Technology and Peer Conferencing on Student Writing Performance

By

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Question

How will the implementation of my Writers Workshop using technology, peer conferencing improve my 4th grade students writing?

Problem/Rationale

According to the National Writing Panel, technology-based writing has helped young people develop as writers on the new read-write Web. Grammar- and spell-checkers have aided proofreading, and desktop publishing has opened up new opportunities for graphic design and publication. Any author could become his/her own designer, distributor of real-world texts for actual audiences. As a fourth grade teacher, I fused technology and writing in the form of responding electronically as a vehicle of communication between myself and the students. The classroom website I created allowed me, not only to motivate my students, but to provide another way to help them improve their writing skills. The students responded via my Web site to a variety of writing prompts that enabled them to work independently and at their own pace. The goal of the program was to embed technology in the classroom and to see how this would improve their writing and help them become effective communicators of their own knowledge.

In many elementary schools, instruction in reading and writing has begun to change over the past decade. Today, beginning writers are invited to invent their own spellings, compose their own stories, and read their own text aloud. Authoring and publishing is now a norm in many schools. Teachers provide opportunities for children to write for a variety of audiences and purposes, confer with them while their writing is in progress, arrange for peers to meet together to respond to one another's work, and encourage children to progress through multiple drafts of their work (Hillocks, 1986). The way this

model manifests in my classroom allows my students to respond to the writing prompt provided by the Writers Response Link and then submitted to me via email for feedback. Once I have printed out their responses, we gather in small groups for peer conferencing, thus reviewing what has been written, give constructive criticism and feedback. The students then rewrite and create a final copy for publication. Each week the prompt was updated and different directives were given with ideas on how to write. Another opportunity that the students had within the classroom, website was to publish their own stories. Once a week a student was chosen to write a draft, edit and then published what they had created via the class website link, "Story of the Week". Through word processing the students had a unique potential that exceeded the goals of the elementary writing curriculum.

Ultimately, the goal of this research was to avoid traditional "skill and drill" writing exercises and use technological communication to assist the student in becoming effective writers. Embedding technology into the writing curriculum was also important because students, who are exposed to using the word processors and other technology, have better formed theories and practices about writing. As teachers plan for writing instruction, the tools they offer, the tasks they design, and the learning they construct with the students will help them to develop a strong sense of classroom culture and shape their understanding of teaching writing. The students used the classroom website to communicate with the teacher and respond to the Writer's Response link. This process effectively led to peer-conferencing and publishing of their final essays.

Research

When students are invested in what they are doing they produce higher quality work. According to the Center for Applied Research in Educational Technology, recent studies suggest that instructional technology is thriving today as teachers and students are more computer literate and computers are faster, friendlier, and more accessible in schools. Most studies carried out during the 1990s found that enrichment programs have positive effects on students' writing skills. Giving students greater access to computers and internet resources often results in high and effective writing skills. When this computer access is structured within the curriculum the students become independent critical thinkers, able to find information, organize and evaluate it, and then effectively express their new knowledge and ideas in compelling ways (CAST, 1996). Technology can enable the development of critical thinking skills when students use technology presentation and communication tools to present, publish, and share results of their projects. According to the National Commission on Writing on America's Schools and Colleges, a group made up of university leaders, public school superintendents, and teachers, and assisted by an advisory panel of writing experts, the amount of time and money devoted to student writing must be dramatically increased in school districts throughout the United States, and state and local curriculum guidelines must require writing in every curriculum at all grade levels. Educators also must engage the private sector in developing ways to apply technology to the teaching and assessment of writing (Anonymous, 2003). The report stresses that writing is essential to educational and career success. Writing allows students to "connect the dots" in their knowledge and is central to self-expression and civic participation. In this report, entitled, "The Neglected "R": The need for a Writing Revolution", it is stated that writing should be embedded in

the curriculum and that writing has been shortchanged in school reform over the past twenty years. It is precisely because writing has not received the attention it deserves that I am focusing part of my research on ways in which it can be incorporated into my curriculum. This allows me to make an impact not only on the student, other teachers, administration bt the district and the community as well. The report also states that:

- Most fourth grade students spend less than three hours a week writing

- 66% of high school seniors do not write a three-page paper

- 70& of seniors never receive a writing assignment in history or social studies.

