, the second about a boy and his baby sitter having to deal with a huge flock of birds flying down their chimney, the third was about a woman whose home had been invaded and damaged by two ducks, and the final one involved the inventive solution to the problem of nervous elephants living near an airport. Helen and I both enjoyed all these stories.

However, while I was fairly convinced that content and affective response to text were critical to Helen’s engagement and her ability to demonstrate her progress through the tests and assessments, I hadn’t detailed the additional patterns to the story set at the time we were working. In fact, what I reacted to first in this activity was Helen’s initial excitement about the first text having a picture. This cued me to take advantage of further instructional possibilities and one result was the opportunity to hand over more and more of the responsibility with the texts and the questions. Thus Helen’s engagement, her affective response to text, seemed to open the door to the focus and attention necessary to allow for learning and, potentially, domain
specific development to occur. Certainly her ‘correct’ answers, especially with the 4th grade level text, argue that something different was going on (see Table 5.4: Helen’s Multiple Skills Series Overview Results).

Table 5.4: Helen’s Multiple Skills Series Overview Results

<table>
<thead>
<tr>
<th>Reading Level</th>
<th>Grade 1</th>
<th>Grade 2</th>
<th>Grade 3</th>
<th>Grade 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 1 Main idea</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Question 2 Locating information</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Question 3 Locating information</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Question 4 Inference</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Question 5 Vocabulary</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Picture cue (1/2) Context (3/4)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Viewing the video of our work together reveals that Helen’s engagement is palpable. In the video set, Clip 22 Helen: Tutoring Session 3, From Avoidance to Excitement to Engagement (0:00 – 4:10), the progression of Helen’s engagement with the texts can be followed, a progression that allowed us to realize more in-depth activity relevant not only to the so-called ‘correct’ answers for a reading test, but activity that promotes learning-that-leads-development. The latter was directed through collaborative engagements with a strategy that I believe to be of particular importance for Helen: rereading for comprehension. In the end, it appears that Helen may be more capable than anyone has realized.

The clip begins with us preparing to work on shorter passages that involve the main idea (from Getting the Main Idea: Specific Skill Series by Richard A. Boning). Helen is clearly not interested in this activity! However what strikes me is that when asked about the story, she
recalls the story we had read and enjoyed discussing during the previous session: *Clara and Asha*. As a result, it’s clear that I need to change my plans and I give up on the wee ‘bear hug’ story and moved on to the *Multiple Skills Series: Overview*, capturing her attention when I announce there are pictures (view Clip 22 Helen: *Tutoring Session 3, From Avoidance to Excitement to Engagement*, 0:00 – 4:10). The transformation is unmistakable! The clip continues with Helen accepting my invitation to read the first story. I end up helping her follow the text by using my finger to direct her and I correct her miscues. Following this I read the questions on the next page, pointing to the text with my finger, and Helen appears to read along. Helen begins answering questions by simply pointing and might have continued this way, but I encourage her to think about the text of the answer choices by rereading them to her. Helen also seems to relax with this first story.

The next segment, Clip 23 Helen: *Helen Test Taking Skill, Looking for Patterns* (4:10 – 6:29), begins with the mini-clip, ‘Helen Rereads’, which identifies the strategy we use followed by the longer mini-clip ‘Main Idea After Reading’. Helen is able to decide on the ‘correct’ answer but in the next fragment ‘Why Helen Made that Choice’ I give her too much support or give it too soon and overtake her thinking. As a result, she simply replies, “Because it’s the best one.” This is followed by the mini-clip ‘Recall of Detail Using the Text to Verify’, where I demonstrate how to use a text to check an answer choice. This same strategy is demonstrated in ‘Rereading a Passage to Make an Inference’ where the language that supports our choice is actually found in the text. Next, in ‘Review Strategy Using Text to Verify’, I explain the approach we have used to recall information: going back to a picture or a text, but the focus is on getting the right answer to a question although I do tell Helen that I believe she understands better and learns more when she reads rather than when I read.
The segment, Clip Helen 24: What Happens When the Story is Exciting: Practicing Strategies (6:29 – 10:20) involves a story without pictures on a 3rd grade level. This time I read the story first, with much vigor, and then Helen reads. She is quite engaged throughout and seems to be attentive when we double check answers. In hindsight, I ought to have gone back with each response and not waited to check in until she responded with the ‘incorrect’ answer.

The next segment, Clip Helen 25: Another Good Story; Engaged Practice (10:20 – 15:20) follows a similar direction but with a text at a 4th grade level. Helen becomes quite involved in this story and responds directly to the text. Again, in hindsight, this offered some new opportunities to engage with the texts, but I remained focused on the task of learning to reread with a purpose.

As the session progresses it’s clear that I had begun to work more on teaching Helen how to use a text in a testing situation. Yet, as Helen started checking back with the text to confirm her answer choices it is also evident that she is rereading the text with a purpose - text that had been designated as 4th grade – and she is beginning to work on her own! Again, I am surprised, but I also know that Helen enjoyed the story immensely and was very interested in answering the questions. Certainly the video confirms her positive affect as she works with the text and questions. It’s interesting to note that rereading/ multiple readings during the DSLA-1 seemed to make a huge difference in Helen’s comprehension of the text, but also her ability to engage in activities relevant to word structure and word analysis. Ultimately, one detail I discover about Helen, what seems to make a difference in her work, is that she is a person who finds pleasure in certain texts and that she appears to engage from a more aesthetic response to content, participating in the fun of the stories. In this way, I think Helen and I are very alike – honestly we both loved the last story!
In addition to content playing a role, however, I had also begun to consider the impact of text length, number of questions, and overall layout of the material. The data, particularly Helen’s comments, suggested to me that Helen considered the difficulty of the task in relation to the apparent size of the task. As a result, I wondered if there was an issue of stamina or more so her assumptions, drawn based on the visual appearance of the materials used in the pretest, DSLA-1, and the post test. In the tutoring materials, each passage in the Multiple Skills Series: Overview is, visually speaking, ½ a page long (pages being 7 x 10 inches) and an entire passage and corresponding questions can be seen simultaneously, either on the next page (set 1 and 2) or underneath the passage (set 3 and 4). The DSLA, however, includes 1 full page of text (standard 8 ½ x 11 inches) and 10 questions, the latter each on a page by themselves. Thus the text is longer, there are more questions (including word analysis questions) and, even outside the actual physical length of the material, the DSLAs simply appear bigger.

Yet text length and layout didn’t seem to be an issue when I administered the partial DSLA, but this assessment was on a topic of interest to Helen and included only five questions, none of which were word analysis questions. Helen had no difficulty with this assessment and even took over the reading of the full page of text. Furthermore, she answered each question accurately and with conviction; no mediations were necessary and Helen seemed unconcerned by the number of questions. In other words, it seems as if I had gotten the combination just right for Helen: the content, the length and layout, and the type of questions.

Unfortunately, the final tutoring session was not particularly enjoyable for Helen. Although her results reveal hidden progress – especially in comprehension - (see Figure 5.27: Helen: All or Nothing Results vs. Progress Underway) Helen was not happy that we were going to work collaboratively on another assessment, particularly when she found out that the story
was about a picnic. She was not very enthusiastic and her energy waned; she just wanted it to be over.

**Figure 5:27: Helen: All or Nothing Results vs Progress Underway**

![Day 94](image)

**Figure 27: Visual Representation of DSLA-2**

To that end, it may be that her affect going into the assessment compromised her abilities. On the other hand, tutoring session 3 may have been an anomaly. It would have been interesting to have offered Helen a choice of topic during the final session to see if that would have mediated her affective response to the activity. More research is suggested in terms of the importance of the affective response to assessment content and, therefore, to outcomes on reading tests.

In addition, the work done with Helen prompts consideration of visual presentation and length of assessment as areas warranting further investigation. Many children with learning disabilities profit from such accommodations as enlarged type and less text on a page, however, it may be disconcerting to have a test that simply appears physically large and perhaps intimidating. This may also have been a factor for Helen during the DSLA-2. As such, it may behoove us to consider how long an assessment needs to be to demonstrate adequate yearly progress.
Ultimately, however, Helen’s overall results indicate an upward trend in her responses (see Figure 5.28 below), suggesting that progress is indeed being made towards the goals of the general education curriculum.

**Figure 5.28: Helen Results: Total with Trend Line**
Case Study IV: Anita – Testing Reading versus Reading

Anita is a 4th grade girl with shoulder length brown hair and who is somewhat heavily built. She is an avid member of 4-H and has won awards for showing cows; she also likes to ride and would love to have her own horse. Anita had been identified as having a Specific Learning Disability with auditory processing difficulties and was reading below a 3.0 grade level. She had not passed the 3rd grade state mandated, standardized reading test the previous year. Anita receives most of her instruction in the general education classroom with regular resource room time used to provide instructional support in reading and math. Anita and her family live in a rural setting. The immediate family includes a younger sister and two parents, a mother who is employed part-time outside the home and a father employed full time in a position that required leaving the family for extended periods. Mid-way through the research, the latter parent was no longer employed and remained in the home full time. Anita’s participation spanned an 85 day period.
**Pretest-DSLA-Posttest-Reflection**

The results of Anita’s pretest, DSLA-1, and posttest (Figures 5.29 – 5.31 below) reveal progress toward the goals of the general education curriculum as constructed in state mandated, standardized tests.

**Figure 5.29 – 5.31: Anita: Progress Underway vs. All or Nothing Results**

In fact, based on scores alone, it appears that Anita didn’t need much support at all - perhaps she just needed to get used to the testing format. However numbers can be deceptive
and in this case, they don’t capture the reality of our experience together. In Anita’s case the scores are more representative of her ability to take full advantage of the support made available to her during the pre and post tests as well as the dynamic assessment, than a reflection of her reading skills. Video Clip 26 Anita: DSLA-1(0:00 – 3:32) captures this. It begins with the introductory mediations that emphasize the collaborative nature of the DSLA and follows with three segments that illustrate Anita’s skill in utilizing what is available to her both externally and internally.

‘Using Rereading and Test Taking Strategy’: in this segment Anita and I are beginning to work through question 4, thinking about the characters of Turtle and Spider. When Anita chooses an ‘incorrect’ answer I give the first mediation, rereading, but Anita responds with a think aloud about the answers. Her reasoning is sound, but I’m sure she will benefit from rereading the question, so I repeat the mediation but have her reread the question. After rereading, she rethinks her reasoning and then makes her answer selection, the ‘correct’ one. Afterwards I also point out some of the important language used in the question, identifying the terms in both the question and answer that seemed helped her thinking and final decision making.

‘Using Text to Mediate’: in this segment, Anita verifies that she can check back in the text. After I give her the go-ahead she uses the text to help make her answer selection. I ask her what she did and she explains her strategy.

‘Elimination as Most Frequent Strategy’: in this segment, Anita has asked me to reread the question on vowel sounds. She reviews the choices on her own and then selects an answer. When I ask, she reviews her strategy out loud, step-by-step, and then confirms that she frequently uses elimination as a strategy.
Anita’s results suggested to me that she was really able to benefit from a collaborative approach in order to talk through her responses and check-in on basics more so than profiting by learning strategies. Furthermore, given the discussions we’d had so far about her difficulties with peers socially, I wondered if it was more the social aspect that was the important factor. I considered this as we talked through the reflection discussion.

The reflection discussion revealed that Anita had good recall with regard to our activities and the texts, but she was unable to articulate anything about her strategy use – even rereading, which had been her primary strategy throughout. I brought it up, however, and so we talked about her use of rereading which, for Anita, was a strategy that one used during tests or for answering questions posed about texts. Anita hadn’t considered that rereading might also be a strategy that good readers use to enhance their understanding of texts and even to figure out new vocabulary as they read.

The reflection discussion also revealed that Anita thought the DSLA was easier than the other tests because I had read the text to her. “All I had to do was answer the questions!” she said. However, Anita also thought the texts we’d used were not very difficult and that it would only have been “a little bit harder” if she’d had to read them on her own. In addition, Anita stated she had learned more during the DSLA with me, but her reasoning had to do with the accommodation of having the text read to her. When asked about anything that she would change, her suggestion was that it would better if the stories had been about cows! Funny as it was, we both agreed that the best texts to read are the ones that are about something you like.

After her reflection discussion, while reviewing what the next activities would involve, I told Anita that I’d like to find stories or books that she was interested in to include in our work together. Anita asked if I had read any of the Kaya books from the American Girl Series. I hadn’t
and asked her if she had. Her response was that she had ‘sort of’ read them so we agreed that we would use *Meet Kaya* by Janet Shaw, the first book in the series and one she had recently received as a present.

**Tutoring Sessions**

I began my planning by looking for the reading level of *Meet Kaya: An American Girl*. I discovered that it was rated at a grade 4.2 readability level whereas other books about Kaya by Janet Shaw seemed to range from a grade 4.6 to grade 5.5 level (from Renaissance Learning: Accelerated Reader™ Enterprise at [http://www.renlearn.com/ar/default.htm](http://www.renlearn.com/ar/default.htm)). Given that Anita had stated that she had read some of the other books about Kaya and that her scores were so high on the DSLA and the posttest, I thought that it was a good choice for us. I thought we could work on the one area that had clearly given her difficulty, comparing and contrasting characters. This was a way of engaging with text that Anita herself had pointedly remarked on as problematic and so I thought it would be a great opportunity to demonstrate to Anita that being able to compare and contrast characters can be a thoughtful and rich way to actively interact with a text and think about it, not just something to learn for a test. As well, there were lots of characters in the story with a variety of distinct character traits and she was already somewhat familiar with them having read some of the more difficult books already.

I began our first session with *What is the Big Idea?* as a warm up. Anita had some difficulties with categories that were outside of her experience such as cities and states, but was able to bring her experience to bear upon other groups, such as the building materials, “awesome cars”, and trees. When she made a personal connection with the words she would share her connection, talking without prompting. It was a pretty relaxed activity for us, though it served as a flag for me in terms of the relationship between Anita’s vocabulary and her life experience. I
would have to watch how I interpreted her responses to material that may involve knowing about things that had not been part of her day-to-day life to date. However, when we turned to our text, *Meet Kaya*, it became evident that Anita’s limitations were not restricted by her life experience alone.

In Clip 27 Anita: *Tutoring 1, Using her Choice of Text* (0:00 – 3:55) the beginning segment ‘*Anita Vocabulary Prep*’ confirms that Anita is familiar with some of the characters. In the next segment however, ‘*Anita Choosing to Read What She Has Read Before*’, I am surprised to discover right away that Anita is not familiar with the VCe (vowel-consonant-silent e) pattern and that she has difficulty with the sound of the letter c when followed by an e. We continued with the text, but I had to provide quite a bit of support – the text was well beyond even the instructional level for Anita and, as the segment continues, I give Anita help with inflected verbs and medial r-controlled vowels. As a result the help I am giving Anita is not at the level of mediation to support what is budding, but is scaffolding. In scaffolding I am not helping Anita learn and develop as much as I am shoring up her gaps by taking over as she simply does not have the decoding skills to work with text on this level. I offer some instruction, but it is clear to me that we are working outside Anita’s ZPD.

In the final segment on this clip, ‘*Anita Vocabulary Strategy*’, I demonstrate a strategy for understanding vocabulary using the word ‘restless’. As a result of what I have been learning about Anita’s approach to texts I anticipate that Anita has taken the term as a compound word and so I help her use a reading ahead strategy as well as her prior knowledge to develop her understanding of the term. However, these are not strategies that Anita is ready to apply on her own; she doesn’t yet realize that reading is more than skimming the surface of a passage.

