George Mason University College of Education and Human Development Literacy Program Area Summer 2011 Woodburn Elementary School

EDRD 633 (6R1) LITERACY ASSESSMENTS AND INTERVENTIONS FOR INDIVIDUALS EDRD 637: SUPERVISED LITERACY PRACTICUM II

Professors/Supervisors

Dr. Thana Vance (EDRD 633/637) tlvance@fcps.edu
Office hours by appointment

Mary Kenely (EDRD 637) mary.kenely@apsva.edu Office hours by appointment

COURSE DESCRIPTION:

EDRD 633 Provides literacy assessments and interventions for individuals. Includes diagnosis and remediation for learners who find reading and writing difficult. Requires assigned practicum experience.

EDRD 637 is a supervised literacy practicum that requires students to conduct assessments of, and provide instruction to, struggling readers.

REQUIRED TEXTS

- Woods, M. & Moe, A.J. (2008). *Analytical Reading Inventory with Readers Passages* (9th edition). Prentice Hall.
- Israel, S. (2007). *Using metacognitive assessments to create individualized reading instruction*. International Reading Association.
- Fisher, D. & Frey, N. (2007). Checking for understanding: Formative assessment techniques for your classroom. ASCD.

OPTIONAL TEXTS

- Rasinski, T., & Padak, N. (2004). Effective reading strategies: Teaching children who find reading difficult (3rd ed.). Upper Saddle River, NJ: Merrill/Prentice Hall.
- Harvey, S. & Goudvis, A. (2007), 2nd edition *Strategies that work: Teaching comprehension for understanding and engagement*. Portland, ME: Stenhouse.

MODE OF COURSE DELIVERY

EDRD 633/637 will be taught in an integrated format. Students are expected to plan and conduct weekly diagnostic and tutorial lessons for an individual student under the direct supervision of the 637 instructors. Students are also expected to complete all class readings prior to each session in order to engage in active dialogue and sharing of ideas. Activities will include lecture, strategy demonstrations, assessment and teaching practice experiences and analysis, small group discussions and presentations, whole class sharing, critical reflection, and individual technical assistance.

RATIONALE

As a required portion (course IV) of the literacy specialization in the Advanced Studies in Teaching and Learning (ASTL) program, these courses address required Virginia Department of Education (VDOE) and International Reading Association (IRA) competencies for K-12 Reading Specialists. The courses also provide an advanced, research-based study of literacy for teachers seeking master's degrees.

OUTCOMES AND RELATED STANDARDS

EDRD 633/637

Standard 3.1. Wide range of assessment tools and practices

Compare and contrast, use, interpret, and recommend a wide range of assessment tools and practices. Assessments may range from standardized tests to informal tests and also include technology based assessments. They demonstrate appropriate use of assessments in their practice, and they can train classroom teachers to administer and interpret these assessments.

PERFORMANCE BASED ASSESSMENT: Clinical Practice - EDRD 637 Practicum Notebook and Impact on Student Learning- EDRD 633 Student Case Study

Standard 3.2. Students' proficiencies and difficulties

Support the classroom teacher in the assessment of individual students. They extend the assessment to further determine proficiencies and difficulties for appropriate service.

PERFORMANCE BASED ASSESSMENT: Clinical Practice - EDRD 637 Practicum Notebook and Impact on Student Learning- EDRD 633 Student Case Study

Standard 3.3. Assessment to plan, evaluate, and revise instruction.

Assist the classroom teacher in using assessment to plan instruction for all students. They use indepth assessment information to plan individual instruction for struggling readers. They collaborate with other education professionals to implement appropriate reading instruction for individual students. They collect, analyze, and use schoolwide assessment data to implement and revise school reading programs.

PERFORMANCE BASED ASSESSMENT: Clinical Practice - EDRD 637 Practicum Notebook and Impact on Student Learning- EDRD 633 Student Case Study

Standard 3.4. Communicate results of assessments

Communicate assessment information to various audiences for both accountability and instructional purposes (policymakers, public officials, community members, clinical specialists, school psychologists, social workers, classroom teacher, and parents).