In referring to the National Assessment of Educational Progress (NAEP), also known as the "Nation's Report Card", in grades 4, 8, 12, about one student in five produces completely unsatisfactory prose, about 50% meet the "basic" requirements, and only one in five can be called "proficient". It would be beneficial to incorporate both writing and technology into the state school standards both as isolated skills and as an integrated set. It is essential to increase the time and financial records allotted to both technology and writing as well as to improve teacher awareness and training from all facets of education to develop ways of implementing technology and writing into their curriculum. In the state of the Union speech in January 1996, President Clinton pronounced, "Every Classroom in America must be connected to the information superhighway…by the year 2000." With this implementation, it is also apparent that integration of technology into the curriculum, teacher training, and ongoing support are important components for success. Research in evaluating the effectiveness of online communication is essential in for continued success. Therefore, in my classroom, I am implementing and analyzing the effectiveness of my program on an ongoing basis to ensure the success of each student.

In another study sponsored by Scholastic Inc., an educational publishing company, and the Council of the Great City Schools, a Washington-based lobbying organization for urban school districts in the United States, the Center for applied Special Technology (CAST) address the following goals to evaluate the effectiveness of online use, as different from the use of other technologies and curricular reforms, for improving students learning. The study was conducted in seven of the nation's major cities during the 1995-96 school year. These goals include: 1) to measure the effects of online use on student learning including information processing, communication, and presentation skills, and 2) to gain insights into what it takes to use online communications effectively in the classroom. This was a controlled study that examined the efficacy of online use as applied with in the ongoing curriculum. It also evaluated the online use with technology use in general which also addressed issues of teacher support and learning. Although, there were caveats in the study, there was a strong indication of the positive effects of online communication and the curriculum to enhance student learning. More importantly, the study represented a significant step in investigating whether online use will lead to increased learning, since we are in a world of rising demands for literacy, both as readers and technological consumers. In support of teacher effectiveness, school administrators need to find the means for professional development in the area of technology and curriculum implementation. Both students and teachers need to become independent critical thinkers and active learners who can find information, organize it, evaluate it and then effectively express their knowledge and ideas.

Background and Context

I am a 4th Grade teacher in an urban school and have been there for seven years. The

school is classified as Title I and low performing. Last year the state assessments were

such that we did not make Adequate Yearly Progress (AYP). As a member of the School

Improvement Zone, the school day is extended by one hour each day and the school year

is extended by two weeks each year. we teach an extra hour a day and two weeks longer

that the other schools within the district. We are mandated to teach and follow the state

standards established by the state of Florida and also fall under the Reading First Grant

which provides alternative intervention resources targeting low performing students.

There are currently six to eight computers in each classroom and our school also provides

a highly equipped computer lab. As a true "inner-city school", the majority of the student

population is living in poverty and 97% of our students receive free or reduced lunch as

well as a daily free breakfast. My school also provides a full service medical clinic for

our students and their families. The majority of the student population is African-

American. First or second-generation immigrants representing many Caribbean, Central

and South American countries comprise the remainder of the student body. There is also

very limited use of technology at home and many students who do have computers at

home use them without access to the internet.

There are 16 students in my classroom, which include 12 African-American students and

four Hispanic students. There are six computers in my classroom and a kidney bean table

for small group instruction. The desks are also grouped for cooperative learning and

group work. My classroom is a print-rich environment where the students have access to

math, science, language arts, and social studies vocabulary word walls that are constantly

changing and being updated. There is also an overhead projector and screen. As you walk into my classroom you will see bulleting boards that display the students' creative writing as well as the word walls listing various groups of words. There is also a bulletin board that displays the different centers and group names as well as times for each group. This display allows me to constantly make changes according to their progress and needs for differentiated instruction. There is also an assortment of books and reference materials for their use on a daily basis.

The Setting: Components of my Writing Block

The students were grouped into small teams according to their particular learning needs and the specific skills taught for that lesson. Approximately 20 to 25 minutes was spent on each group discussing and editing the prompt they typed, while the rest of the groups worked on the computer completing the Writer's Response prompt from the class link, and the other students worked independently on their writing projects. An hour was set aside each day to focus on writing and the writing process. The students had the opportunity to write on a daily basis which allowed for content knowledge and group discussions on the particular prompt or skill. Once the students were finished with their journal, they are given the opportunity to work on the particular hands-on writing project assigned for the week or month. Having a rotating schedule with the three groups allowed me to focus and implement mini-lessons on structure, context, grammar, or style in writing. The major component of the writing block is the involvement and implementation of the Writer's Response Link from the classroom website as well as peer conferencing. The Writers Response was based on the writing prompts given to the students each week. In the Writer's Response the students have write and then submit