What I moved towards during this session and wanted Anita to take from our work
together at this point, was a sense that reading can take time and thought and still be enjoyable. Overall the session revealed to me that Anita reads using her repertoire of sight words, some recognition of parts of words, and word guessing, often relying on pictures as contextualized support for her guesses. By the end of the session it seemed to me that Anita was scanning the text more so than reading it, hunting for words she could recognize and making up a story as she went. As a result Anita was unable to generate a story retelling from the initial pages read and I decided to change my direction for the tutoring. I had planned to work with the *Meet Kaya* text and see where that took us, but it was simply too difficult. I needed to gather more information and work from where Anita was and so I went back to some of the texts I had used with the other participants. See Table 5.5: *Anita’s Tutoring Sessions: Focus and Materials* below.

*Table 5.5: Anita’s Tutoring Sessions: Focus and Materials*

<table>
<thead>
<tr>
<th>1. compare/contrast - changed to – rereading, vocabulary</th>
<th>What is the big idea? <em>Meet Kaya: An American Girl</em> by Janet Shaw</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. prediction, locating information, main idea; rereading</td>
<td>“The Cat Who Caught His Own Tail” <em>(Virginia Standards of Learning Text)</em> <em>Getting the Main Idea (Specific Skills Series)</em> by Richard Boning</td>
</tr>
<tr>
<td>3/4. review main idea, review elements that support decoding</td>
<td><em>Sometime I Wonder If Poodles Like Noodles</em> by Laura Numeroff “Picnic” <em>(Virginia Standards of Learning Text)</em></td>
</tr>
</tbody>
</table>

The second tutoring session gave more clarity to Anita’s ways with texts. She had no difficulty with the comprehension questions in the partial DSLA; she needed no assistance with the areas of main idea, locating information, or prediction. On the other hand, Anita was unable to complete the three word analysis questions even with all learning-that-leads-development mediations; she needed support to use the test-taking skill of elimination to complete the activity with the ‘correct’ responses. In Clip 28 *Anita: Tutoring 2 (0:00 – 2:42)* I tell Anita what the data
suggests, that she is able to understand stories, but has difficulty with pronouncing words and getting the meaning from material she reads. She agrees with this assessment – it’s no surprise to her.

I had decided to use *Getting the Main Idea (Specific Skills Series)* to focus in on the ways that Anita used rereading. I wanted to get a better understanding of her application and understanding of the strategy and see if we could develop this strength further as a means of supporting her decoding and meaning making. The passages in the series are very short and I thought they might be interesting, too. In the next segment, ‘*Tutoring 2 Rereading*’, Anita has difficulty with a passage and I prompt her to consider what strategy might help her. She chooses rereading and after having the passage reread to her she is able to select the ‘correct’ answer and talk about why. From the way Anita talks, it appears that she is firm in her understanding that rereading is what gives answers to questions about texts.

In the next segment, however, ‘*Tutoring 2: Main Idea when the Story is Fun*’, I prompt Anita to discover the answer to a question she has formed from hearing the passage. My favorite part of the segment is when Anita turns her head from the print in front of us and looks at me while I read to her – she’s dumbfounded, seized by the text! The story itself is a funny little informational passage about gloves in earlier times and it has captured her attention - and mine! Anita and I both reread parts of the text as we consider her question and it’s clear that the rereading strategy helps Anita understand the text better as she discovers the answer to her own question. Anita is also able to answer the on-paper question about the main idea with ease.

This engagement reminds me of Helen’s work with the story about the elephants, the way she became emotionally involved and fascinated by the story. To me, this segment with Anita adds to what I’d learned from Helen. Not only may the enjoyment of a text bridge the chasm for
children who struggle with reading and taking reading tests, but the on-paper test-type questions may not have to take center stage in our work with children with learning disabilities. The big reading picture, engaging with texts and questioning them ourselves, may support children’s ability to do well with the more restricted form of reading, the reading test. Clearly Anita found the question I asked her about the main idea simple after she had connected with the text, formulated her own question, and then used the text itself to help her make sense of what the printed page offered her. Here is the place where it seems reading and testing reading may begin to coexist.

The clip ends with the final segment ‘Tutoring 2 Done’. I’ve included it to show that there is an important element in dynamic assessment that can’t be overlooked: the collaborative nature of the activity. Collaboration is a social activity and involves developing a relationship, a bond, and this bond must, in my view, include commonly held values that infuse the activity with social and cultural significance. More specifically, I would argue that this must involve a level of trust that is mutually agreed upon, whether explicitly or implicitly. As a result, it is not at all surprising that in this segment Anita doesn’t jump for joy when I accept her decision to stop working. She knew that when I asked, “Are you up for one more story?” that I am legitimately asking her and that the choice is hers; she can answer honestly and I will accept her decision.

Our final tutoring session was a double session and we worked together with Laura Numeroff’s poems as well as completed the DSLA-2. In Clip 29 Anita: Tutoring 3, Poems and Rhyming (0:00 – 3:15) Anita is somewhat dismayed by the idea of reading poems and quite anxious about reading them. She is reassured by the author whose books she is familiar with and she seems less anxious when given control over who will read. After she reads a poem and we
talk a bit about it, I turn the activity towards rhyming and discover that Anita knows what rhyming is, but it is a lot of work for her.

In Clip 20 Anita: Tutoring 3, Poetry and Rereading (3:15 – 5:21) Anita reads a short poem with difficulty and I ask Anita if she ‘gets’ the poem after she has struggled through the first reading; she says no. I have her reread it and her fluency improves, but I want to see if she is able to segment sounds well enough in this poem to find a rhyme.

In hindsight, I should have stopped here and spent time talking about the poem and enjoying it with her first; perhaps she would have made interesting connections on the word analysis level if she had been given an opportunity to immerse herself in the text – it’s hard to say. What I can say, however, is that I was absolutely focused on understanding her ability to work with isolated words and sounds rather than enjoying the poem or simply making meaning from the text. This hazard, the use of an embedded phonics approach that is somewhat superficial, obscures the pleasures and purposes of reading; the minutiae of decoding or other task-mastery activities overtakes the larger picture.

Nonetheless Anita is able to find a close-enough rhyme (Dalmatian and connection), but it’s difficult for her so I let her know that I understand how hard it is, but that this is one reason we are working on rhyming. Again, in hindsight, I think I ought to have phrased this a little differently! However, Anita says that this is what makes it fun. The clip finishes with me reiterating that Anita is strong in comprehension, but has difficulty with reading the words. Anita tells me, with a laugh, that I am reading the next one!

Thinking about this, equating hard with fun may seem contradictory, but yet many of us would agree that what is fun isn’t necessarily easy, nor is what is easy necessarily fun. That a child with special needs, who may be struggling on many fronts simultaneously, could also hold
this view might seem unlikely. Indeed, it’s perhaps easier to consider that this response to hard work could be Anita’s way of transforming the experience, a way to cover up her true feelings and/ or please me. However one of the things that Anita had shared with me about her general education schooling experience is that she is often left to help a child in her class who is less able than she. Rather than feeling good that she can help someone or has more ability than someone else, or glad that she doesn’t have to work hard, Anita told me that she feels like she doesn’t get a chance to learn, that she’s not given opportunities to work with children who are engaged in more challenging activities.

I inadvertently had the opportunity to witness this first hand weeks previously, on the day we completed the posttest. On this day I had prepared the principal’s office for the testing and then gone to find Anita at the library. She was working on a project with another classmate, a child who appeared to have one or more severe impairments that impeded learning. As we walked to the principal’s office Anita told me that she felt not only academically restricted, but also socially limited by the ongoing pairing up with one particular peer. She didn’t have a chance to join up in school related activities with other peers and she felt that this was why she was left out of their recess and lunch time social world. She added that she struggled to develop friendships beyond the school wall and felt herself limited to other children who ‘had no friends’. To that end, she knew that some of her friendships were not healthy – a point her mother confirmed – but she didn’t feel she had much alternative. The structure of her schooling left her feeling marginalized both academically and socially. She felt stuck.

As the tutoring connected to rhyming continued there was also a moment reminiscent of Lawrence’s experience with thinking and guessing. Anita is convinced that if she responds quickly that she is always guessing. In Clip 31 Anita: Tutoring 3, Guessing (5:21 – 6:07) I
explain to Anita that just because she is able to respond to a question quickly doesn’t mean that she has to be guessing; she also knows things. She’s not too sure about this, though! The tutoring continues with a demonstration by Anita of her reasoning for why two particular words rhyme. I don’t know if Anita connected this ability to thinking rather than guessing. I didn’t make the connection for her. Rather I wondered if her understanding of rhyme was based not so much on sounds, but more so on print, that it is her strongest cue for a rhyme in this case. Is her phonemic awareness overly anchored to the graphophonic cues of written language? Her work with the poems, so far, tells me that she is budding in a more advanced area of phonemic awareness, and that she’s not completely wedded to one grapheme to represent one phoneme. In the final clip for this portion of the session, Clip 32 Anita: Tutoring 3, Memory (6:07 – 6:31), I finally get to the heart of the matter, that Anita is indeed clear on rhyming, but that when working from texts or poems read out loud she has difficulty remembering what is read or said. The print helps support her working memory.

Our last meeting involved our engagement with the DSLA-2. The assessment scores from this final tutoring session appear to present a somewhat confusing picture of what Anita is able to do with and without assistance given her past performances. See below, Figure 5.32.

**Figure 5.32: Anita: Progress Underway vs. All or Nothing Results**

![](image)

**Figure 32: Visual Representation of DSLA-2**
However, it’s crucial to consider these results in light of what Anita and I had been working on throughout our activity together: shifting her approach of employing strategies for test-taking to really working with texts, language, words, and sounds – even during a testing or assessment situation. For example, Anita had been learning how to use rereading as a reading strategy, not just a test taking strategy. She had also been relearning rhyme and developing a deeper understanding of phonemes versus graphemes and the role that similarities play in reading.

It’s interesting to consider these activities in the context of the DSLA-2 results. Recall that during the partial DSLA, Anita had found the word analysis questions extremely difficult and, not surprisingly, Anita asked if she could read the questions ahead of the story to help with the DSLA-2. In Clip 33 Anita: DSLA 2, When Reading the Questions Ahead Seemed Like a Great Strategy (0:00 – 0:48), I say that this is fine, a good test-taking strategy in fact. Then she asks to follow along with the questions as I read the text. When I respond by asking her if she would then be able to remember the story and give a retelling, if requested, she quickly says no. I had okay-ed Anita’s request to read the questions ahead, but I denied her request to follow along with the questions as I read the text. I believe that reading the questions ahead on a test is a good test taking strategy, but I have difficulty with the notion of looking for or listening for answers as a way of demonstrating progress in reading. Anita explained that it was a way of taking a reading test that she was used to: read the questions and then use the text.

This suggests that Anita might have been given instruction that opened the door to an approach to reading that was based on finding answers with little ability to make meaning of the text being used. Anita is clearly skilled in test taking practice. This was evident throughout the study as she would naturally use opportunities to have questions and passages reread and, as a
matter of course, would scan to find key words that might indicate which answer was correct. However, I have come to believe that these strong test taking skills may have influenced and limited her understanding of what it is we do when we read.

As a result, I offer that Anita’s final scores on the DSLA-2 may be a combined result of learning to make meaning with texts, not simply answering questions, of not being able to rely on the second approach or testing strategy that she was well schooled in, and perhaps the realization that taking reading tests in the way she was used to taking them was not actually what reading is - outside of the context of testing. This realization was clearly a surprise for her. It is no wonder that her memory seems to have been an issue. There was no connecting with texts; her approach had taken away the meaningfulness of a whole text in order to hunt down answers to questions.

In the very final clip, Clip 34 Anita: Reading the Questions Ahead Doesn’t Really Help (0:48 – 2:13), Anita admits that reading the questions didn’t help that much and I suggest that she can remember more than she thinks she can and that we have the evidence for this in these results. In other words, really listening to a story, really focusing on making meaning from the text, is a better strategy, even in test taking, than is listening for answers.

Overall, Anita demonstrated progress during the pilot (see Figure 5.33).

**Figure 5.33: Anita Results: Total with Trend Line**
However, in hindsight, I may have missed an important opportunity to talk to Anita more about the difference between reading and testing-reading. This suggests, quite poignantly, that we must remain vigilant with regard to the messages that are conveyed to children (and other stakeholders) about testing and what it indicates, particularly when classroom based teaching also involves actively engaging in ‘test taking strategies’ instruction. Equally, it reminds us that we must remain vocal about our suspicions of test validity – that is, whether a state mandated, standardized test of reading actually tests reading or does it test children on a particular genre of reading: testing-reading? When it comes to such high stakes assessment practices we need to ensure that we are cognizant of the ramifications of such practices, particularly those that go beyond the numbers on a page.
Curtain Call

Corey, Lawrence, Helen, and Anita understood that the activities we were going to engage in together were to help them with reading and testing, but they also knew that it might make things better for other kids, too. The data presented in this chapter is focused on individuals, for the most part, so what can we learn from them that could apply more generally?

On assessment and accountability

First, it’s clear that there is much more going on in terms of children’s reading ability than meets the state mandated, standardized eye. In each case there was evidence, to a greater or lesser degree, that the children were more capable than a state mandated, standardized test might lead us to believe, but the state mandated, standardized tests were simply not sensitive enough to show this. By using a dynamic assessment approach such as the DSLA, however, we can uncover “what children can do with the assistance of others [which] might be in some sense even more indicative of their mental development than what they can do alone” (Vygotsky, 1978: 85). As a result, we can see what each child is ready to learn and this learning, learning-that-leads-development, is actually progress underway. Thus the DSLA, by operating within the zone of proximal development can provide data that notes not only what the child is able do on his or her own, but

‘data that can capture progress on the move, that is individually considered and collaboratively promoted, is dynamic and is happening, providing data for purposes of directing further learning and development. This type of progress is connected to process learning that is on the move, it is progress-towards.’

Thus “Progress-on-the-Move” is no longer concealed from our view; rather it opens up the ZPD to us and the possibility for teaching and learning activity that can promote cognitive and
affective development as we capture, with much more clarity, what is going on for each child in terms of their reading ability.

In other words, the detail of the information that can be revealed during a DSLA provides clear data points with which to begin the process of making very specific, data-driven decisions for intervention for each child that are focused on their development as readers - and as learners in general – without compromising the standardization of the assessment. That is to say, the data provides direction for learning-that-leads-development which allows for data-driven interventions. In our work together, these interventions were expressed as the process-activities we engaged in during the tutoring sessions and which supported each child’s overall learning in reading as per the goals of the general education curriculum. Here the direction I could begin with, with each child, allowed me to be both teacher and learner alongside each child from a very specific place: within each child’s ZPD. As a result, I could teaching with more accuracy - from where each child was budding in their development and, as we learned more from each other, I was able to continue working within the child’s ZPD to propel them forward, teaching them strategies that they could begin to appropriate.

To do this, I did what good teachers do, and focused on recognizing emerging patterns. This helped me maintain the activity in each child’s zone of proximal development and to offer him or her just the assistance they needed. This could be considered a more interactionist approach, yet I still made use of my scripted/standardized hints as a domain specific foundation. Thus, while someone who knows the student well, such as the student’s special education teacher, may be well positioned with regards to engaging in a DSLA with the student, understanding the domain specific content is equally important to remaining within a student’s ZPD particularly when stepping out from the scripted hints. A good teacher detective will apply
themselves to naturally and vigorously look for patterns, adjusting as further information contradicts or enlightens or redirects where the focus for intervention might go next. However, with regard to a DSLA, or any dynamic assessment for that matter, creating mediations ahead of time may help direct and support the dynamic assessment activity in particular ways. That is, a meditational structure can help to keep the assessment focused yet also allow for more active and authentic reflective and reflexive teaching as the teacher-administrator learns recursively from the ongoing data collection and analysis. Furthermore, by beginning with a task analysis approach, the teacher-administrator’s domain specific proficiency is also promoted. To this end, I would offer that not only it is possible to work more interactively with interventionist types of dynamic assessment such as the DSLA without losing standardized reliability, but that it offers learning opportunities for both student and teacher-administrator.