PERFORMANCE BASED ASSESSMENT: Clinical Practice - EDRD 637 Practicum Notebook and Impact on Student Learning- EDRD 633 Student Case Study

COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT

Student Expectations

- Students must follow the university policy for Responsible Use of Computing [See http://universitypolicy.gmu.edu/1301gen.html].
- Students are responsible for the content of university communications sent to their George Mason University email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students solely through their Mason email account.
- Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- Students are expected to exhibit professional behaviors and dispositions at all times.

EDRD 633 and EDRD 637 embody the five Core Values of the College of Education and Human Development:

- Collaboration
- Ethical Leadership
- Innovation
- Research-based Practices
- Social Justice

HONOR CODE

• To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of George Mason University and with the desire for greater academic and personal achievement, we, the members of George Mason University, have set forth the following code of honor. Any individual who is caught in the act of cheating, attempting to cheat, plagiarizing, or stealing will be brought forth before a council of their peers. In the event that the individual is found guilty, he or she will be punished accordingly. For further information, please refer to the University Catalog or Website at www.gmu.edu. Code in the University catalog can be found online at [See http://academicintegrity.gmu.edu/honorcode/].

GEORGE MASON UNIVERSITY POLICY ON DISABILITIES

This syllabus is subject to change based on the needs of the class. The Americans with Disabilities Act (ADA) prohibits discrimination against individuals with disabilities in the series, programs, or activities of all State and local Governments. Under ADA a disability is defined as a physical or mental impairment that substantially limits a major life activity such as learning, working, walking, speaking, hearing, breathing, and/or taking care of oneself. If a student has a disability and needs course adaptations or accommodations because of that disability, it must be established with the faculty, in writing, at the beginning of the semester so arrangements can be made. Please call the Disability Resource Center for required documentation (703-993-2474). The Disability Resource Center website is at: [See http://ods.gmu.edu/].

COURSE INFORMATION

Students must have access to email and the Internet, either at home, work or GMU campus. GMU provides students with free email accounts which must be accessed for information sent from the university or the Graduate School of Education. Go to http://mason.gmu.edu/ for information on accessing.

LATE ASSIGNMENT POLICY

All assignments are to be completed and delivered on their due dates. Any late assignment will have points automatically deducted (10% for each day late). This policy will be rigorously applied to Instructional Plans.

CLASS PARTICIPATION

Class participation is critical since most of the class sessions will include tutorial practicum experiences as well as critical information on literacy testing and teaching. If you know in advance that you will be absent for any tutorial sessions, you must withdraw from the course. For each absence from a non-tutorial session, 10 points will be deducted from the total possible participation points. If there is an unexpected absence from a tutorial session, you will be expected to make arrangements with your tutee's parent/guardian to make-up the practicum time missed and produce acceptable verification. If missed practicum time is not made up by the conclusion of the course, you will not receive a passing grade for the course. If your tutee is absent, the practicum time does not need to be made up, nor will this negatively affect your grade.

Campus Resources

- The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance [See http://caps.gmu.edu/].
- The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing [See http://writingcenter.gmu.edu/].

COURSE REQUIREMENTS

Assignments	Due Dates (see agenda)	Points
EDRD 637 (Pass/Fail)		
Class Participation – complete assigned readings		10
and participate fully in all classes.		
Instructional Plans (8 total)		80
(Tutoring for minimum 20 hours – instructional plans and reflection for each tutoring session)		
Reading Instruction Summary Report (Submit to	(submitted to both 633 and 637	
TaskStream)	instructors)	
Diagnostic Report (Submit to TaskStream)	(submitted to both 633 and 637 instructors)	
Case Study/Parent Conference/ Presentation		10
		100
EDRD 633		
Class Participation		10
Diagnostic Report		50
Reading Instruction Summary Report		10
Evidence-Based Strategy Share		10
Article Discussion Leadership		10
Professional Book Review		10
	Total	100

GRADING SCALE – PERCENTAGE OF TOTAL POSSIBLE POINTS	
A	95 – 100
A-	90 – 94
B+	86 – 89
В	80 - 85
C	70 – 79

NCATE/IRA STANDARDS AND PERFORMANCE-BASED ASSESSMENTS

Throughout the literacy masters programs, students are required to satisfactorily complete one or more performance-based assessments (PBAs) in each course and are required to submit these to an electronic system entitled "TaskStream." Satisfactory completion of every PBA as well as posting to TaskStream is required before moving to the next course. The TaskStream assessment system can be found at https://www.taskstream.com/pub/. Students are REQUIRED to submit the designated PBA to each course instructor so that the assignment can be evaluated when the assignment is due. Only assignments/PBAs posted to TaskStream will be assessed. *No final grades for courses will be posted until ALL required PBAs are posted to TaskStream*.