their writing for peer review and editing through email. The link was set up so that when the students finish their response they click on the submit button and I received it as an email. They spend approximately 20 – 25 minutes on a prompt. The prompts may be expository where the students were given a prompt to explain a topic and gave reasons or explained their position on a specific topic. They had to give at least two to three reasons and then defend their reasons with details, examples, similes, and dialogue. They were also given a narrative prompt where the students to tell a story focusing on the topic of the prompt. Through peer conferencing, interaction and discussion between the teacher and students as well as student with student about the essay, complete the essential components of the writing block.
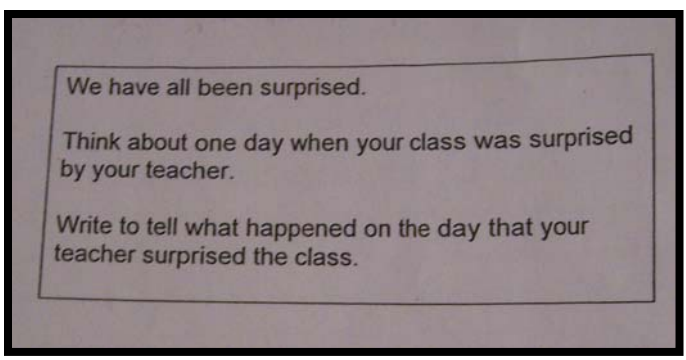
Tools for Data Collection

Numerous tools were implemented in the collection of data for this study. The tools chosen for the research included the monthly writing assessments, the essays from the Writer's Response link, daily journals, and the Florida Writes FCAT Classroom summary as well as the writing rubric scale. The students in the classroom were given a pre-test and a post-test based on the same writing prompt. The Florida Writes rubric scale was used to measure their progress in writing. The writing prompts were documented over the period of nine months with an assessment given each month. The written assignments from the Writer's Response link were used for peer conferencing and assessment on a weekly basis. This process gave the students the opportunity to make corrections and show progress. I met with each student after he or she had completed the response from the classroom Web site and established the specific skills the student needed to acquire.
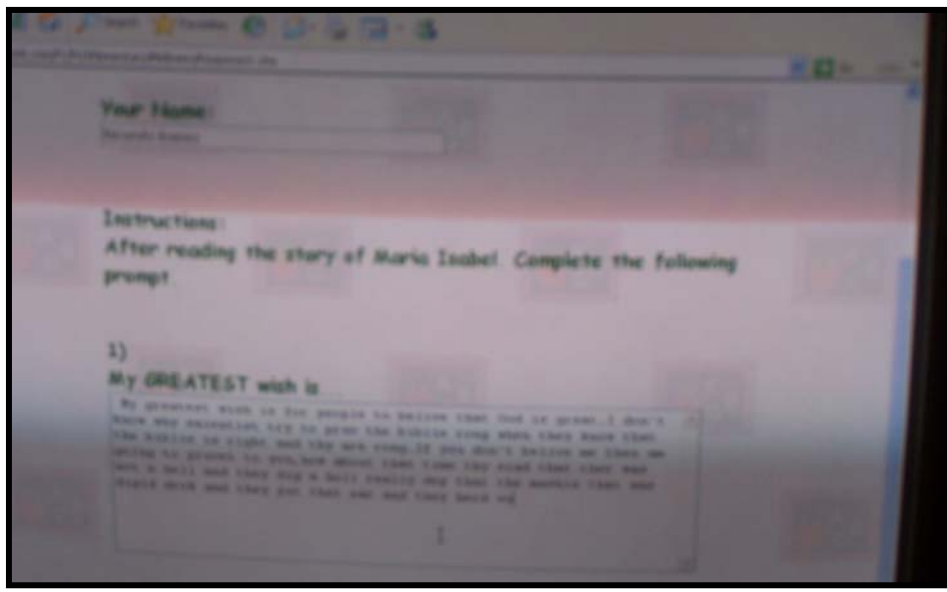
Writers' Response Link from the classroom website

Pre-test and Post-test Writing Prompt given to students at the beginning and ending of the school year.

We have all been surprised.

Think about one day when your class was surprised by your teacher.

Write to tell what happened on the day that your teacher surprised the class.