From a teacher’s perspective, it is important to add that I did not develop an entire curriculum for each child for the tutoring sessions. I was able to draw on my own knowledge of children’s texts and other materials to support the direction for learning-that-leads-development for each child. In addition, I was able to use some common material although I may have used it differently depending on a child’s needs. However, it became clear that understanding the content of the subject domain deeply and being cognizant of naturally occurring patterns of learning and development are clearly necessary to engage in dynamic assessment and to work within the ZPD in general.

Importantly, then, the information, as it emerges during the course of a DSLA can easily give teachers the ability to pinpoint strengths and weaknesses and then apply that knowledge to craft specific instructional goals. Returning to the data, by looking at the progress underway data from the DSLA-1 for each child and comparing it to the data had it been scored only as correct
or incorrect it is not only clear that much more is going on, but that much more can be revealed (see Figure 4.34: All Participants DSLA-1: Progress Underway vs Correct or Incorrect). That is, the DSLA provided the conditions conducive to revealing more information about each child’s reading vis-à-vis the goals of the general education curriculum as translated into a state mandated, standardized test.
Figure 5.34: All Participants DSLA-1: Progress Underway vs Correct or Incorrect

Rolling up the data in this way reflects a second type of progress, the ‘Individual Progress-to-a-Point’, which makes use of ‘data that can capture progress that is individually considered, is static and has happened, providing benchmark data that satisfies the mandate of IDEA and may include IEP goals.'
This type of progress may be considered in terms of process learning and consumable learning, but it is clearly ‘fossilized’ as Vygotsky might suggest; it has happened, it is progress-to-a-point.

In other words, because we can plot our activity using the mediations as benchmarks, Progress-on-the-Move can be given a data point or a number and be viewed as Individual Progress-to-a-Point. This means that there can be a direct relationship between what children are capable of with the support of another, what they are ready to learn, and how this compares to the goals of the general education curriculum. This information can be used to support IEP development especially with regard to making statements about a child’s progress towards the goals of the general education curriculum and with regard to developing specific, data-driven individual goals that can serve to direct teaching and learning.

This level of detailed information, linked to the general education curriculum, cannot be gleaned from the all or nothing types of tests currently being used.

That more is going on than meets the eye is also apparent in the DSLA-2 (see Figure 5.35: All Participants DSLA-2: Progress Underway vs Correct or Incorrect). Here, if we look at Helen’s scores in particular, we can envision the hazard of drawing all or nothing conclusions about a child’s ability from snap shot data in general. Even though Helen did not want to do the DSLA-2, it was a so called ‘bad day’, her progress does not remain entirely concealed from view; Helen can still reveal to us how much she is able to do under those circumstances using the DSLA.
Figure 5.35: All Participants DSLA-2: Progress Underway vs Correct or Incorrect
How mistaken are we about the progress that children are making? Indeed, how mistaken are we about the Adequate Yearly Progress of schools?

The data from the DSLA is promising in this regard for it also provides a way to look at progress-on-the-move within the larger NCLB context. This is the third type of progress, “Collective Progress-to-a Point”, using

‘data that can capture progress that is standardized against a collective, is static and has happened, providing benchmark data that satisfies NCLB goals in terms of AYP. This type of progress may be considered in terms of process learning and/ or consumable learning, it is fossilized and progress-to-a-point.

And, quite literally, a scoring formula could be used with the DSLA that would provide more realistic ‘numbers’ that reflect progress underway, the actual progress that children with learning disabilities are making towards the goals of the general education curriculum. However, it may be more pertinent to consider ways of using the DSLA data in terms of the recently proposed ‘growth model’ approach to AYP. Under this approach

[s]tates could measure growth in individual student achievement over time instead of comparing cohorts of students. All student subgroups would have to be proficient in math and reading by the original law’s 2013-14 deadline or else be “on a trajectory” to reach proficiency within three years. (Hoff, 2007)

Consider Figure 5.36: All Participants: Overall Results. The visual data reveals that all children improved their scores overall. In terms of the pre and posttests, the static tests, three of the four children showed improved scores after having participated in the DSLA-1.
Figure 5.36: All Participants: Overall Results

Corey

Lawrence

Helen

Anita
In a score-driven framework, it could be possible to consider the more detailed scores of the DSLA accounting for progress so that schools, districts, and states could have cumulatively higher scores with respect to demonstrating AYP. At the very least schools, districts, and states could reveal the hidden progress through supplemental material. This would demonstrate that their students with learning disabilities are making progress, but that it is concealed when the assessment and reporting routes are unable to reflect what these children are capable of in the context of the current assessment and accountability framework. However, what cannot be disregarded, in terms of the DSLA and the race to provide more favorable views of the work that schools are doing, is the potential value of teaching while testing, and while these notions of progress may satisfy various stakeholder needs vis-à-vis having data that informs instruction and can be considered in comparison to general education goals on the individual as well as the cohort level, did the DSLA promote the cognitive and affective development of the participants?

*On cognitive and affective development... and thinking, learning, testing & reading*

To consider this, recall from chapter three that evidence for cognitive development was via process learning versus consumable learning and required: “some form of ‘real world’ use to authenticate the student’s learning outside the testing framework, to promote transfer and cognitive development.” Further, the evidence for affective development was to be “some form of questioning or discussion with the student about their experience of the experience, and some form of observation and study of the student’s experiences”. As a result, the scores can be meaningful when used in the context of the reflection discussions, the tutoring involving real world texts, and the overall case studies. To this end, seeing the children apply the strategies we learned about during the DSLA-2 in the context of working with the real world texts and then back to the DSLA-2, having them articulate these strategies to varying degrees, and recognizing
that three of the children preferred the DSLA format of collaborative assessment suggests that cognitive and affective development was underway during the study.

In addition, several themes emerged with regard to learning, thinking, testing, and reading. In each instance, one case study seemed to articulate these themes more clearly than others, yet other children (both inside and outside the study) also contributed to my understanding of these as themes to consider in terms of cognitive-affective development.

1. Learning about Learning: Corey was clearly interested in learning about the way he learns and finding out more about way his mind worked in general. Teaching him to reflect and think about the way he arrives at conclusions, that is supporting his developing metacognitive abilities, gave Corey important insight into patterns of thinking and therefore control over his thinking. Understanding that the way we write down our language, the written code, was also based on patterns or relationships between sounds and signs, but that not all patterns were easy to figure out was also critical to his development. Corey is a child who looks for precision and patterns in his world and knowing that those patterns were there in the written code, waiting to be discovered, gave him the will to learn, confident that reading could be mastered as code breaking and meaning making.

Lawrence, too, began learning about learning, not as explicitly as Corey, but certainly his activity was laying down a framework for being able to understand more about being a learner. By the end of the study he had begun to feel comfortable with the activity of articulating his thought processes in terms of how he came to choose a particular answer. This involved reflecting on what he had read and how he had thought about it, developing mastery over his thinking as well as the text.

This emerging potential to engage in metacognitive activity was also developing in
Helen’s work, particularly during our work together with the *Multiple Skill Series*. Helen was excited when she ‘proved’ her answers, when she could ‘show and tell’ me how she came to her conclusions. She could answer ‘how do you know’ questions with specific reference to the text or what she thought about the text. And, equally importantly, she began to differentiate between this process and guessing. She wasn’t ready to talk about herself as a learner, however, when I suggested that she learned best when she read texts herself. She would comply, but there was no discussion.

Anita, on the other hand, was already quite familiar with the process of talking about her thinking with regard to answering test questions. She was less sure of herself, though, when it came to thinking outside the framework of test questions.

2. *Thinking & Guessing*: Lawrence’s experience in discovering that he could think, not just guess, was no less than life changing – for us both. Unfortunately, it has been my experience that teachers often tell children to ‘take a guess’ in order to encourage them to try, but without following up and developing the basis for metacognitive thinking they run the risk of what I now call the “Lawrence Effect”. The Lawrence Effect is when a child’s experience with schooling becomes oriented to guessing for right answers, leaving them unaware that they have the capacity to think, unaware of what thinking is, and unaware that they can control their thinking. Getting things right is understood as valuable, but getting it right also becomes a hit or miss endeavor. Having the right idea, being close, coming up with a great alternative, or even coming up with a thoughtful so-called ‘wrong’ answer is not rewarded, particularly in the all or nothing high stakes testing environment. It is product rather than process. Unfortunately there are unwanted byproducts.

I also engaged in activities with Helen that allowed her to begin to differentiate between
thinking and guessing. That she was able to point to her head and say she had information in her brain showed me that at the very least she was aware that she had some ownership, that it wasn’t simply luck or guessing.

Anita and I had opportunities to talk about thinking and guessing as well. These discussions let her know that there was a difference between a guess and something more. In the one instance I specifically told her that I didn’t think she had guessed and that just because she had given a quick reply to a question didn’t mean that it had to be a guess. I have to wonder how often she might have heard the words “lucky guess” or “good guess” as a response to her efforts.

3. **Layout, Length & Content**: One common element amongst all the children was the importance of content. While Corey was able to apply himself to all the texts we worked with, it was Laura Numeroff’s poetry that captivated him, that lead him to ask for more, to enjoy talking about verse and illustrations, and to actively engage in making meaning through personal connections with the work before us. He also relished our book talks – the ‘have you read’ and ‘my favorite part’ discussions about the Narnia series.

For Lawrence, personal connections and engagement came via content he could link and bridge to other things he knew about. For example, in our discussion about Benjamin Franklin after the *What is the Big Idea?* we read *Time Flies* and he was able to connect the lightning in the picture to Ben Franklin and to his experiences with lightening versus what the small bird might be feeling during a storm. It was as if he gained ownership over texts in this way. Certainly Anita was willing to try and stretch herself to tackle a text she really wanted to be able to read. And with Helen it became patently obvious that she did better with texts if she enjoyed them. At times her responses to texts seemed to transport her into the story and she would seem to hang onto the words as I read them. In other words, there was an important relationship between cognition and
affect, and enjoying the stories or poems seemed to balance or offset the challenge of text.

Other aspects that were important for Helen were length of the text and the layout of the tests and assessments. Helen clearly did better with the Multiple Skill Series where the passages and overall tests were shorter. That she was able to work just as long but with more energy, interest, stamina – even working with grade level text - suggests to me that this might be a consideration for the future. How long does a passage have to be, how many questions do we need to ask? What are the boundaries of ‘proficient’ for a reader like Helen? What is more important, the length of a text or thoughtful engagement with a text?

Lawrence’s reaction to the sheer volume of the pages in front of him, even though there was very little on them, supports this line of questioning on a more general level. The physical properties of a test or assessment or any type of text may make a big difference in a child’s approach to text, not to mention their confidence. Certainly, in terms of my own work, I would consider reformatting the presentation of the tests and assessments. My thinking had been to avoid overwhelming children with too much on a page. Instead they were overwhelmed by too many pages.

4. Testing Reading vs. Reading: Ultimately, the work that Anita and I did together stunned me. Anita had no way of knowing that she had been taught to read for tests rather than to simply read. Watching her scan the text of Meet Kaya in the same way she scanned the test and assessment passages is a vivid yet disturbing memory. What meaning could Anita ever make of a text if she ‘read’ only piecemeal print?

The Anita Effect, the result of teaching reading to the test rather than reading to make meaning, presumes that tests of reading are legitimate in what they are testing and therefore teaching children to pass such tests is akin to a guarantee that they are able to read.
Unfortunately, this is not necessarily so. On the other hand, I would argue that many of the same strategies that good readers use can be applied in tests of reading – and, indeed, this is in part what this study has attempted to show.

That all the children I worked with were being schooled to take reading tests is not disturbing to me. There is a need to be a good test taker in our society... to drive a car, enter post-secondary school, sail a boat, sell real estate, become a lawyer... testing is a method gate keeping we use, for better or for worse. Yet, we don’t expect that our ability to engage in these activities can be judged solely by a test. There is the practical, the applied, the experience of doing these activities that counts.

Why doesn’t it count for children? As Johnston & Costello suggest, “We have to consider what kind of literacy might benefit individuals, what kind of literate society we aspire to. And what assessment might best serve those ends” (Johnston & Costello, 2005: 256-7).

Experience does not go on simply inside a person…

…we live from birth to death in world of persons and things which is in a large measure what it is because of what has been done and transmitted from previous human activities.

…experience does not live in a vacuum.

There are sources outside an individual which give rise to experience.

- John Dewey
“I just filled in the bubbles. I didn’t care; there wasn’t anything in it for me.”

“Somehow my teacher made us want to do well; it was like we were in it together.”

- Passing comments by two preservice teachers on their experience with taking state mandated, standardized tests in school.

What does it mean for a child to be making progress in an American school today? My perception of this has been confounded by various understandings of progress, by the ways in which progress is allowed to be revealed, and the use to which a notion of progress as a test result is put. Indeed, the current federal assessment and accountability project has muddied the waters of progress by forging a link between the test results of individual students and the efficacy of their teachers, the Adequate Yearly Progress of their schools, the management of their school district, the ensuing state directives, and the overarching federal governance of schooling writ large. Here the trickle down of numbers from the monitoring of each child forms the foundation for the entire model of American public education. Yet, in the case of students with learning disabilities, it seems that the tests have not been designed to actually reveal their progress; rather it seems that testing is a matter of compulsory participation in an activity that simply highlights foregone conclusions and then secrets them away into subgroup statistics. This is the fallacy, the argumentum ad ignorantiam\(^{xxxI}\), of assuming that the tests being used and the techniques to administer them are adequate and useful ways and means of revealing the progress that children with learning disabilities may be making towards the goals of the general education curriculum and, as a result, not only tolerating but accepting the inferences wrung from the data. Moreover, these inferences become the facts upon which significant decisions are based that have potentially dire consequences for children, teachers, and schools.
Yet this research was not about proving that state mandated, standardized tests of subject domain matters should necessarily be scrapped. This work is an effort to consider how we can do better with what we have. Specifically, it has been to demonstrate that children with learning disabilities can and do make progress in the context of the academic objectives set in motion by the No Child Left Behind Act (2001) and that this progress can be rendered visible by using the current state mandated, standardized tests redesigned as dynamic assessments: the Dynamic Standards of Learning Assessments (DSLA). Furthermore, it has been to consider whether such assessments can provide suitable and useful data to multiple stakeholders, whether it is possible to bring into play a more insightful accountability measure with data that is not only relevant to AYP, but also to the cognitive and affective development of children, by providing the level of detail needed by teachers to inform the design of their instructional course of action in concert with the needs of their learners. And, in so doing, it is to augment the current accountability framework data, lifting a cloak of invisibility to reveal the progress that children with learning disabilities may be making towards the goals of the general education curriculum and thereby also more genuinely inform our discussions of the Adequate Yearly Progress of schools.

Like Pandora, however, lifting the lid on the box of high stakes tests released a fury.
Pandora and her box of high stakes tests....

Forthwith there escaped a multitude of plagues for hapless man, - such as gout, rheumatism, and colic for his body, and envy, spite, and revenge for his mind, - and scattered themselves far and wide. Pandora hastened to replace the lid! but, alas! the whole contents of the jar had escaped, one thing only excepted, which lay at the bottom, and that was hope. So we see at this day, whatever evils are abroad, hope never entirely leaves us; and while we have that, no amount of other ills can make us completely wretched.