SUPERVISED PRACTICUM (EDRD 637)

Assignment

The purpose of the practicum experience is to practice working with individual students and to broaden understandings of students' literacy needs in K-12 classrooms. As a part of the practicum, instructional plans will be developed and ongoing assessment and intervention strategies will be implemented under the direct supervision of the course instructors. Documentation of work with the practicum student will be compiled into a case study portfolio which will be saved to a CD or flash drive.

Procedures

Each practicum session will be approximately 2-3 hours in length. The first three to four sessions will focus on becoming acquainted with the student and conducting preliminary assessments that will inform decisions made when developing instructional plans. The remaining instructional sessions will focus on providing literacy support for the practicum student based on the initial diagnosis and ongoing interactive assessment.

During the instructional sessions, literacy interactions with tutees must include the following four strands: (1) guided reading (comprehension strategies); (2) writing as meaningful communication; (3) word study (phonological awareness/vocabulary instruction); and (4) fluency building with self-selected readings. Whenever possible try to include expository text strategies. Emphasis will be on providing a comprehensive literacy experience that further develops critical reading and writing skills by building on the student's strengths and addressing the student's needs as evidenced in initial and ongoing assessments.

Two lesson plans must incorporate technology. One may include a low-level technology program (e.g., overheads, Word product, online games, Kidspiration) and one should include a high-level technology program (e.g., Smartboard, MovieMaker, Photostory).

It is recommended that diagnostic sessions are audio taped. The diagnostic report, instructional plans, instructional summary report, as well as selected samples of student work, and reflections will be compiled in the case study portfolio (on a CD or flash drive). The case study portfolio will be overviewed in a parent/student conference at the conclusion of the practicum period and presented to the class.

GUIDELINES FOR THE DIAGNOSTIC REPORT WILL BE HANDED OUT SEPARATELY

INSTRUCTIONAL PLANS (EDRD 637)

To guide your work with a student and to keep the practicum supervisor informed of your activities and goals, you are required to write instructional plans for each instructional session with your practicum student. Use the following format for your plans.

Date:

Session (Session number):

Your Name:

Your Student's Name:

Reflections

Include 1-2 paragraphs summarizing your previous session with the student. Provide a statement of your judgment about the relative effectiveness of the strategies and activities you used. Do not simply restate everything you did in the previous session; instead, reflect on what occurred and state (a) what you're learning about your tutee and (b) how your instruction will be crafted and modified based on your tutee's needs. Use first person point of view. The Reflections section will be blank for the first Instructional Plan.

Example

Overall, I thought our session went well. "Matt" showed more enthusiasm for the book about baseball, which is one of his favorite pastimes. He also remembered more details from the book than those we've used in the past. Matt is still reluctant to write, though our brainstorming sessions seem to be helping him. When I allowed Matt to draw pictures to accompany his writing, he seemed more motivated.

Matt's decoding skills are excellent, but his word knowledge is limited. I tried using flashcards for new vocabulary, but he wasn't very interested. I went through our textbook and explored other resources for some fun vocabulary strategies that I'm going to use in todays and future sessions.

Instructional Strategies and Rationales

Describe briefly the specific instructional strategies you intend to use that session with your student. Include relevant books and materials needed for and to accompany the strategy. Number each strategy description. Instructional strategies may come from any legitimate source, such as class suggestions, previous reading courses, ideas in the textbook, and your own teaching experience. *Do not use workbooks*.

Along with each strategy description include a brief rationale for the use of the strategy, explanation of the activity, the ongoing assessment and an opportunity for the student to be metacognitive. In other words, explain your reason(s) for using each strategy. Rationales are based on what you've learned about the student from previous diagnostic information and/or information you've acquired from your own interactions with the student.