Scores of FCAT Writing

Low Scores	Middle Scores	High Scores
Unscorable 0	Okay 3	Excellent 5
Poor 1	Good Job! 4	Wonderful! 6
Not much better 2		

Data Analysis

As a result of the project, my students performed better and they showed significant gains in their writing. I focused on three students throughout my study, Mary, a level four ESOL student, Mac an average student, and Shawndre an above average student. Mary showed significant gains, going from a 2.0 to a 3.0 on a scale of 6.0. She went from a one-paragraph response to a three- paragraph response with focus. Mac showed significant gains as well. He increased his writing score from a 2.0 to a 4.0. Shawndre maintained her above average status in writing. As we worked together and analyzed their writing, they became more aware each time of the improvements they needed to make. They also showed motivation in working on the Writer's Response from the classroom Web site. Although, their motivation could not be measured, a student survey would have served as an indication of their diligence in continual progress and enthusiasm. Through both guided and independent writing, the students were able to practice note-taking skills, identifying the major concerns rooted in their writing thus making revisions to improve their final essay. The difference the classroom website made was that in this writing workshop, a community of writers was created in which both the teacher and students shared and revised their writing throughout all the various stages of the writing process using technological communication. Teacher and peer conferencing is continuous, (Lacina, 2003/2004). The overall effect of incorporating technology into my classroom curriculum was positive because the students were able to work independently and continued to show progress as they ventured in their own writing. They looked forward to emailing me their responses to the writing prompt.

Monthly Benchmark Assessments

	Aug.	Nov.	Jan.	Mar.	May	FL. Wrti	
C	2	4	3	4	4	4.5	
B	1	1	3	3	3	2	
A	0	2	3	3	3	4	

Florida Writes Rubric Scale
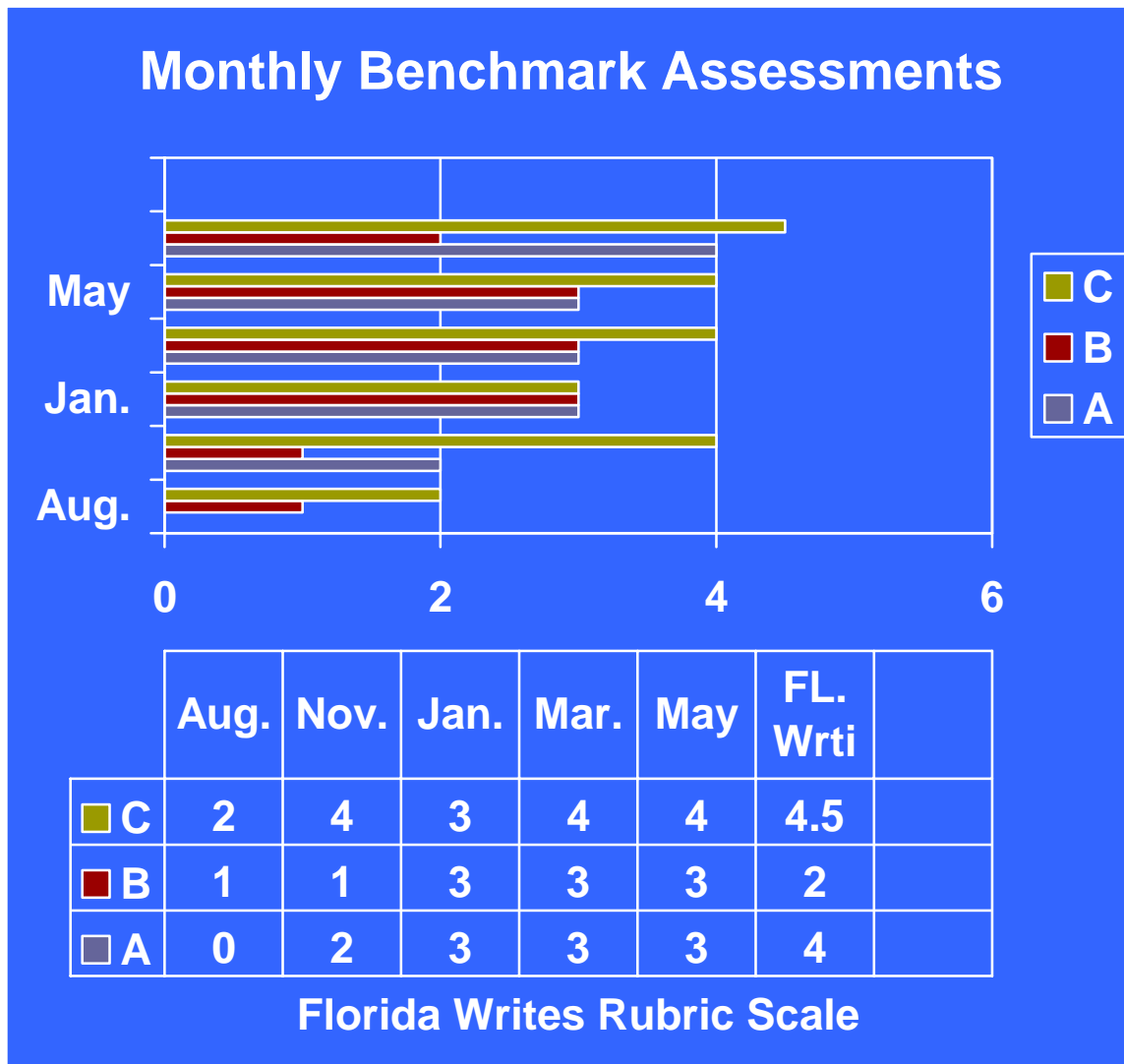
Data Collected through out the school year based on students writing responses as well as the Florida Writes Exam given at the end of the school year.