– Bullfinch’s Mythology

Troubling Progress

In the process of investigating the ways and means that dynamic assessment might serve to ameliorate the constraints of high stakes testing vis-à-vis the hidden progress being made by children with learning disabilities my research began to trouble the notion of progress itself.

At its most neutral, progress can be defined as advancement, originating from the Latin progressus (http://www.thefreedictionary.com/progress), to move forward. However, progress came to be defined in multiple ways in this research:

- Progress 1: Individual-progress-on-the-move: a learner’s progress that is underway, continuing, and is most relevant to making data-driven instructional decisions germane to a child’s ongoing and lifelong learning and development either in situ or in the classroom. It can be described according to points in time, but it is not necessary to pinpoint space and time as it is not considered static. It is most relevant to the child and those who know the child. Context is important.

- Progress 2: Individual-progress-to-a-point: a learner’s progress that is underway, but is characterized by points in time deemed of particular importance to his/ her progression
in school. As a result, this type of progress is more teleological in nature, subject to the structure and function of the educational system. This type of progress can be used to satisfy data needs that arise at the individual level that require documentation relative to space and time. It may be relevant for the child and stakeholders who know the child, but progress captured at as data points can be disassociated from the context and used in various ways.

- Progress 3: Collective-progress-to-a-point: aggregated scores from Progress 2 create a collective progress. It is captured primarily to satisfy data needs that arise at the systemic level, such as school and district AYP.

These notions of progress came about as I began to outline the activity system with which I was concerned and the unit of analysis I would investigate. I came to realize that I had not one activity system, but had indeed sketched several. In so doing, progress as the unit of analysis also multiplied – and it could not be construed in the same way for all the activity systems although they were interconnected (see Figure 6.1: Overview of Activity Systems).
In addition, it became clear that while there was a relationship between what became Progress 2 and Progress 3, the current incarnation of progress being used under the NCLB rubric did not include Progress 1. This progress, progress as it is underway - on the move - for the
individual child with learning disabilities, this type of individual progress is woven into the legislation of IDEA, most obviously through the Individual Education Plan, but in point of fact it is irrelevant under the NCLB attainment orientation to progress. That is to say, under NCLB it is neither the process of getting there nor how close you are that counts, but only that you have made it.

In terms of being able to read by the end of third grade it boils down to this:

Can you do it? Yes or no? What’s the score?

And if you get enough of the answers correct that means that you can read, that means that your teacher is doing his or her job, the school is doing its job, the district, the state, the federal government – all doing their part to leave no child behind. But does a score really mean that you can read? Is this really a valid claim?

Troubling Validity

Popham (2007) suggests we make all kinds of inferences about students based on test results, noting that

[although a test may be described as reliable or unreliable, because reliability focuses on the consistency with which the test does its measurement job, it can never be valid or invalid. .. it’s the score-based inferences that we make about a student or a group students that are valid or invalid. (Popham, 2007: 30)

With this in mind, I want to consider the results for Helen and Anita. In every test and assessment based on a state mandated, standardized test Helen would appear to be a less able reader than Anita. Yet when it came to reading on or above grade level, outside the state mandated, standardized testing framework, Helen demonstrated that she might be the better reader. Based on those state mandated, standardized test and assessment scores alone not only
would my assumptions about these children’s reading abilities be invalid, but I would have remained ignorant with regard to the ramifications of the NCLB obsession with testing reading. Indeed, it was only through the process-activity of the DSLAs that I glimpsed other possibilities, and only through following up with tutoring based on the DSLA results that I was able to discover that there were crucial, hidden aspects to each girl’s reading that needed clarification and that these secrets, once unleashed, become important considerations with regard to the other participants and for children in general vis-à-vis our current accountability and assessment framework.

...and the relevance of the affective and cognitive link

Helen revealed that she could read at or above grade level if presented with short passages instead of full page narratives and she was more successful at question-answering if presented with five questions instead of ten. That is, the physical presentation of the material seemed to make a difference to her; it was pretty clear from the way she began to respond to the assessments during the tutoring that if it looked too long she thought it was going to be too hard. In addition, Helen’s ability to read and to tackle tests seemed to improve when she found the subject matter interesting. In other words, the content of the material as well as the look of the material appear to have been ‘powering up features’ for Helen, where powering up features give rise to the affective connect, impacting motivation and engagement and, in the case of Helen, reading ability.

Other examples of the relevance of affect to cognition can be seen in the case studies of Anita, Lawrence, and Corey as well. Like Helen, content was also important to Anita and her drive to read about Kaya was powered by this feature even though the text was well beyond even her instructional reading level.
Another example of a powering up feature, something that impacts cognition by forging a stronger affective link, is the personal connection between the text and the child. Certainly Lawrence’s budding ability to think about texts and begin to make connections with what he already knew was a powering up feature. Lawrence first began to link what he knew in relation to a text after our work together on *What is the Big Idea?* where he had learned that he was able to think and that he could take the time to think about things. During our next activity, he applied this awareness and made connections between the lightning in *Time Flies* and what he knew about Benjamin Franklin, and then together we connected this with experiences of storms in general and his experiences with storms in particular. He also connected the latter to his religious faith, his belief that God would protect him. Next, we went back to the text and thought out loud about the differences between a bird’s response to a storm and a human’s response to a storm. For Lawrence there was another explicit connection for him between his religious convictions and the way that he felt about storms, something he considered was not true for a bird. Afterwards, Lawrence began to approach other texts by stopping and thinking and then seeking personal connections.

Yet another clear connection between affect and cognition was in the appreciation of the dynamic assessment approach of not going-it-alone as noted by Corey, Lawrence, and Anita in the reflection discussion. Here dynamic assessment, and subsequently working within the ZPD during the tutoring sessions, encouraged the cognitive and affective connection in several fundamental ways: through an interactive and collaborative social framework hewn out of mutual respect and a common goal, by engagement in personally challenging activities and being supported by mediations used only as needed, and from a growing awareness that learning is taking place as the metacognitive processes form the core for transfer of learning to new
activities. In other words, as Vygotskian-based activities, the activities themselves are embedded with powering features that naturally support/ intertwine connections between affect and cognition.

And, indeed, it may be that the one does not happen without the other.

That affect may have an effect on cognitive engagement shouldn’t be too surprising though; certainly Vygotsky maintained that cognitive and affective development are intertwined and more recently Zull, in “The Art of Changing the Brain”, has argued that “emotion and thought are physically entangled – immensely so” (Zull, 2004: 70). Indeed, forward thinking cognitive science research is now beginning to consider not only “that social cognitive processes play an integral role in emotional appraisal, learning and regulation” but that it may not make sense to separate emotion and cognition (Ochsner & Phelps, 2007: 317-8). More specifically, in their review of the research, “How Emotions Inform Judgment and Regulate Thought”, Clore & Huntsinger (2007) conclude that “[a]ffect and emotion are pervasive influences on human judgment and thought” adding that “[e]xperiments consistently show that positive affective information promotes and negative affective information inhibits the cognitive responses that are accessible or dominant in a particular situation” (Clore & Huntsinger, 2007: 397). Furthermore, they note that it may be that “the source of affect would be finding oneself making progress on a task or encountering a difficulty. This ‘affective feedback’ would then regulate attention and elicit ‘cognitive tuning’ to meet task demands” (Clore & Huntsinger, 2007: 396). So what is the relevance of this affective and cognitive link when it comes to state mandated, standardized tests of reading?

A good question.
**Troubling Systems**

Perhaps what is most telling is for whom the progress data is most relevant and, as a result, who uses the data and to what ends. If we consider the three types of progress with regard to power, agency, and the structural reproduction of systems what is perhaps most astounding is that while progress 2 and 3 seem to be cogs in this structuration (Giddens, 1984), progress 1 is less clear on this point. Here structuration can be theorized as the dualism of agency (of teachers and students in particular, but concerning all stakeholders) and structure (education) reproducing the system as it is enacted, in this case, according to educational policy.

Progress 2 and 3 data are most relevant as scores to be used by stakeholders for comparison purposes on different levels of the existing system. These forms of progress must not only be measurable, but must be measured using a tool, and a tool must have defined end points. The tool in our case has been constructed under the umbrella policy of NCLB and now, by default, IDEA, to position the end point for all third grade students as something called proficient or better in reading by the end of grade 3. Ultimately, proficient equals a certain number of correct answers on a test. Advanced equals more.

Progress 1 data are most relevant to the student in their development regardless of the assessment and accountability system. Outside the DSLA, in the general education state mandated, standardized test, progress 1 does not exist. It does not conform to the ontology that nourishes the system. Progress 1 is not a cog. In progress 1 power and agency are not static, but flexible and take on meaning outside of structuration. Here reading and learning to read are blended while simultaneously uncoupling the activity of reading from the structure to which state mandated, standardized testing has wedded it – the test. As a result, through active engagement in learning-that-leads-development, the nexus of power shifts to the activity of assessment. Here
teacher and student are positioned as collaborators who have agency, with the teacher ever mindful of the student’s ZPD and the student free to be successful.

Not surprisingly, progress 1 begins to trouble our notion of system, particularly a system in which individuals come to be positioned in certain ways in a given structure – such as the positioning through labeling of children with learning disabilities. Thus it calls into question whether or not systems are necessarily to be transgressed for certainly there is a seemingly positive side for children identified as having special needs. Doors may open, for as Giddens (1984) reminds us structures may indeed enable rather than simply constrain agency. However, any “process shapes thought [and] the ways that we present knowledge condition and habituate us to certain patterns of thinking, certain means of seeing and reacting to the world” (Powell, 1999: 39). Perhaps then, at the very least, we need to be respectful and ensure that our model is not about deficits, but democracy (Shor, 1992) and to consider what our education planning presupposes as a vision of the future (Shannon, 1999).

In Standardized Minds: The High Price of America’s Testing Culture and What We Can Do To Change It (1999), Sacks reports on the research of Eric Anderman (1992), who compared the scores of middle schoolers on a standardized reading test, and who found that those who valued writing and reading and were learning-focused – fared far worse on the standardized achievement tests as a group than did their… peers, who used more superficial learning strategies….. The apparent contradiction between the demands of standardized testing against the deeper and more taxing kinds of thinking more valuable to schoolchildren in the long run was not lost on Anderman. He concluded that “these data suggest that there may indeed be a mismatch between the
purposes of standardized testing in literacy skills, and students’ emotional/motivational orientation toward reading and writing activities”. (Sacks, 1999: 210)

Later Sacks suggests that our paradigm of education has come to define “learning and teaching as rote memorization of facts and formulas; the hegemony of abstract knowledge over real-world application and performance; and rigid militaristic hierarchies placing students in the role of passive observers” (Sacks, 1999: 219).

Is this ‘our vision’, a passive system of one-size fits all that encourages conformity on the one hand while peddling democracy, freedom, and the American creed of liberty, equality, justice and fair treatment of all people on the other? xxxii In this system there is no power, no agency and students are positioned in an ‘object-centered’ society where agents are conceptualized as the effects of social order (Hauguaard on Giddens, 2002: 146).

Mandie, Dennis, Ryan, Kris and I had stripped down our classroom a week before the tests so we could get used to the starkness of the walls and the echo of our voices. We arranged the desks so everyone would have enough space for the oversized, large print versions of the tests we were using that year and we settled on a place for the tape recorder, the proctor and for me. We decided that we would only take one break in the middle of each test unless my voice ran out. I was reading all the tests out loud. We arranged all the snacks that parents had sent us, we sharpened all our pencils. And we had extras. We were in it together. But still, as I placed the first test down in front of him, Ryan ran for the garbage can. It sat beside him the entire time; he just kept throwing up. And we all kind of got used to it.

Later, on the day of the reading test, as I was reading the word analysis question, the one with the rhyming, Kris looked up at me with tears in his eyes.

“Mrs. Duvall?”
“I know. It’s okay Kris, I know. Just do your best.”

And I brought him the box of tissues.

Kris wasn’t going to get this question. He knew and I knew it.

Kris couldn’t rhyme.

At least... not without help...

He filled in the bubbles on the answer sheet on his own, though.

Later I filled in the other bubbles, the ones naming him as a person with a learning disability and identifying him as a person who received allowable and non-allowable accommodations due to his learning disability. And as I named him, so, too did I exclude him.

In the meantime?

Reflecting on high stakes testing practices such as a state mandated, standardized test of third grade reading, one has to wonder why we put any child through a form of testing that isn’t conducive to successfully engaging (or coping) with a text and then expect them to demonstrate all that they are capable of in terms of reading ability. Given what Shannon and Sacks suggest, it may be no accident, that these are indeed technologies of control – social control. Yet we are discovering that there are unexpected consequences for all children. In a recent study on six graders’ experiences with high stakes testing, Triplett & Barksdale (2005) found that “aspects of testing culture, such as limited time, long testing periods, and a code of silence cause students to experience nervousness, anger, and isolation” (Triplett & Barksdale, 2005: 257).

Understanding that there is a link between emotion and thinking is one thing – figuring out how to test or assess so as to provide an arena conducive to developing this connection in a positive way is another. Perhaps future research concerned with testing and assessment might
consider ways that we can change what we do by paying attention to the research coming out of
the cognitive sciences as well as what Corey, Lawrence, Helen and Anita have told us. Perhaps
different content choices could be incorporated into reading tests or become part of reading
assessment protocols. Perhaps different formats might be considered - especially for children
who are still developing their stamina for longer tests as they may be able to demonstrate more
with less. And perhaps revisiting the DSLA pilot makes sense – the active, collaborative
framework of the DSLA appears to have been conducive to revealing what children with
disabilities are capable of and the progress they are making towards the goals of the general
education curriculum. Does this change the vision?

*Troubling Reading – Consequential Validity*

What lingers for me is the legacy of the Anita Effect. In 1990, S. Jeanne Reardon
published a piece in *The New Advocate* called “Putting Reading Tests in Their Place”; in it she
wrote,

> Can the children read? *Yes,* the children can and do read, joyfully and critically. Teachers and children keep records, the classroom is alive with evidence of a successful reading program, but is this enough? *No,* not at this time. States and school systems require that children in this room, and in most public school classrooms, take standardized reading-tests to demonstrate their reading proficiency…. I have never found the test results useful to me or to the children I teach, but as long as the tests are used to judge the children and their reading I will teach the genre I call “reading-test-reading”….Reading-test-reading is a genre that my students must become familiar with to be literate participants in society….*[but]* It is not relevant to them as readers.” (Reardon, 1990: 29-30)
Reardon goes on to reveal how she taught the reading-test-reading genre and what discoveries her students made about the genre, letting us know that as the children understood the genre, they controlled it. *The Reading Test* lost its power. The children began to recognize the reading-test genre for what it is—a rather trivial form of writing. The students’ confidence in themselves as readers, as meaning makers, as individuals who can shape their world, [was] left intact. (Reardon, 1990: 35).