Example

- 1) Guided Reading (Comprehension Strategy): Story Impressions/Venn Diagram
 - Rationale: Matt has been having difficulty staying focused while reading. This strategy should help him attend to story details because he will be interested in discovering how closely his story impression story matches the actual story.
 - Activity (with explanation): I will prepare a list of words from the book The Magic Spring and present them to Matt. I will ask Matt to write a short story using the words from the list. We will then read the Magic Spring together, trading off reading pages out loud. As we read I will work with Matt to fill in a previously made, blank Venn Diagram sheet. One circle of the diagram he will write pertinent details from his story, the other pertinent details from the actual book, and the overlapping area common details and ideas.
 - Metacomprehension Strategy: Street Signs To help Matt monitor his comprehension I will place a smiley face (green), caution sign (yellow) and stop sign (red) on his desk. When he understands he will have the green sign on his desk. When he becomes slightly confused he'll put the yellow sign on his desk and should ask a friend (or me) a question to get back on track. If he is still having difficulty he should place the red sign on his desk and we'll take the time to sort out the problem.
 - Ongoing Assessment: Running record Since we are working on decoding skills a running record will keep track of Matt's decoding/fluency.
- 2) Writing (strategy or skill):
 - Rationale:
 - Activity (with explanation):
 - Metacomprehension Strategy:
- 3) Word Study (Phonological Awareness):
 - Rationale:
 - Activity (with explanation):
 - Metacomprehension Strategy:
- 4) Fluency:
 - Rationale:
 - Activity (with explanation):
 - Metacomprehension Strategy:
- 5) Technology (as appropriate):

NOTE: For the first three sessions or so your instructional plans will be based on the initial diagnosis you will be conducting with your practicum student. Therefore, these plans will be modified to accommodate this approach and the information being obtained. For example, the *Reflections* section will summarize diagnostic findings and any other insights into the student's literacy behavior. The next section will be concerned with *Diagnostic Strategies and Rationales*. Here report on the assessments you intend to use and why.

Criteria for Evaluation

Each instructional plan is worth 10 points. Points will be awarded based on how clearly and succinctly you describe your past and ongoing work with the student. Plans should be typed and comprised of no more than 3 single-spaced pages.

THE READING INSTRUCTION SUMMARY REPORT (EDRD 633/637)

Use the following format to write your report, placing the following heading at the top center of your report:

GEORGE MASON UNIVERSITY GRADUATE SCHOOL OF EDUCATION READING INSTRUCTION SUMMARY REPORT

Student:
Grade:
Age:
Location of Tutoring
Dates of Tutoring:
Date of Report:
Practicum Tutor:

RATIONALE FOR INSTRUCTIONAL PLAN

This section should summarize the overall reasons for focusing on certain aspects of literacy in your instructional plans. Base this on the rationales from your weekly plans.

SUMMARY OF INSTRUCTIONAL EXPERIENCES

This section should include a description of the reading and writing strategies and methods you employed. You should also include the outcomes of this instruction based on your judgments of the student's performance.

RECOMMENDATIONS FOR TEACHERS

This section should be comprised of ideas you have for strategies and experiences teachers might provide the student to expand literacy.

RECOMMENTATIONS FOR PARENTS

This section should be comprised of ideas you have for strategies and experiences parents might provide the student to expand literacy

OTHER CONSIDERATIONS

- * Report should be no longer than two single spaced pages
- * Write in third person
- * Spelling and structure need to be as near perfect as possible

CASE STUDY AND PRESENTATION (EDRD 633/637)

Assignment

The purpose of the case study is to document, evaluate, and reflect upon the assessment and intervention process that took place throughout the practicum period and to share the findings of the case study in a parent/student conference as well as to colleagues. **All work should be saved to a CD or flash drive.**