Policy Recommendations

The field of education in combination with technology has the power to be one of the greatest sources of information and collaboration of the 21st century. Students have the opportunity to become proficient writers, especially in a society that communicates through "texting" and "IMing." Students need to be provided with the tools necessary to communicate with the world. Providing a   source that is motivating and inviting will help the students to engage with writing instruction. Writing and technology go hand in

hand, therefore, as educators we must take advantage of this connection and provide the exposure needed to help our students achieve. Time and funding is needed, especially for low-income students who do not have access to a computer outside the classroom, so they may take advantage of all possible writing. Greater emphasis should be placed on technology by incorporating it into the curriculum as a part of writing. Professional development is needed to prepare our teachers so they may, in turn, prepare our students to use technology in connection with writing in the curriculum in order to have a society that will face the challenges of tomorrow.

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Appendices

Appendix A – Classroom Website

TeacherWeb   **Ms. Breen's 4th Grade Class**

Your Attitude Determines Your Altitude!!

Announcements
Teacher
Dear Parents!
Indian WebQuest
Science WebQuest
Our Learning Norms
This Weeks Learning Focus is...
Homework Policy
Homework Assignments
Writer's Response
Student of the Week!
Vocabulary Words for the Week
Story of the Week
Poem of the Week
My Story
Ms. Breen's 4th Grade Class Schedule
Links
Supply List
FAQ
4th Grade Standards
Spelling Words for the Week
Special Announcements!

Announcements

Welcome To 4th Grade

IF YOU BELIEVE, YOU CAN ACHIEVE!!!!!!!

Just several more days before FCAT and I KNOW we are ready

Check out our MISSION on the Science WebQuest/and The In

HOMEWORK! REMEMBER TO READ EVERY NIGHT FOR 20 TO

Thank you for visiting the website.. Ms. Breen

Appendices

Appendix B — Writers Response Submitted for Peer Conferencing

Name: ~~[redacted]~~

168.221.143.68 168.221.143.68 Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1

***** Multi-Paragraph Section
1)
I have a dream...

i have a dream that i was ciara and i was singing and everyone love
my song and then afain i was done singing that song my family was
so happy with me and then at the end the people that tould me that
i can go on to the next round that when i stard to cry and my mom
was like i am so happy with you and she said i never know that you
can sing like that i was crying to my mom saying that i made it
when i went home then i walk and that whan my family stard to cry
and saying that i did it and everyone stard hugging me tell me if i
didt win i will always be a winer to them that my dereeam that i had
when i was and my sleep and then i wake up and i said was that a
real dream and i said no that was not a real dream it was and my
sleep that my dream that i had and life time

2)
If Dr.Martin Luther King were alive today...