Seventeen years ago Reardon did not allow ‘The Reading Test’ to take over her classroom. And while I hope that there are still teachers like Reardon out there, the reality is that the current assessment and accountability framework fuels a culture that is more about fear of failure than achievement, and as a result the tests are steering the curriculum and all that come in contact with it. In “High-Stakes Testing and Curricular Control: A Qualitative Metasynthesis”, Au (2007) adds that not only do high-stakes tests encourage curricular alignment to the tests themselves. [But] This alignment tends to take the form of a curricular content narrowing to tested subjects, to the detriment or exclusion of non-tested subjects... [Furthermore] the structure of the knowledge itself is also changed to meet the test-based norms: Content is increasingly taught in isolated pieces and often learned only within the context of the tests themselves. Finally, in tandem with both content contraction and the fragmentation of knowledge, pedagogy is also implicated, as teachers increasingly turn to teacher-centered instruction to cover the breadth of test-required information and procedures. (Au, 2007: 263)
Indeed it seems that American schools have been usurped by the tests. The impact can be seen in children like Anita, children who have come to view a genre of reading, reading-test-reading, as reading itself. Ultimately, Anita and her peers have been betrayed by a system of schooling that more than ever seems to value reading as a search for ‘correct’ answers… a troubling form of reading.

The Hope

The Dynamic Standards of Learning Assessment investigation was meant to offer hope. It was meant to open a door of possibility to a better way of working within the current assessment and accountability system, a way that could unveil and support the progress being made by children with learning disabilities towards the goal of grade level reading proficiency. And it was meant to do so in a way that could improve upon the way we approach assessment for children with disabilities so that there is more value in this process for the children, for their parents and teachers, and for the administrations that watch over our schools.

For the children themselves the DSLA was able to capture and reveal the hidden progress that each child was making - all participants demonstrated that they are making progress towards achieving the reading goals as reflected in the state mandated, standardized tests. Three of the four participants preferred the DSLA assessment process; that is, they preferred the “doing it together” rather than the go-it-alone approach. Lawrence, while he preferred the DSLA, also noted that it was more difficult to do.

All participants stated that they learned more during the DSLA, although Corey eventually qualified this by stating that he learned more about himself during the DSLA, whereas he learned about the same, content wise, in the regular test.
The children’s parents stated that they saw the benefits of the research in terms of their children’s responses to the process and that the descriptive results of their child’s abilities as revealed by the research was new and important to their understandings of their children. Several parents contacted me via email to respond with feedback they were receiving from their children, which were generally positive comments regarding the research activities.

At the end of the first stage of the study, I communicated a general understanding of what each child’s assessment results suggested in terms of planning for the initial follow-up tutoring session and parents were kept apprised of what the tutoring sessions were going to focus on and why. Parents reported that they felt they were learning more about their child’s abilities from the research and asked if the case study results for their child could eventually be given to their child’s school for consideration. Lawrence’s mother was also interested in learning how to mediate Lawrence’s learning and development and was interested in further involvement after the study was over.

Future research might include a more formal, structured interview with the parents to find out what they viewed as important from the DSLA results, the development of ways to report results to parents that would be useful to them, and the development of follow-up sessions with parents and children to support mediated learning in the home.

Special education teachers expressed interest in the research. Permission had been granted for me to speak with the teachers of the participants and one teacher in particular became very interested in the ongoing results, especially the direction for instruction that the DSLA suggested, and the tutoring approaches used. A collaborative research project evolved with this teacher and has already been completed with the initial results presented at the Council for Exceptional Children Convention 2007. The results suggested that teachers may
see benefits to using the DSLA not only for their students’ immediate learning and development, but also in terms of informing their instructional plans and perhaps to provide added present level of performance data to use when developing Individual Education Plans. Additional research might include reviewing the DSLA results in order to develop ways to report data to teachers that is useful in terms of instructional design and students’ individual goal development.

Discussions with district level administrators, including members of the local school board who gave me permission to conduct the pilot study in the schools, suggest that administrations may find the data relevant to demonstrating progress for children with special needs. That is, the sensitivity of a dynamic assessment version of a state mandated, standardized assessment may potentially yield the kind of evidence necessary to prevent unwarranted sanctions befalling teachers, schools, and school districts. Future research could involve collaborative work with a school district to pilot the DSLA as a district wide assessment for children with disabilities to reveal their hidden progress and investigate ways of reporting this progress in order to satisfy NCLB requirements.

_Troubling Hope_

The purpose of this pilot study was to consider the potential of a Dynamic Standards of Learning Assessment as an accountability measure; as a way of addressing tomorrow’s accountability by accepting today’s responsibility to children with special needs.

As such a DSLA may have the potential to deliver.

Certainly the measure is more sensitive in terms of identifying where a child’s needs are in terms of learning-that-leads-development and particular reading goals, goals that may be benchmarked by a state mandated, standardized tests but that also have applicability to
authentic forms of reading with real world texts. The DSLA can also capitalize on scarce teaching and testing time, potentially effecting positive learning experiences for children that can deepen cognitive and affective development while simultaneously generating more sensitive data with which to analyze and report successful progress towards the goals of the general education curriculum. It makes sense from the standpoint of accountability. It ensures that when children with disabilities are included in tomorrow’s accountability practices that we are taking responsibility today to ensure that children, their teachers and their schools are not automatically at risk for failure to achieve in terms of the expected grade level standards, but yet are still held accountable for progress being made.

Thus it is still incumbent upon us to consider what it is that we as a nation hope to accomplish by compelling state-wide, standardized tests and that in our vision we take into account injurious bi-products of the administration of such testing practices and address those effects. Taking a cue from R. Murray Thomas and his investigation of high stakes testing (High-Stakes Testing: Coping with Collateral Damage, 2005) we need to be cognizant of the collateral damage that may occur as a result of the current assessment and accountability practices in general. In the case of Anita, indeed for Corey, Lawrence and Helen as well, we see there may be long term cognitive and affective consequences for the ways and means we support our children in developing skills to demonstrate competence via particular forms of testing.

However, we also need to search for the hope in our system of schooling our young and press forward for better ways and means of monitoring what is going on in the classrooms of America’s schools. As such, a dynamic standards of learning assessment offers a step towards a more pragmatic approach to educational reform by challenging us to seek incremental change rather than to overthrow the current accountability system willy-nilly. On the other hand, the
DSLA also offers a foundation for revolutionary educational reform in that it challenges us to think about testing in a different way, to reconsider our definitions of progress and our assumptions about children with disabilities, to really question the validity of state mandated, standardized reading tests, and to be more vigilant about our curriculum and the ways and means that tests and assessments should or should not impact directly on the instruction of children. It challenges us to begin to search beyond the tests for our vision of the future.

the erroneous assumptions that pervade public and political discussions about learning call into question whether the most strident voices for "evidence-based" teaching are at all familiar with critically important bodies of research; namely, research on learning, motivation, interest, and effective teaching. It is attention to these dimensions that makes the difference between teachers who merely follow the book and teachers who lead children to do their best, between children who trudge through the curriculum and those who acquire a lifelong passion for learning, and between institutions that warehouse children and those that truly educate them.

- Jalongo, 2007
Four months after this project was completed I had the opportunity to meet with Corey and his family. At that time, Corey’s mother reported to me that Corey was now reading on grade level and would be moving back into the general education classroom for his reading instruction. This was subsequently substantiated through contact from Corey’s special education teacher. Corey continues to receive his reading instruction in the general education classroom.

Helen continued to receive her reading instruction in the general education classroom with the assistance of an aide.

Lawrence and Anita remained in the special education resource room for reading instruction. Several months later, Lawrence’s special education teacher began to incorporate metacognitive questioning with all her students; Lawrence picked up where we had left off with regard to the ability to verbalize and take control over his thinking although he could not remember working with me. He did remember the ‘smelly eraser’.
Appendix

Dynamic Standards of Learning Assessment 1

Administrator’s Copy

This assessment uses the text *Spider and Turtle: A West African Tale*. The text can be found in the public domain, and has been made available to Virginia public school educators from the Virginia Department of Education as part of the Virginia Standards of Learning Assessments, Spring 2003 Released Test, Grade 3 English: Reading and Writing. I contacted the VDOE via telephone, as per their requirements, and requested permission to use the texts. In my message I noted that I was a licensed in Virginia as a special education teacher and this may be why I received no response from the VDOE although I made several attempts.

The Spring 2003 Released Test is available on the World Wide Web at: http://www.pen.k12.va.us/VDOE/Assessment/Release2003/VA-RIBs_g3rdgwr1-1.pdf

I constructed questions 3, 5, 7, and 9; the other questions are from the original released test.
“I’m going to read a story to you. Then I’m going to ask you some questions about the story. [Mediation 1] You and I will work together to answer the questions. We’ll use ways that readers like to use to understand what they read. These ways to understanding are called strategies, okay? Okay, lets both listen to the story as I read. You can follow along if you want,” point to the story on the paper.

Read the story.

“Now I’m going to ask you some questions. Along with each question, there’s going to be a copy of the story in front of you, show child the questions and point to the story beside the question, [Mediation 2] so you can use it to help if you want. Remember, we’re going to work together and use the ways or strategies that readers like to use to understand what they have read.” Make sure story question 1 is open. “Remember not to choose an answer until you are very sure about it and also, you can ask me to reread anything you like.”
Read:

1. The main reason someone would read this story is to……

A. learn about underwater turtles
B. be entertained by a funny story
C. gain facts about Africa
D. find out how real spiders live

3. **Student rephrases the question**: the student will rephrase the question in response to the prompt, “The first strategy is to think about the question and say it your way. To think, ask yourself, out loud: What is the question asking me? The question is asking me…. Go ahead and try that.”
   i. If the student answers ‘the main reason or why someone would read this story’ or an approximation, then prompt the student to consider the answers, “Now let’s go back and think about which of the answer choices could tell us the main reason someone would read this story, why would someone read this story. To think, we say: [Use the student’s words to approximate the main reason someone would read this story is…]” Reread the answers.

4. If the student does not answer or does not answer correctly **Check for understanding of the question**, state: “Let’s make sure we know what the question is about. The question is asking us to figure something out. In this case, the question is asking us to figure out why someone would read this story. What is the main reason?” and continue….

5. **Suggest story recall strategy of the story**: the student is prompted to recall the story, “Okay, a good strategy for understanding a story and figuring out the answer to a question is to think about the story again by retelling it. Sometimes, when we retell a story we understand it better. Can you tell me the story?”
   i. If the student gives reasonable recall, prompt the student to consider the answers, “Now let’s go back and think about which of the answer choices could be the reason someone would read this story.” Reread the answers.
   ii. If the student cannot…

6. **Suggest thinking about the sequence of a story**: “A story has a beginning, middle and an end. Can you tell me how this story starts, what happens, and how it ends?”
   i. if the student responds with a reasonable approximation, then prompt the student to consider the answers, “Now let’s go back and think about which of the answer choices could be the main reason someone would read this story.” Reread the answers.
   ii. If the student cannot…

7. **Suggest rereading with a strategy, setting a purpose for reading**: “Okay, let’s try another strategy. A good strategy when we read is to have a reason for reading. In this case, our reason for reading is to figure out an answer for our question. Let me reread the question and then reread the story to you. You listen to the story and keep in your mind…. Why would a reader want to read this story?” Reread the question, “The main reason someone would read this story is…?” and the
story to the student. Prompt the student to consider the answers, “Now let’s go back to the answer choices and consider which could be the best answer to why someone would read this story.” Reread the answers.

8. **Suggest elimination strategy, while rereading the question, to narrow the choices:** the student is offered a general strategy for elimination and a pencil. “Okay, a good strategy for answering questions is to eliminate, or get rid of, answer choices. Let’s read each choice again and you can decide whether there are any answer choices that you can cross out with the pencil and get rid of right away because they are not the main reason someone would read this story.” Reread each answer choice.

9. **Repeat, answer and review:** Repeat the question to the student and give the student the correct answer. State why it is the correct answer and why the others are not the correct answers. “Okay, let me reread the question and do some thinking out loud. I will think aloud about each answer and say why it is or isn’t a good answer to our question. Then I’ll go over the strategies, okay?”

10. **Reread the question.**

    “Okay.
    Let’s look at A: learn about underwater turtles. This story doesn’t really tell me about turtles; it tells me a story about a turtle. I would cross this one off. [cross off]
    B says: be entertained by a funny story. This is a funny story and funny stories are pretty good to listen to. This could be the reason someone would read this story, but I want to be sure. I won’t cross it off, but I’ll check the other answers before I decide.
    C says: gain facts about Africa. This story doesn’t really tell me much about Africa, like what kind of place it is or what happened there in the past. I don’t think it’s the best choice for learning about Africa. I would cross this one off. [cross off]
    And D says: find out how real spiders live. I’m pretty sure that real spiders don’t live this way. I mean, I don’t think they talk, cook dinner and invite turtles over! I would cross this one off. [cross off]
    So, the best answer to the main reason someone would read this story is probably to be entertained by a funny story.

Okay? Okay, before we go on, here are the four main strategies we used:
- First, thinking about the question by saying it out loud our own words.
- Next, thinking about the story by retelling it out loud in our own words.
- Then, rereading/listening to the story because we had a question we wanted to answer.
- Finally, getting rid of some of the answers by crossing out the ones that we didn’t think were the answers.”

Proceed to the next question.
2. How does Turtle teach Spider a lesson?

A. He makes food that Spider does not like to eat.
B. He asks Spider to help him make the dinner.
C. He makes Spider wash hands that he does not have.
D. He serves dinner in a place where Spider cannot go.

©2003 Commonwealth of Virginia Department of Education

3. **Student rephrases the question:** the student will rephrase the question in response to the prompt, “The first strategy is to think about the question and say it your way. To think, ask yourself, out loud: What is the question asking me? The question is asking me…. Go ahead and try that.”

   i. If the student answers ‘to remember what turtle did to teach Spider a lesson’ or an approximation, then prompt the student to consider the answers, “Now let’s go back and think about which of the answer choices could tell us the what Turtle did to teach Spider a lesson’. To think, we say: [Use the student’s words to approximate the way Turtle taught Spider a lesson was…]” Reread the answers.

4. If the student does not answer or does not answer correctly **Check for understanding of the question**, state: “Let’s make sure we know what the question is about. The question is asking us to remember something. In this case, the question is asking us to remember what Turtle did to Spider to teach him a lesson. What did Turtle do?” and continue….

5. **Suggest story recall strategy of the story:** the student is prompted to recall the story, “Okay, a good strategy for understanding a story and figuring out the answer to a question is to think about the story again by retelling it. Sometimes, when we retell a story we understand it better. Can you tell me the story?”

   i. If the student gives reasonable recall, prompt the student to consider the answers, “Now let’s go back and think about which of the answer choices could be what Turtle did to teach Spider a lesson.” Reread the answers.

   ii. If the student cannot…

6. **Suggest thinking about the sequence of a story:** “A story has a beginning, middle and an end. Can you tell me how this story starts, what happens, and how it ends?”

   i. if the student responds with a reasonable approximation, then prompt the student to consider the answers, “Now let’s go back and think about which of the answer choices could be what Turtle did to teach Spider a lesson.” Reread the answers.

   ii. If the student cannot…

7. **Suggest rereading with a strategy, setting a purpose for reading:** “Okay, let’s try another strategy. A good strategy when we read is to have a reason for reading. In this case, our reason for reading is to figure out an answer for our question. Let me reread the question and then reread the story to you. You listen to the story and keep in your mind…. What did Turtle do to Spider to teach him a lesson?” Reread the question and the story to the student. Prompt the student to consider the answers, “Now let’s go back to the answer choices and consider which could be the best answer to what Turtle did to Spider to teach him a lesson.” Reread the answers.
8. **Suggest elimination strategy, while rereading the question, to narrow the choices**: the student is offered a general strategy for elimination and a pencil. “Okay, a good strategy for answering questions is to eliminate, or get rid of, answer choices. Let’s read each choice again and you can decide whether there are any answer choices that you can cross out with the pencil and get rid of right away because they are not what Turtle did to Spider to teach him a lesson.” Reread each answer choice.