Procedure

- 1. Organize the practicum student's file so that it documents your work with the student. The components should include:
 - Diagnostic Report
 - Instructional Plans
 - Instructional Summary Report
 - Student Work
 - One Page Handout Summary
- 2. At the final session of the practicum period, meet with your practicum student and his/her caregiver for a conference. Summarize the diagnostic and instructional work you did, highlighting your presentation with sample student work. Also, allow the student to showcase a particular accomplishment (e.g., fluent oral reading of a passage, an authored and illustrated book, etc.). Share ideas that can be employed at home for furthering the student's literacy progress. Provide the student's caregiver with a copy of the Instructional Summary Report.
- 3. In the final class session, make an oral presentation of your case study to your classmates. Provide a one-page handout to accompany the presentation that uses the following headings and summarizes:
 - Results of Diagnosis
 - Instructional Approaches and Rationales
 - Effectiveness of Strategies and Activities
 - Recommendations for Furthering the Student's Literacy Growth
 - Critical Reflections on the Practicum Experience (How did the practicum contribute to your professional growth and learning?)

Exemplify instructional approaches with selected student work samples. Limit your presentation to no more than 10-12 minutes.

Name
CASE STUDY AND PRESENTATION (EDRD 633/637)
The purpose of the case study portfolio is to document, evaluate, and reflect upon the assessment and intervention process that took place throughout the practicum period and to share the findings of the case study in a parent/student conference as well as to colleagues.
Documents
Final Diagnostic Report
o APA style
Protocols includedInstructional Plans
Plans include all components
Instructional Summary Report
o APA style
o All categories included
Oral Presentation:
• 10-12 minute presentation
One Page Handout Summary
o Results of Diagnosis
 Instructional Approaches and Rationales
o Effectiveness of Strategies and Activities
o Recommendations for Furthering the Student's Literacy Growth
o Critical Reflections on the Practicum Experience (How did the practicum
contribute to your professional growth and learning?) o Exemplify instructional approaches with selected student work samples.
O Exemplify instructional approaches with selected student work samples.
Comments:
Strategy Presentation Article Presentation

EVIDENCE-BASED STRATEGY SHARE (EDRD 633)

Assignment

The purpose of this assignment is to give you the opportunity to share with your peers an effective strategy and provide support from the professional literature for the strategy. Everyone has success with particular strategies, which should be made available to others. In this way you become a resource to your peers. Furthermore, every effective strategy should be linked to the theoretical and research literature.

Procedure

- 1. Select a strategy or activity you that research has found to be effective. It might be a strategy related to word attack, vocabulary, fluency, comprehension, writing, or study reading.
- 2. Review the professional literature for direct and/or related support for your strategy. Direct support refers to studies and expert opinion addressing the specific strategy you are sharing. Related support refers to studies and expert opinion that do address the specific strategy but benefits of general approaches to developing literacy within which your strategy fits.
- 3. Write a two page, double-spaced evidence-based rationale for the strategy using appropriate APA citation and referencing format. Include at least 3 references from journals and books with copyrights no earlier than 1999. Put references on a separate page.
- 4. Prepare a 15-minute presentation of the strategy for your classmates according to the following format.
 - Describe the context for the strategy: With whom would you use this strategy?
 - Provide a brief theoretical and research rationale for the strategy.
 - Describe and demonstrate the strategy. Use handouts and examples. Provide your classmates a very brief mini-lesson in using the strategy.
 - Describe the effect the strategy could have on a student's reading ability. What evidence do you have to suggest a positive change could occur as a result of working with the strategy?
 - Discuss future directions with the strategy: Will you continue to use it in the same manner it was presented? Could it be modified, if so how and why?
 - Provide your classmates a one-page description of the strategy. This description should be a guide for someone else who wishes to use the strategy.

EVIDENCE-BASED STRATEGY SHARE RUBRIC

Evaluation

The assignment will be evaluated based on (a) the appropriateness of the professional literature used to support the strategy, (b) the clarity of writing in your rationale, (c) correct APA citation and referencing format, and (d) how clearly the strategy is described, exemplified, and linked to the needs evidenced by your tutee.

Appropriate professional literature supporting the strategy	/1
Clarity of writing in your rationale	/2
Correct APA citation and referencing format	/2
Presentation: How clearly the strategy is described, the possible effects and future directions explained.	/5
Total	/10

ARTICLE DISCUSSION LEADERSHIP (ADL) (EDRD 633)

Assignment

The purpose of this assignment is to provide you the opportunity to read, analyze, and interpret the required journal articles for your peers. This is a paired activity.