Appendices

Appendix C – Edited Response after Peer Conferencing

Name: ▓▓▓▓▓▓▓▓▓▓▓▓

168.221.143.68 168.221.143.68 Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; .NE

***** Multi-Paragraph Section
1)
I have a dream...

I HAVE A DREAM THAT ONE DAY I COULD GET EVERYTHING THAT I WANT.I
ALSO WANT THAT MARTIN LUTHER ▓▓▓ KING J.R COULD BE ALIVE.I CHOOSE
THOSE DREAMS BECAUSE IN MY BIRTHDAY I COULD GET AN LINTENDO DS AND
MY BROTHER COULD GET AN GAME BOY ADVANCE.HE WILL BE REALLY,REALLY,
HAPPY ▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓T IF I GIVE HIM ALL THE STUFF
OFF POKEMON AND DINOSUARS.HE WOULD THANK ME A LOT OF TIMES AND I
COULD GIVE HIM A ROOM MAKEOVER.I WANT MARTIN LUTHER KING BACK,▓▓▓▓TO CC
MAYOR.IF HE WANT TO BE OUR MAYOR I HOPE HE WILL BE HAPPY HE COULD
MAKE AN SPEECH TO THANK ME BECAUSE I'M THE ONE ▓▓▓ BROUGHT HIM BACK
TO LIFE TO MAKE THE PEOPLE BE WITH EACH OTHER.BLACK PEOPLE WITH
WHITE PEOPLE.I ALSO HAVE A DREAM ▓▓▓▓▓FAMILY IS REALLY,REALLY,
REALLY,RICH.THEY WOULD BE REALLY,REALLY REALLY HAPPY JUST LIKE MY
BROTHER.MY BROTHER WILL HAVE POKEMON AND DINOSAURS THAT WOULD BE THE
MAKE OVER FOR HIS ROOM.

2)
If Dr.Martin Luther King were alive today...

capital letters

Nintendo

who

that my

Appendices

Appendix D – . FCAT Writers Prompt

Shingi : writing 4/29/07.

Everyone has a favrite activity I have a favorite activity is basetball because I like to shot a lot and run down the courte.

I have basetball shoes and clothes I basetball I lIke to Juke and and other shake I love basetball it It is my favrite sprote.

It all stated when I was a little boy I tryed to shoot but it was too haene but I still tryed but I did noti make a baset.

When I was six years old I play little league baset-ball I number 3 I hade a nice jump shot and still do have it and I love basetball.

My brother and I use to alwaays go to the basetball courte to shot some hoops Monday through Friday we went we even went to basetball pratice cause we both love basetball

Appendices

Appendix E – Florida Writes FCAT Writing Classroom Summary
August 2006

Florida Writes! FCAT Writing Classroom Summary
(To be completed by the classroom teacher)

Paul L. Dunbar Elementary   Teacher: **Breen**   Grade: **Y**   Aug-2006

Circle the appropriate kind of prompt: Expository   (Narrative)

• Place an ✓ under the appropriate pre/post test column

Student	6 Pre	6 Post	5.5 Pre	5.5 Post	5 Pre	5 Post	4.5 Pre	4.5 Post	4 Pre	4 Post	3.5 Pre	3.5 Post	3 Pre	3 Post	2.5 Pre	2.5 Post	2 Pre	2 Post	1.5 Pre	1.5 Post	1 Pre	1 Post	0.5 Pre	0.5 Post	0 Pre	0 Post
Maria Smith	✐																✓									
Shaundre																	✓									
Jahlil															✓											
Lodarius																	✓									
Kimberly																	✓									
Ashley															✓											
Jacqueline													✓													
Roberto															✓											
Jose															✓											
Jackeline																	✓									
Alex																	✓									
Angie															✓											
Leonhar																					✓					
Wesly																										
Samantha													✓													
Maria																					✓					
Vladimir																					✓					

Pretest Class Average _____

Post Test Class Average _____

Appendices

Appendix F – Florida Writes FCAT Writing Classroom Summary
May 2007

Florida Writes! FCAT Writing Classroom Summary
(To be completed by the classroom teacher)

Paul L. Dunbar Elementary   Teacher: __Breen__   Grade: __4__   May\2007

Circle the appropriate kind of prompt: Expository   (Narrative)

• Place an ✓ under the appropriate pre/post test column

SCORE	6		5.5		5		4.5		4		3.5		3		2.5		2		1.5		1		0.5		0	
Student	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
ria Smith																	✓									
esh														✓												
osr														✓												
himi															✓											
Shled														✓												
sahil														✓												
smantha														✓												
aShred														✓												
berto													✓													
nawndre										✓																
exander												✓				✓										
cquiline																✓										
orshay																✓										
aheesha												✓														
ackeline													✓													

Pretest Class Average _____

Post Test Class Average _____