9. **Repeat, answer and review**: Repeat the question to the student and give the student the correct answer. State why it is the correct answer and why the others are not the correct answers. “Okay, let me reread the question and do some thinking out loud. I will think aloud about each answer and say why it is or isn’t a good answer to our question. Then I’ll go over the strategies, okay?”

Reread the question.

“Okay.
Let’s look at A: He makes food that Spider does not like to eat. I don’t remember the story saying what food Turtle made so we don’t really know what he made to eat so we can’t tell if Spider would have liked it or not. I would cross this one off. [cross off]
B says: He asks Spider to help him make the dinner. I don’t remember reading about the two of them doing any cooking together and I don’t think cooking would teach Spider a lesson. I don’t think this is a good choice. I would cross this one off. [cross off]
C says: He makes Spider wash hands that he does not have. I remember Spider told Turtle to wash his hands not Turtle telling Spider. Besides, it would be easy for the Spider to walk around on only 6 feet and not get his hands dirty. This wouldn’t teach him a lesson. I would cross this one off. [cross off]
And D says: He serves dinner in a place where Spider cannot go. I remember that Turtle made his dinner under water and that Spiders can’t live under the water. I’m pretty sure that real spiders don’t live this way. I think telling a hungry Spider his food is waiting for him under water would be a way to teach the Spider a lesson.
So, the best answer to what the Turtle did to teach the Spider a lesson is going to be D, he serves dinner in a place where Spider cannot go.

Okay? Okay, before we go on, here are the four main strategies we used:
- First, thinking about the question by saying it out loud our own words.
- Next, thinking about the story by retelling it out loud in our own words.
- Then, rereading/listening to the story because we had a question we wanted to answer.
- Finally, getting rid of some of the answers by crossing out the ones that we didn’t think were the answers.”

Proceed to the next question.
3. **Student rephrases the question:** the student will rephrase the question in response to the prompt, “The first strategy is to think about the question and say it your way. To think, ask yourself, out loud: What is the question asking me? The question is asking me…. Go ahead and try that.”
   
   i. If the student answers ‘to think about what Spider might do next time someone wants to join him for dinner’ or an approximation, then prompt the student to consider the answers, “Now let’s go back and think about which of the answer choices could be what Spider might do next time someone wants to join him for dinner”. To think, we say; [*Use the student’s words to approximate the next time Spider might…*]” Reread the answers.

4. If the student does not answer or does not answer correctly **Check for understanding of the question**, state: “Let’s make sure we know what the question is about. The question is asking us to think about something that isn’t in the story, is it? In this case, the question is asking us to predict or guess what Spider will probably do next time someone wants to join him for dinner. What would he probably do next time?” and continue….

5. **Suggest story recall strategy of the story:** the student is prompted to recall the story, “Okay, a good strategy for understanding a story and figuring out the answer to a question is to think about the story again by retelling it. Sometimes, when we retell a story we understand it better. Can you tell me the story?”
   
   i. If the student gives reasonable recall, prompt the student to consider the answers, “Now let’s go back and think about which of the answer choices will probably be what Spider would do next time someone wants to join him for dinner.” Reread the answers.

   ii. If the student cannot…

6. **Suggest thinking about the sequence of a story:** “A story has a beginning, middle and an end. Can you tell me how this story starts, what happens, and how it ends?”
   
   i. If the student responds with a reasonable approximation, then prompt the student to consider the answers, “Now let’s go back and think about which of the answer choices could be what Spider would do next time someone wants to join him for dinner.” Reread the answers.

   ii. If the student cannot…

7. **Suggest rereading with a strategy, setting a purpose for reading:** “Okay, let’s try another strategy. A good strategy when we read is to have a reason for reading. In this case, our reason for reading is to figure out an answer for our question. Let me reread the question and then reread the story to you. You listen to the story
and keep in your mind…. What will Spider do next time someone wants to join him for dinner?” Reread the question and the story to the student. Prompt the student to consider the answers, “Now let’s go back to the answer choices and consider which could be the best answer to what Spider will probably do next time someone wants to join him for dinner.” Reread the answers.

8. **Suggest elimination strategy, while rereading the question, to narrow the choices:** the student is offered a general strategy for elimination and a pencil, “Okay, a good strategy for answering questions is to eliminate, or get rid of, answer choices. Let’s read each choice again and you can decide whether there are any answer choices that you can cross out with the pencil and get rid of right away because they are not what Spider will probably do next time someone wants to join him for dinner.” Reread each answer choice.

9. **Repeat, answer and review:** Repeat the question to the student and give the student the correct answer. State why it is the correct answer and why the others are not the correct answers. “Okay, let me reread the question and do some thinking out loud. I will think aloud about each answer and say why it is or isn’t a good answer to our question. Then I’ll go over the strategies, okay?”

Reread the question.

“Okay. Let’s look at A: be glad for the company and be welcoming. At the end of the story, Turtle and Spider were both lonely eating by themselves and they seemed to want to eat together in a place they could both be happy. I think this could be what Spider would do next time. I’m going to check the other answers, just in case, but this one sounds like it could probably be what happens next time someone wants to join Spider for dinner.

B says: say he doesn’t have enough food. Since Spider didn’t lie about his food the first time, I don’t think he would do next time. Plus he seems to want company. I don’t think this is a good choice. I would cross this one off. [cross off]

C says: tell them to go wash their hands. I think this is important to Spider, but after what happened to Turtle I don’t think he will do this automatically. He might do it, but I don’t know for sure. I would cross this one off. [cross off]

And D says: ask them to help make dinner. This never happened in the story at all so I don’t think it would be something that Spider would do. I don’t know for sure, but I don’t think this is the best choice. [cross off]

So, the best answer to what Spider will probably do the next time someone wants to join him for dinner is A, be glad for the company and be welcoming.

Okay? Okay, before we go on, here are the four main strategies we used:

- First, thinking about the question by saying it out loud our own words.
- Next, thinking about the story by retelling it out loud in our own words.
- Then, rereading/listening to the story because we had a question we wanted to answer.
- Finally, getting rid of some of the answers by crossing out the ones that we didn’t think were the answers.”

Proceed to the next question.
4. In most of this story, both Turtle and spider can BEST be described as -
A. selfish
B. truthful
C. afraid
D. kind

©2003 Commonwealth of Virginia Department of Education

3. **Student rephrases the question**: the student will rephrase the question in response to the prompt, “The first strategy is to think about the question and say it your way. To think, ask yourself, out loud: What is the question asking me? The question is asking me…. Go ahead and try that.”
   
   iii. If the student answers ‘to think about something that describes both Turtle and Spider’ or an approximation, then prompt the student to consider the answers, “Now let’s go back and think about which of the answer choices could be the best describing word for both Turtle and Spider in this story’. To think, we say: [Use the student’s words to approximate the best describing word for both Turtle and Spider is…]" Reread the answers.

4. If the student does not answer or does not answer correctly **Check for understanding of the question**, state: “Let’s make sure we know what the question is about. The question is asking us to compare Turtle and Spider and figure out something about them that is the same, a way they both are. In this case, the question is asking us to figure the best word that describes Turtle and that describes Spider. What are they both like?” and continue….

5. **Suggest story recall strategy of the story**: the student is prompted to recall the story, “Okay, a good strategy for understanding a story and figuring out the answer to a question is to think about the story again by retelling it. Sometimes, when we retell a story we understand it better. Can you tell me the story?”
   
   i. If the student responds with a reasonable approximation, prompt the student to consider the answers, “Now let’s go back and think about which of the answer choices could be the best word to describe Turtle and describe Spider.” Reread the answers.
   
   ii. If the student cannot…

6. **Suggest thinking about the sequence of a story**: “A story has a beginning, middle and an end. Can you tell me how this story starts, what happens, and how it ends?”
   
   i. If the student responds with a reasonable approximation, then prompt the student to consider the answers, “Now let’s go back and think about which of the answer choices could be the best describing word for both Turtle and Spider.” Reread the answers.
   
   ii. If the student cannot…

7. **Suggest rereading with a strategy, setting a purpose for reading**: “Okay, let’s try another strategy. A good strategy when we read is to have a reason for reading. In this case, our reason for reading is to figure out an answer for our question. Let me reread the question and then reread the story to you. You listen to the story and keep in your mind…. In what way are Turtle and Spider the same?” Reread the question and the story to the student. Prompt the student to consider the answers, “Now let’s go back to the
answer choices and consider which could be the best answer to what best describes Turtle and Spider.” Reread the answers.

8. **Suggest elimination strategy, while rereading the question, to narrow the choices:** the student is offered a general strategy for elimination and a pencil, “Okay, a good strategy for answering questions is to eliminate, or get rid of, answer choices. Let’s read each choice again and you can decide whether there are any answer choices that you can cross out with the pencil and get rid of right away because they are not what describes Turtle and what describes Spider in this story.” Reread each answer choice.

9. **Repeat, answer and review:** Repeat the question to the student and give the student the correct answer. State why it is the correct answer and why the others are not the correct answers. “Okay, let me reread the question and do some thinking out loud. I will think aloud about each answer and say why it is or isn’t a good answer to our question. Then I’ll go over the strategies, okay?”

Reread the question.

“Okay.
Let’s look at A: He makes food that Spider does not like to eat. I don’t remember the story saying what food Turtle made so we don’t really know what he made to eat so we can’t tell if Spider would have liked it or not. I would cross this one off. [cross off] B says: He asks Spider to help him make the dinner. I don’t remember reading about the two of them doing any cooking together and I don’t think cooking would teach Spider a lesson. I don’t think this is a good choice. I would cross this one off. [cross off] C says: He makes Spider wash hands that he does not have. I remember Spider told Turtle to wash his hands not Turtle telling Spider. Besides, it would be easy for the Spider to walk around on only 6 feet and not get his hands dirty. This wouldn’t teach him a lesson. I would cross this one off. [cross off] And D says: He serves dinner in a place where Spider cannot go. I remember that Turtle made his dinner under water and that Spiders can’t live under the water. I’m pretty sure that real spiders don’t live this way. I think telling a hungry Spider his food is waiting for him under water would be a way to teach the Spider a lesson.

So, the best answer to what the Turtle did to teach the Spider a lesson is probably going to be serves dinner in a place where Spider cannot go.

Okay? Okay, before we go on, here are the four main strategies we used:
- First, thinking about the question by saying it out loud our own words.
- Next, thinking about the story by retelling it out loud in our own words.
- Then, rereading/listening to the story because we had a question we wanted to answer.
- Finally, getting rid of some of the answers by crossing out the ones that we didn’t think were the answers.”

Proceed to the next question.
5. What is the last thing that happens before Spider and Turtle decide to eat in the woods?

A. Turtle has to try to wash his hands.
B. Spider has to try to swim underwater.
C. They realize they are tired of eating alone.
D. They both go to the woods to look around.

3. **Student rephrases the question**: the student will rephrase the question in response to the prompt, “The first strategy is to think about the question and say it your way. To think, ask yourself, out loud: What is the question asking me? The question is asking me…. Go ahead and try that.”
   i. If the student answers ‘to remember the last thing that happens before Spider and Turtle thought about eating in the woods’ or an approximation, then prompt the student to consider the answers, “Now let’s go back and think about which of the answer choices is the last thing that happens before Spider and Turtle decided to eat in the woods. To think, we say: [Use the student’s words to approximate ‘the last thing that happens before they decided to eat in the woods is…’]” Reread the answers.

4. If the student does not answer or does not answer correctly **Check for understanding of the question**, state: “Let’s make sure we know what the question is about. The question is asking us to remember something. In this case, the question is asking us to remember the last thing that happens before Turtle and Spider decide to eat in the woods. What is it that happens right before Spider and Turtle decide to eat in the woods?” and continue….

5. **Suggest story recall strategy of the story**: the student is prompted to recall the story, “Okay, a good strategy for understanding a story and figuring out the answer to a question is to think about the story again by retelling it. Sometimes, when we retell a story we understand it better. Can you tell me the story?”
   i. If the student responds with a reasonable approximation, prompt the student to consider the answers, “Now let’s go back and think about which of the answer choices is the last thing that happens before Turtle and Spider decide to eat in the woods.” Reread the answers.
   ii. If the student cannot…

6. **Suggest thinking about the sequence of a story**: “A story has a beginning, middle and an end. Can you tell me how this story starts, what happens, and how it ends?”
   i. If the student responds with a reasonable approximation, then prompt the student to consider the answers, “Now let’s go back and think about which of the answer choices could be the last thing that happens before Spider and Turtle decide to eat in the woods.” Reread the answers.
   ii. If the student cannot…

7. **Suggest rereading with a strategy, setting a purpose for reading**: “Okay, let’s try another strategy. A good strategy when we read is to have a reason for reading. In this
case, our reason for reading is to figure out an answer for our question. Let me reread the question and then reread the story to you. You listen to the story and keep in your mind…. What is the last thing that happens before Spider and Turtle decide to eat in the woods?” Reread the question and the story to the student. Prompt the student to consider the answers, “Now let’s go back to the answer choices and consider which could be the the last thing that happens before Spider and Turtle decide to eat in the woods.” Reread the answers.

8. **Suggest elimination strategy, while rereading the question, to narrow the choices**: the student is offered a general strategy for elimination and a pencil, “Okay, a good strategy for answering questions is to eliminate, or get rid of, answer choices. Let’s read each choice again and you can decide whether there are any answer choices that you can cross out with the pencil and get rid of right away because they are not the last thing to happen before Spider and Turtle decide to eat in the woods.” Reread each answer choice.

9. **Repeat, answer and review**: Repeat the question to the student and give the student the correct answer. State why it is the correct answer and why the others are not the correct answers. “Okay, let me reread the question and do some thinking out loud. I will think aloud about each answer and say why it is or isn’t a good answer to our question. Then I’ll go over the strategies, okay?”

Reread the question.

“Okay. Let’s look at A: Turtle has to try to wash his hands. Does this happen and then they decide to eat in the woods? I know it happens but I think it happens a lot earlier than right before Spider and Turtle decide to eat in the woods. I would cross this one off. [cross off]

B says: Spider has to try to swim underwater. Does this happen and then they decide to eat in the woods? I know it happens but I think it happens a lot earlier than right before Spider and Turtle decide to eat in the woods. I would cross this one off. [cross off]

C says: They realize they are tired of eating alone. Does this happen and then they decide to eat in the woods? Yes I am pretty sure this happens right before they decide to eat in the woods. I think this is the best choice so far, but I am going to read the last answer before I decide. I won’t cross this one off though.

And D says: They both go to the woods to look around. Does this happen and then they decide to eat in the woods? I don’t remember them going to the woods first so I would cross this one off. [cross off]So, the best answer to what the Turtle did to teach the Spider a lesson is probably going to be C, that they realize they are tired of eating alone.

Okay? Okay, before we go on, here are the four main strategies we used:

- First, thinking about the question by saying it out loud our own words.
- Next, thinking about the story by retelling it out loud in our own words.
- Then, rereading/listening to the story because we had a question we wanted to answer.
- Finally, getting rid of some of the answers by crossing out the ones that we didn’t think were the answers.”
Proceed to the next question.
6. In paragraph 5, what does the word appetite mean?

A. idea
B. hand
C. hunger
D. house

3. **Student rephrases the question:** the student will rephrase the question in response to the prompt, “The first strategy is to think about the question and say it your way. To think, ask yourself, out loud: What is the question asking me? The question is asking me…. Go ahead and try that.” If the student answers ‘what is another word for appetite’ or an approximation, then prompt the student to consider the answers, “Now let’s go back and think about which of the answer choices is another word for appetite. To think, we say: [Use the student’s words to approximate ‘another word for appetite is...’] Reread the answers.