Completion Procedures

- 1. With another student in class, identify one article over which to lead discussion. The article should be taken from the course readings. There will be no overlap.
- 2. Read, analyze, and format its presentation around the following aspects of the article:
 - purpose
 - main points
 - type of research and methodology, if relevant
 - conclusions
 - implications for research and practice
 - personal responses and reactions
- 3. Discussants should also devise ways of engaging the class in critical conversation and reflection on the article. Demonstrations, simulations, role-plays, and debates are recommended.
- 4. PowerPoint slides, overheads, and/or handouts should accompany the article presentations and discussions.
- 5. Article discussion leaders should plan 30 minutes for their article discussions.

Evaluation

Article discussants will be given a grade based on (a) how well they planned and coordinated the presentation and discussion of the article; (b) how succinctly and understandably key information from the article was presented; and (c) the extent to which the discussants used engaging techniques for bringing all students into critical conversation about the article.

ARTICLE DICUSSION LEADERSHIP RUBRIC

Evaluation

Article discussants will be given a grade based on (a) how well they planned and coordinated the presentation and discussion of the article; (b) how succinctly and understandably key information from the article was presented; and (c) the extent to which the discussants used engaging techniques for bringing all students into critical conversation about the article.

Read, analyze, and format the presentation around the following aspects of the article: purpose, main points, type of research and methodology, if relevant conclusions implications for research and practice personal responses and reactions	/5
Discussants should also devise ways of engaging the class in critical conversation and reflection on the article. Demonstrations, simulations, role-plays, and debates are recommended.	/3
PowerPoint slides, overheads, and/or handouts should accompany the article presentations and discussions.	/2
Total	/10

PROFESSIONAL BOOK REVIEW (633)

Assignment

The purpose of this assignment is to give you the opportunity to share with your peers a professional book that would be beneficial in literacy instructional theory and/or practices. The book selected should be one that ...

Procedure

- 1. Select a professional book that you know would be important for your peers to have in their personal professional library. The book should not have a copyright before 2000. It might be a book related to strategy work, vocabulary, fluency, comprehension, writing, or reading.
- 2. Write a one page, double-spaced write up of the book using appropriate APA citation and referencing format.
- 3. Prepare a 10-minute presentation for your classmates according to the following format.

Format

Book Information:

Title:

Author:

Publisher:

Date of Publication:

Number of pages:

Overview:

Outline the contents of the book by identifying the thesis and giving a brief summary of the main points. Quote and/or paraphrase key ideas.

Purpose:

What is the author's purpose? Who is the intended audience?

Evaluation:

Has the author achieved his/her goal/s? What evidence has been given? What original suggestions or possibilities have been presented? What is not convincing? What has been left out? Is the book useful? Does it relate to your teaching?

Summary:

State your overall response.

PROFESSIONAL BOOK REVIEW RUBRIC

Evaluation

Professional book review presenters will be given a grade based on (a) how well they planned and coordinated the presentation and discussion of the book; (b) how succinctly and understandably key information from the book was presented; and (c) the appropriateness of the professional book presented, (b) the clarity of writing in your review, (c) correct APA citation and referencing format, and (d) how closely the format was followed

Presentation • succinctly and understandably presented key information from the book	/3
Book Selection	
 appropriateness of the professional book presented 	/2
Written Review	
 Followed book review format 	/5
 Correct APA format 	
Writing was clear and succinct	
Total	/10



Assessment Checklist

Reading
ARI – Analytical Reading Inventory *** (3 levels – instructional, independent, frustration) — Word Identification — Oral Reading Narrative Comprehension — Silent Reading Expository Comprehension — Silent Reading Expository Comprehension — Listening Narrative Comprehension — Listening Expository Comprehension — Listening Expository Comprehension
Metacognitive Strategies (at least one from below) interview think aloud survey
Fluency fluency rubric and/or ARI observation
Writing
Writing Prompt with rubric - expository Writing Prompt with rubric - narrative
Word Study
Developmental spelling assessment (Words Their Way or Gangste Word Journey)
Interest Inventory
ARI Reading Interview and Interest Survey Any interest or attitude inventory such as Garfield
*** If student is below a level 16/I they should be given the Fountas and Pinnell Benchmark Assessment.