4. If the student does not answer or does not answer correctly **Check for understanding of the question,** state: “Let’s make sure we know what the question is about. The question is asking us to think about something. In this case, the question is asking us to think about a word from the story, in paragraph 5, and choose another word that means the same thing. What could we say instead of appetite?” Reread the answers.

5. **Suggest thinking about the word in context:** the student is prompted to look at/find and read/listen to the relevant sentence/passage in the story, “Okay, a good strategy for understanding a word is to think about what it means in the story. Can you find the word in the story? [If the student cannot find the word: Point to the word in the passage.] Okay, now let’s read the paragraph the word is in. [read paragraph 5]. “What do you think the paragraph tells us?”

a. If the student says something like “Spider got an idea” redirect and suggest “Let’s read just the sentence that the word appetite is in,” read the sentence, “Now, what do we know from that sentence?”

i. If the student gives an answer along the lines of Spider being hungry, prompt the student to consider the answers by reading the question and answers.

ii. If the student gives an answer along the lines of “Spider wants to eat all the food”, prompt the student, “Okay, if you wanted to eat all the food then how would you probably be like?” If the student gives an answer along the lines of being hungry, prompt the student to consider the answers by reading the question and answers.

6. **Suggest rereading the passage and substituting the meaning choices as part of an elimination strategy:** “Another good strategy is to read the paragraph and substitute the word we don’t know with the answer choices. Let’s read the paragraph again and each time we read it we’ll substitute one of the answer choices for the word appetite. Okay, be sure to listen to each one. You can decide whether there are any answer choices that you can eliminate or get rid of and cross them out with the pencil.” Read the sentence in paragraph 5 four times and substitute an answer choice each time. Reread the question and answers.
7. **Repeat, answer and review:** Repeat the question to the student and give the student the correct answer. State why it is the correct answer and why the others are not the correct answers. “Okay, let me reread the question and do some thinking out loud. I will think aloud about each answer and say why it is or isn’t a good answer to our question. Then I’ll go over the strategies, okay?”

Reread the question.

“Okay.
Let’s look at A: idea. We know the sentence is about Spider wanting to eat all the food. The paragraph tells us that after we find out about his appetite and that he wanted all the food, an idea came to him. Why would they say he had a big idea and then afterwards say an idea came to him? It doesn’t make sense. I would cross this one off. [cross off]
B says: hand. The sentence isn’t about Spider’s hand. And he probably doesn’t have a big hand either! I would cross this one off. [cross off]
C says: hunger. I know that having hunger means wanting food. And a big hunger might make Spider want all the food. This makes sense to me and I think this is the best choice so far, but I am going to read the last answer before I decide. I won’t cross this one off.
And D says: house. What difference does it make whether Spider has a big house or not? This doesn’t seem to have anything to do with wanting all the food. I would cross this one off. [cross off]
So, the best answer to what does the word appetite mean is C, ‘hunger’.

Okay? Okay, before we go on, here are the four main strategies we used:

- First, thinking about the question by saying it out loud in our own words.
- Next, thinking about the passage or sentence and then the meaning of the word in the sentence or passage it’s in.
- Then, thinking about the meaning of a word by asking questions about what the sentence or paragraph is trying to tell us and trying to think of a different way to say it.
- Finally, substituting the answer choices in the sentence and thinking about the meanings as we reread the sentence so we can get rid of some of the answers by crossing out the ones that we didn’t think were the answers.”

Proceed to the next question.
7. Read this sentence from the story.

“Let’s meet for dinner in the woods,” Turtle said one day.

Which is another correct way to write let’s?

A. let us
B. let was
C. let is
D. let has
pencil and get rid of because they don’t make any sense. Okay, be sure to listen to each one. Read the sentence in four times and substitute an answer choice each time. Reread the question and answers.

6. **Repeat, answer and review**: Repeat the question to the student and give the student the correct answer. State why it is the correct answer and why the others are not the correct answers. “Okay, let me reread the question and do some thinking out loud. I will think aloud about each answer and say why it is or isn’t a good answer to our question. Then I’ll go over the strategies, okay?”

Reread the question.

“Okay.

Let’s look at A: idea. We know the sentence is about Spider wanting to eat all the food. The paragraph tells us that after we find out about his appetite and that he wanted all the food, an idea came to him. Why would they say he had a big idea and then afterwards say an idea came to him? It doesn’t make sense. I would cross this one off. [cross off]

B says: hand. The sentence isn’t about Spider’s hand. And he probably doesn’t have a big hand either! I would cross this one off. [cross off]

C says: hunger. I know that having hunger means wanting food. And a big hunger might make Spider want all the food. This makes sense to me and I think this is the best choice so far, but I am going to read the last answer before I decide. I won’t cross this one off.

And D says: house. What difference does it make whether Spider has a big house or not? This doesn’t seem to have anything to do with wanting all the food. I would cross this one off. [cross off]

So, the best answer to what does the word appetite mean is C, ‘hunger’.

Okay? Okay, before we go on, here are the four main strategies we used:

- First, thinking about the question by saying it out loud our own words.
- Next, thinking about the meaning of a word by finding it and rereading the sentence or passage it’s in.
- Finally, substituting the answer choices in the sentence and thinking about the meanings as we reread the sentence so we can get rid of some of the answers by crossing out the ones that we didn’t think were the answers.”

Proceed to the next question.
8. Read this sentence from the story.

“Aren’t you going to bring my dinner up here?”

Which word rhymes with here?

A. fear
B. there
C. wear
D. care

©2003 Commonwealth of Virginia Department of Education

3. **Student rephrases the question**: the student will rephrase the question in response to the prompt, “The first strategy is to think about the question and say it your way. To think, ask yourself, out loud: What is the question asking me? The question is asking me…. Go ahead and try that.”
   i. If the student answers ‘to find which word rhymes with here’ or an approximation, then prompt the student to consider the answers, “Now let’s go back and think about which of the answer choices rhymes with here. To think, we say: [Use the student’s words to approximate “the word that rhymes with here is...”]” Reread the answers.

4. If the student does not answer or does not answer correctly **Check for understanding of the question**, state: “Let’s make sure we know what the question is about. The question is asking us find a rhyme. A rhyme is when two words have the same ending sounds. So in the words me and be, the end sound is the same, “ee”, and I know me and be rhyme. What is the part of the word “here” that is the rhyming part?” if the student does not know say “it’s ee-r” and continue….

5. **Suggest word-to-word oral repetition strategy to listen and compare the words**: the student is prompted to state each target word with each response possibility, “So, a good strategy for finding a rhyme is to repeat the underlined word, “here”, out loud and then repeat an answer choice out loud and compare them. We’ll do this with each possible answer choice. Please try that.” Have the student try that. If necessary, “I’ll point to each word and say it first, then you say “here” and that word, okay?” If the student cannot or is unable to make use of the strategy…

6. **Suggest word-to-word repetition strategy to listen and compare while considering the mouth for clues**: the student is prompted to consider his or her mouth as he or she states each target word with each response possibility. “Okay, a good strategy for learning about rhyming is to think about the way your mouth moves when you say the words. Your mouth will make the same shape when you say the rhyming part of a word. Now I’d like you to do what you did in the last strategy: Repeat the underlined word, “here”, out loud and then repeat an answer choice out loud and compare them. We’ll do this with each possible answer choice. Go ahead and try that, please.” Have the student try that. If the student cannot or is unable to make use of the strategy…
   a. “One way to learn this strategy is to watch your mouth while you say the words. Your mouth will look the same when you say the rhyming part of a word. Using the mirror, say the word “here”. See the way your mouth moves at the end of the
word? Now do what you did in the last strategy: Repeat the underlined word, “here”, out loud and then repeat an answer choice out loud and compare them. We’ll do this with each possible answer choice. Go ahead and try that, please.” Have the student try that. If the student cannot or is unable to make use of the strategy…

i. “Another way to understand this is to use the same strategy we just used but this time you also put your hands gently on top of your mouth while saying the word “here”. Feel the way your mouth moves, especially at the end of the word. Now let’s do what you did in the last strategy while you touch your mouth: Repeat the underlined word, “here”, out loud and then repeat an answer choice out loud and compare them. We’ll do this with each possible answer choice. Go ahead and try that, please.” Have the student try that. If the student cannot or is unable to make use of the strategy…

7. **Suggest elimination strategy, while rereading the question, to narrow the choices**: the student is offered a general strategy for elimination and a pencil, “Okay, a good strategy for answering questions is to eliminate, or get rid of, answer choices. Let’s read each choice again and you can decide whether there are any answer choices that you can cross out with the pencil and get rid of right away because they are not a rhyme for ‘here’”. Reread each answer choice.

8. **Repeat, answer and review**: Repeat the question to the student and give the student the correct answer. State why it is the correct answer and why the others are not the correct answers. “Okay, let me reread the question and do some thinking out loud. I will think aloud about each answer and say why it is or isn’t a good answer to our question. Then I’ll go over the strategies, okay?”

Reread the question.

“Okay.

Let’s look at A: Fear. Does fear rhyme with here? Since a rhyme is about the end sound, if I say “here” and then “fear” I have the same end sound, “ee-r” so I know they rhyme. I am pretty sure this is the answer, but I want to check the others to be sure.

B says: There. Does there rhyme with here? If I say “here” and then “there” I don’t have the same end sound. I have “ee-r” and “ay-r”. I know they don’t rhyme. I would cross this one off. [cross off]

C says: Wear. Does wear rhyme with here? If I say “here” and “wear” I don’t have the same end sound. I have “ee-r” and “ay-r”. I know they don’t rhyme. I would cross this one off. [cross off]

And D says: Care. Does care rhyme with here? If I say “here” and “care” I don’t have the same end sound. I have “ee-r” and “ay-r”. I know they don’t rhyme. I would cross this one off. [cross off]

So, the best answer to which word rhymes with here is A, fear.

Okay? Okay, before we go on, here are the four main strategies we used:

- First, thinking about the question by saying it out loud our own words.
- Next, thinking about the words by comparing how they sound.
- Then, thinking about the words by comparing how they sound while I think about or feel the shape of my mouth.
Finally, getting rid of some of the answers by crossing out the ones that we didn’t think were the answers.”

Proceed to the next question.
9. Read this sentence from the story.

Spider was preparing his dinner one day when he heard a knock on the door.

Which word has the same vowel sound as day?

A. dark
B. rain
C. boy
D. paw

3. **Student rephrases the question**: the student will rephrase the question in response to the prompt, “The first strategy is to think about the question and say it your way. To think, ask yourself, out loud: What is the question asking me? The question is asking me…. Go ahead and try that.”
   ii. If the student answers ‘to find a word with the same vowel sound’ or an approximation, then prompt the student to consider the answers, “Now let’s go back and think about which of the answer choices has the same vowel sound as “day”. To think, we say: [Use the student’s words to approximate “the word that has the same vowel sound as day is...]”
   Reread the answers.

4. If the student does not answer or does not answer correctly **Check for understanding of the question**, state: “Let’s make sure we know what the question is about. The question is asking us find the same or matching vowel sound. A vowel sound is based on the vowels a, e, i, o, or u. A vowel sound can have different sounds such as short sounds like /æ/, /e/, /i/ or /ʊ/ or long sounds like /a/, /e/, /i/, /o/, or /u/. So in the words mine and file, the vowel sound is the same, it sounds like“i-e”, and I know mine and file have the same vowel sound. So what is the vowel sound in “day?” if the student doesn’t know say “it’s “ay” and continue…. 

5. **Suggest word-to-word oral repetition strategy to listen and compare the words**: the student is prompted to state each target word with each response possibility, “So, a good strategy for finding the same or matching vowel sound is to repeat the underlined word, “day”, out loud and then repeat an answer choice out loud and compare them. We’ll do this with each possible answer choice. Please try that.” Have the student try that. If necessary, “I’ll point to each word and say it first, then you say “day” and that word, okay?” If the student cannot or is unable to make use of the strategy…

6. **Suggest word-to-word repetition strategy to listen and compare while considering the mouth for clues**: the student is prompted to consider his or her mouth as he or she states each target word with each response possibility. “Okay, a good strategy for learning about matching vowel sounds is to think about the way your mouth moves when you say the words. Your mouth will make the same shape when you say the matching vowel part
of a word. Now I’d like you to do what you did in the last strategy: Repeat the underlined word, “day”, out loud and then repeat an answer choice out loud and compare them. We’ll do this with each possible answer choice. Go ahead and try that, please.” Have the student try that. If the student cannot or is unable to make use of the strategy…

a. “One way to learn this strategy is to watch your mouth while you say the words. Your mouth will look the same when you say the matching vowel part of a word. Using the mirror, say the word “day”. See the way your mouth moves with the vowel sound? Now do what you did in the last strategy: Repeat the underlined word, “day”, out loud and then repeat an answer choice out loud and compare them. We’ll do this with each possible answer choice. Go ahead and try that, please.” Have the student try that. If the student cannot or is unable to make use of the strategy…

i. “Another way to understand this is to use the same strategy we just used but this time you also put your hands gently on top of your mouth while saying the word “day”. Feel the way your mouth moves, especially when you say the vowel sound. Now let’s do what you did in the last strategy while you touch your mouth: Repeat the underlined word, “day”, out loud and then repeat an answer choice out loud and compare them. We’ll do this with each possible answer choice. Go ahead and try that, please.” Have the student try that. If the student cannot or is unable to make use of the strategy…

7. **Suggest elimination strategy, while rereading the question, to narrow the choices**: the student is offered a general strategy for elimination and a pencil, “Okay, a good strategy for answering questions is to eliminate, or get rid of, answer choices. Let’s read each choice again and you can decide whether there are any answer choices that you can cross out with the pencil and get rid of right away because they do not have a matching vowel sound to “day”. Reread each answer choice.

8. **Repeat, answer and review**: Repeat the question to the student and give the student the correct answer. State why it is the correct answer and why the others are not the correct answers. “Okay, let me reread the question and do some thinking out loud. I will think aloud about each answer and say why it is or isn’t a good answer to our question. Then I’ll go over the strategies, okay?”

Reread the question.

“Okay.

Let’s look at A: Dark. Does dark have the same vowel sound as day? If I say “dark” and “day” I don’t have the same vowel sound. I have “ah” and “ay”. I know they don’t have the same vowel sound. I would cross this one off. [cross off]

B says: Rain. Does rain have the same vowel sound as day? If I say “rain” and “day” I hear the same vowel sound “ai” and “ay”. I am pretty sure this is the answer, but I want to check the others to be sure.

C says: Boy. Does boy have the same vowel sound as day? If I say “boy” and “day” I don’t have the same vowel sound. I have “oy” and “ay”. I know they don’t have the same vowel sound. I would cross this one off. [cross off]

And D says: Paw. Does paw have the same vowel sound as day? If I say “paw” and “day” I don’t have the same vowel sound. I have “aw” and “ay”. I know they
don’t have the same vowel sound. I would cross this one off. [cross off]
So, the best answer to which word has the same vowel sound as day is B, rain.
Okay? Okay, before we go on, here are the four main strategies we used:
- First, thinking about the question by saying it out loud our own words.
- Next, thinking about the words by comparing how they sound.
- Then, thinking about the words by comparing how they sound while I think
  about or feel the shape of my mouth.
- Finally, getting rid of some of the answers by crossing out the ones that we
  didn’t think were the answers.”
Proceed to the next question.
10. Read this sentence from the story.

He did not want to share his food.

Which word has the same beginning sound as food?

A. phone
B. jewel
C. kept
D. half

3. **Student rephrases the question**: the student will rephrase the question in response to the prompt, “The first strategy is to think about the question and say it your way. To think, ask yourself, out loud: What is the question asking me? The question is asking me… Go ahead and try that.”

   iii. If the student answers ‘to find a word with the same beginning sound’ or an approximation, then prompt the student to consider the answers, “Now let’s go back and think about which of the answer choices has the same beginning sound as ‘food’. To think, we say: [Use the student’s words to approximate “the word that has the same beginning sound as food is...”]

   Reread the answers.

4. If the student does not answer or does not answer correctly **Check for understanding of the question**, state: “Let’s make sure we know what the question is about. The question is asking us find the same or matching beginning sound. So in the words clue and kitten, the beginning sound is the same, it sounds like “/k/”. So what is the beginning sound in “food?” if the student doesn’t know say “it’s “/f/” and continue.…

5. **Suggest word-to-word oral repetition strategy to listen and compare the words**: the student is prompted to state each target word with each response possibility, “So, a good strategy for finding the same or matching beginning sound is to repeat the underlined word, “food”, out loud and then repeat an answer choice out loud and compare them. We’ll do this with each possible answer choice. Please try that.” Have the student try that. If necessary, “I’ll point to each word and say it first, then you say “food” and that word, okay?” If the student cannot or is unable to make use of the strategy…

6. **Suggest word-to-word repetition strategy to listen and compare while considering the mouth for clues**: the student is prompted to consider his or her mouth as he or she states each target word with each response possibility. “Okay, a good strategy for learning about matching beginning sounds is to think about the way your mouth moves when you say the words. Your mouth will make the same shape when you say the matching beginning part of a word. Now I’d like you to do what you did in the last strategy: Repeat the underlined word, “food”, out loud and then repeat an answer choice out loud and compare them. We’ll do this with each possible answer choice. Go ahead and try that, please.” Have the student try that. If the student cannot or is unable to make use of the strategy…

   a. “One way to learn this strategy is to watch your mouth while you say the words. Your mouth will look the same when you say the matching beginning part of a
word. Using the mirror, say the word “food”. See the way your mouth moves with the vowel sound? Now do what you did in the last strategy: Repeat the underlined word, “food”, out loud and then repeat an answer choice out loud and compare them. We’ll do this with each possible answer choice. Go ahead and try that, please.” Have the student try that. If the student cannot or is unable to make use of the strategy…

i. “Another way to understand this is to use the same strategy we just used but this time you also put your hands gently on top of your mouth while saying the word “food”. Feel the way your mouth moves, especially when you say the beginning sound. Now let’s do what you did in the last strategy while you touch your mouth: Repeat the underlined word, “food”, out loud and then repeat an answer choice out loud and compare them. We’ll do this with each possible answer choice. Go ahead and try that, please.” Have the student try that. If the student cannot or is unable to make use of the strategy…

7. **Suggest elimination strategy, while rereading the question, to narrow the choices**: the student is offered a general strategy for elimination and a pencil, “Okay, a good strategy for answering questions is to eliminate, or get rid of, answer choices. Let’s read each choice again and you can decide whether there are any answer choices that you can cross out with the pencil and get rid of right away because they do not have a matching beginning sound to “food”. Reread each answer choice.

8. **Repeat, answer and review**: Repeat the question to the student and give the student the correct answer. State why it is the correct answer and why the others are not the correct answers. “Okay, let me reread the question and do some thinking out loud. I will think aloud about each answer and say why it is or isn’t a good answer to our question. Then I’ll go over the strategies, okay?”

Reread the question.

“Okay.

Let’s look at A: Phone Does phone have the same beginning sound as food? If I say “phone” and “food” I hear the same beginning sound. I have “/f/” and “/f/”. I am pretty sure this is the answer, but I want to check the others to be sure.

B says: Jewel. Does jewel have the same beginning sound as food? If I say “jewel” and “food” I don’t hear the same beginning sound. I have “/j/” and “/f/”. I know they don’t have the same beginning sound. I would cross this one off. [cross off]

C says: Kept. Does kept have the same beginning sound as food? If I say “kept” and “food” I don’t have the same beginning sound. I have “/k/” and “/f/”. I know they don’t have the same beginning sound. I would cross this one off. [cross off]

And D says: Half. Does half have the same beginning sound as food? If I say “half” and “food” I don’t have the same beginning sound. I have “/h/” and “/f/”. I know they don’t have the same beginning sound. I would cross this one off. [cross off]

So, the best answer to which word has the same beginning sound as food is A, phone.

Okay? Okay, before we go on, here are the four main strategies we used:

- First, thinking about the question by saying it out loud our own words.
- Next, thinking about the words by comparing how they sound.
- Then, thinking about the words by comparing how they sound while I think about or feel the shape of my mouth.
- Finally, getting rid of some of the answers by crossing out the ones that we didn’t think were the answers.”

Stop.


Hempenstall, K.(2003). Tools for assessing the critical elements of reading identified by the


http://nces.ed.gov/programs/digest/d03/tables/dt052.asp

National Center on Educational Outcomes. (2005) *Accommodations for students with disabilities*. Retrieved February 1, 2005:
http://education.umn.edu/nceo/TopicAreas/Accommodations/Accom_topic.htm

http://www.ncsl.org/programs/educ/NCLBHistory.htm


http://marxists.org/archive/vygotsky/works/1925/consciousness.htm


Children’s Books

Laura Numeroff. *Sometimes I Wonder if Poodles Eat Noodles*

Eric Rohman. *Time Flies*

Eric Rohman. *Clara and Asha*

George Shannon. *Tomorrow’s Alphabet*

Janet Shaw. *Meet Kaya: An American Girl*
Endnotes


ii Pseudonyms are used for all the children named in this research.

iii LBJ Library & Museum; Daily Digest, August 30, 1965.

iv Note that “[i]n 1964, the majority of State institutionalized and supported handicapped children were receiving little or no formal education. Congress enacted the state agency handicapped program in P.L. 89-313 to reverse this condition” (Fraas & Osman, 1985: 197-8). Thus, an amendment to Title I was created, a so-called “clean-up” measure, as a rider added to the School Disaster Act which was another result of Senate subcommittee proceedings (Bailey & Mosher, 1968: 67).

v Certainly President Johnson had been quick to assure everyone concerned that the “ESEA was far from a perfect act [and he] likened it before its passage to a Model-T Ford destined for amendment many times over the years – as it was, in fact, in 1966, 1967,1970, 1974, 1978, 1981, 1983” (Halperin, 1985: 23). Moreover, in response to within-committee concerns, Carl Perkins, Chairman of the General Subcommittee on Education of the House Committee on Education and Labor, let it be known that “...[i]mmediately after we dispose of this bill, I have been instructed to open up some hearings; and I intend to go into these problems and see if we cannot come up with some good answers.” (Eidenberg & Morey quoting Perkins, 1969: 92)

Facilitating the passage of P.L. 89-313 may also be due in part to the influences of individuals such as David B. Ray and Eunice Shriver. Ray was the first superintendent of the Arkansas Children’s Colony and drew the attention of the Kennedy administration by way of Eunice Kennedy Shriver, vice president of the Joseph P. Kennedy Foundation, sister of President John F. Kennedy, and consultant to the 1961 President’s Panel on Mental Retardation (Shores, 2004: 396). He took a position with the Joseph P. Kennedy Foundation in order to help with the Foundation’s grant disbursements and act as the Foundations publicity director, coordinating efforts with the parents group, the National Association for Retarded Children (NARC), to work on public attitudes towards mental retardation. “He also handled congressional relations for the Foundation” during the passage of the ESEA and P.L. 89-313 and remained with the Foundation “until President Johnson appointed him director of the new President’s Committee on Mental Retardation” in 1966, when he became “the White House’s leading spokesman for the cause of special education” (Shores, 2004: 398-99).


vii “Although the Act [NCLB] mandates annual testing for all states by 2005-2006, it does not provide federal standards for testing practices. Left to their own discretion, states have created a broad array of approaches. Some states test reading and math every year; others test those
subjects at three or four-year intervals, and others test a variety of subjects in a variety of grades. One critical difference in testing practices is whether states use norm-referenced or criterion-referenced tests.” (Wenning, R., Herdman, P.A., Smith, N., McMahon, N., & Washington, K., 2003)


For example, in Kansas, an interview with Tom Mundinger, Baldwin Elementary School Intermediate Center principal and Connie Wright, Baldwin Junior High School principal give a bleak view:

“"You have to not make AYP two years in a row and then you are put on improvement," Mundinger said. "Each year you don't make AYP, the sanctions get heavier. The reality is, in my opinion, you are going to see more and more schools not make AYP each successive year here, because the bar keeps going up."

If a school fails to improve, then harsher penalties could occur. The state might send people to the school to help the students learn better or it might clean house and bring in new staff.

"They have said there are all of these sanctions," Wright said. "They said you are a school on improvement or they could come in and fire all of your staff. Usually what happens is you are a school on improvement, but if you don't improve, the state sends people to offer assistance. Eventually, the consequences become more difficult to where they say they will fire people and bring new staff in."


For example, in North Carolina: “Last year, eight district schools attained High Growth, the category that rewards teachers with a $1,500 bonus and teacher assistants with a $750 bonus. The State also changed the calculations to determine High Growth for this year. The new calculation requires at least 60 percent of the students to meet the growth goal set for them by the State's ABCs accountability model. This year, six elementary and middle schools made High Growth under the new, more difficult standard. Six additional elementary and middle schools met Expected Growth. Teachers in these schools will receive $750 bonuses and teacher assistants will receive $350.” Chapel Hill – Carrboro City Schools (2006). News release. Retrieved January 14, 2007: http://www2.chccs.k12.nc.us/education/components/scrapbook/default.php?sectiondetailid=27519&pagecat=1309&PHPSESSID=b05867cdf38f6607ea73d038b396d257

For example, states such as California, Arizona and Idaho have already withheld diplomas.
when students have not passed mandatory exit exams. In all there are currently 22 states that have mandatory exit exams with three more states planning on phasing them in by 2012. Plans for withholding diplomas are being phased in separately. However, not all exit exams are used for NCLB accountability. California, Arizona and Idaho do use their exit exams for NCLB accountability. However, the ‘cut score’ for passing the exit exam in those states that also use the exit exam for NCLB accountability is not necessarily the same as the ‘cut score’ for NCLB proficiency. Arizona has the same cut score, but both California and Idaho have different cut scores. Center on Education Policy (2006). *State high school exit exams: A challenging year.*


The balance are served as follows: 106,533 children served in separate public facilities; 70,751 served in separate private facilities; 17,012 served in public residential facilities; 16,971 served in private residential facilities; 26,954 served at home or in hospital. U.S. Department of Education Office of Special Education Programs (2006). Tables B4A: Children served in the 50 states and D.C. (including BIA schools) under IDEA, Part B, ages 6-21 by educational environments and disability, 1989 through 2005, numbers and percentages. *Individuals with Disabilities Education Act (IDEA) database.* Retrieved January 9, 2007:

http://www.ideadata.org/docs/PartBTrendData/B4A.xls

SOL = Standards of Learning test, the state mandated, standardized tests of Virginia.

Vygotsky is known to have given partial credit to Dorothea McCarthy for the ZPD as he understood it (Vygotsky, 1978: 87; Robbins, 2001:3; Robbins, 2007: in press).

It is often acknowledged that Feuerstein may have developed his work independently. See, for example, Sternberg & Grigorenko (2002), Haywood & Lidz (2007, forward by Oakland).

Subtitle borrowed from Lantolf & Thorne, 2006.


Puzyrei, who introduces and translates the manuscript, suggests that it is likely to have been the preliminary sketch of the “History of the development of higher mental functions”, one of Vygotsky’s main works available in volume 3 of Vygotsky’s collected works (Vygotsky, 1929/1986: 54).

Lower or elementary functions would include involuntary attention, eidetic memory (Wertsch, 1985; Vygotsky, 1978), psychological functions not under our control.

Vygotsky’s use of ‘constructs’ is quite clear, constructs are the higher psychological processes that are the cultural products of social activity, though still subject to change. He notes that “Most basic is the fact that man not only develops: he also constructs himself. Constructivism. But contra intellectualism (i.e., artistic construction) and mechanism (i.e., semantic construction).” (Vygotsky’s emphasis; Vygotsky 1929/1987: 65). I believe this misunderstanding of constructs and of constructivism has lead to the erroneous belief that we ‘construct meanings’. Here we see that this exactly what Vygotsky did NOT mean! Vygotsky’s understanding of construction is more so the ‘reorganization’ of the lower functions and the ‘construction’ of higher functions. It is a synthesis (Vygotsky, 1986: 55).


This is by no means a complete account of cultural-historical theory! For interested readers I suggest Kozulin’s very succinct overview, “The concept of activity in Soviet psychology” in H. Daniel’s edited volume, An Introduction to Vygotsky (1996); Van Der Veer & Valsiner’s (1991) Understanding Vygotsky: A Quest for Synthesis, specifically the chapter “Cultural-Historical Theory”.

Sternberg & Grigorenko differentiate between dynamic testing and dynamic assessment. “In essence, the goal of dynamic assessment is to intervene and to change. The goal of dynamic testing, however, is much more modest – it is to see whether and how the participant will change if an opportunity is provided.” (Sternberg & Grigorenko 30)

For interested readers, Haywood & Lidz (2007) provide a comprehensive comparison of DA and RTI.

Not all states make their state mandated standardized tests of third grade reading available to the public. For example, while the pilot study was under design, Pennsylvania only provided samples from Oregon and Nevada standardized assessments. See: Pennsylvania Department of Education. Assessment: Grade 3 Reading Item Bank 2004-2005. Compare to: Virginia Department of Education. Standards of Learning Released Tests. The secrecy surrounding some of these tests may soon be a thing of the past. Recently, parental challenges, supported by a school district lawyer, in Washington state were successful in “ending eight years of secrecy intended to protect the sanctity of the exams and control costs… Education Department officials now acknowledge they’ve been running afoul of a federal law that requires

For example, sample test items available from Oregon, Tennessee, and Texas do not assess word analysis strategies:

- Oregon Department of Education. *2003-2004 Reading Grade Level Sample Tests.*

Compare to: Virginia Department of Education. *Standards of Learning Released Tests.*

Hempenstall referring to the research of Stanovich, 1988 and of Elbro, Nielsen, & Petersen, 1994; Yap & Van Der Leij, 1993 that further suggest “that the intervention focus needs to be at the level of word decoding” (Hempenstall, 2003: 32)

See Virginia Department of Education. Guidelines for the participation of students with disabilities in the assessment component of Virginia’s accountability system as well as the Training and Technical Assistance Center at the College of William and Mary, Virginia standards of learning and students with disabilities: Pretest checklist.


Argument to ignorance: assuming something is true because no one has proven otherwise.

Publications

Recent Presentations
To Hide in Plain Sight... A No Child Left Behind Accountability Test of 3rd Grade Reading Redesigned as a Dynamic Assessment Reveals the Hidden Progress of Children with Learning Disabilities - Paper - IACEP XI, Knoxville, TN, July 2007
Beyond the Trompe d’Oeil - Interactive Panel: The Ripening of the Pedagogue; Paper/ Workshop Presentation 13th Annual PTO Conference, Minneapolis, MN, June 2007
Terms of Engagement: A Study in Multicultural and Multiracial Awareness and Development in College of Education Freshmen: Year One, poster w Ms. T. Tevis, 9th An. Conf of PA-NAME, Harrisburg, PA, Mar, 2007
Reading into the Possibilities: Extending a State Mandated Standardized Test for Reading into a Dynamic Assessment for Children with Disabilities Paper - AAAL - ACLA/CAAL Conf. Montreal, June 2006