



Date December , 2008

Monte E. Dawson
Executive Director, Monitoring and Evaluation Services

Dear Dr. Dawson:

Thank you for your valuable advice for revising my application for research. I appreciate your time and the resources. I was able to use the technology surveys to modify and validate questions on the survey. Your name and contact information were added to the consent forms. The application was revised and the program proposal including the budget information you requested is included in this packet. The program proposal form does help to concisely organize all the important information. The evaluation summary with the unintended consequences and other information will be submitted in June with the formal report.

Because the study will need time to really assess the effectiveness of student access to the software and knowing that the process takes more time than anticipated, please accept the revised proposal now. I hope to begin student training in the 2nd week of January for more thorough implementation prior to SOL testing. I also need to resubmit the changes to George Mason's HSRB.

Please let me know if more changes are needed.

I thank you for all your help!

Susan Kenney

APPLICATION TO PERFORM RESEARCH

ALEXANDRIA SCHOOL DISTRICT

Monitoring and Evaluation
2000 N. Beauregard Street
Alexandria, VA 22311
(703) 824-6638 FAX (703) 998-5488

I. **Name of Primary Investigator:** Susan Kenney

Position: Assistive Technology Coordinator PhD Student
Affiliation: ACPS George Mason University

Home Address: 6227 Edgewater Drive, Falls Church, VA 22041
Home Phone: 703-578-0345

Office Address: ACAT, George Washington Middle School, Room D 107
1005 Mount Vernon Avenue, Alexandria, VA 22301
Office Phone: 571-274-2863

Email Address: acat@acps.k12.va.us

Names of Additional Members of Research Team-

Name _____ NA _____ Phone _____ NA _____

Project Title: Read&Write GOLD Software: How Does Its Use Effect Middle School Student Writing

Description:

There are two parts to this study.

Part I is an intervention study using assistive technology software, Read&Write GOLD, with students in eight self-contained special education classes.

Part II is a survey followed by interviews of Middle School Language Arts teachers to investigate teacher attitudes and explore technology integration practices.

For the last several years, ACPS middle school Language Arts classes have used Criterion Web based program to improve writing skills. A positive correlation has been noted between consistent Criterion holistic scores of 4 or better and passing scores of the written portion of the Virginia SOL assessment. This year ACPS purchased assistive technology software program that has writing tools that can be used by middle school students in Special Education with identified writing deficits. These tools can be used in conjunction with Criterion.

In this pilot study, students in four self-contained special education classes will use the Criterion Web based program for writing practice as they have done in the past. In four

other self-contained special education classes, a researcher and teachers will train students to use Read&Write GOLD in conjunction with Criterion during writing activities. After training, students will have access to the both software programs one to two times per week for practice with writing assignments. Writing samples will be submitted to Criterion web based assessment software. Baseline first rough draft writing samples will be compared with first rough draft samples written after using the software 1 time, 6 times, and 12 times. Data reflecting feature use from the Read&Write GOLD software that is collected by the software will also be graphed and compared.

III. Participant Involvement:

<u>Number of Subjects Needed</u>	<u>Time Requirements</u>
Part I	
Pupils: 20-40	15-20 min. one to two times each week for writing practice
Teachers:	2- 3 hour training sessions- Read&Write GOLD software (Already complete.) 30 min. refresher training sessions as needed
Part II	
Teachers: 10-20	10 to 15 min survey response 4-6 - 1 hour interviews
Administrators _____ NA _____	_____
Parents _____ NA _____	_____

Describe the involvement required of subjects, attach any instruments (including reliability and validity information) that will be employed, and also attach your parent permission form letter, if students or their records are to be used in your research. If staff are to be surveyed or interviewed, please include your explanatory letter to them. Describe all other data requirements.

There are two types of projects for this study.

Part I Six ACPS middle school teachers were trained to use Read&Write GOLD this summer. Students chosen will be students in the self contained classes of those teachers. Approximately 45-60 students would be involved.

The researcher would introduce the students to the software. The teachers would allow the students to use the software for writing practice and assignments from one to two times per week for 12 to 15 sessions. Because ACPS is focusing on writing skills this year, the time spent writing would be a normal class activity. Each teacher has another self contained class. The second class would have writing practice as usual. Initial hand written samples would be entered into criterion. Students would submit a minimum of 3 first rough draft samples during the study. Criterion scores and other computer collected data would be compared.

Independent measures

1. 5th grade Writing SOL Scores
2. Previous grade Reading SOL Score
3. Read&Write GOLD Software
4. Number of sessions using the software
5. Mean length of time using the software

Dependent measures

1. Gain score of the Criterion Holistic Score
2. Gain SOL Reading scores
3. District Writing Rubric Scores for Middle School Descriptive Writing
 - a. Composing- Possible points- 1-50
 - b. Written Expression- Possible points- 1-40
 - c. Mechanics- Possible points- 1-10
4. Spelling accuracy
5. Mean number of words

Maintenance measure

1. Writing sample 3-4 weeks after 12th -15th session
2. Writing sample 7-8 weeks after 12th -15th session
3. Gain score from 5th to 8th grade writing SOL

Part II A survey, adapted from questions included in the Formative Evaluation of the Technology Integration in 2004-05 and the Alexandria City Public Schools High School Technology Integration Project by METIRI Group, regarding thoughts about the use of assistive technology and ideas for incorporating technology in classes would be sent to middle school Language Arts teachers. This would be sent via the confidential ACPS survey application. It would take about 10-15 minutes. The final question would ask about interest in participating in an interview and provide an e-mail link to set up a 40 – 60 minute interview.

Number of persons that will visit sites in connection with proposed project: 1

IV. **Project Requirements:**

Number and Type of School(s):

Elementary (K-5) _____	Middle (6-8) ✓
Ninth Grade Center (9) _____	Secondary (10-12) _____
Total number of schools: 2	Total number of classrooms 8
Grades required 6 th & 7 th	Other characteristics: Self-Contained Special Ed Classes

Do you require specific schools? Yes

Names: George Washington Middle School & Francis C. Hammond Middle School

Proposed Starting date of research: January 2009

Proposed Ending date of research: Contacts would end in March or April 2009
Reading SOL grades would be collected in June 2009
Report delivered by the end of June 2009

Frequency of contact: 3 times per month for 2.5 months

V. Briefly Describe Your Data Analysis Plan:

Student first draft writing samples (A first draft sample is an initial writing for a prompt completed in one 25 minute session), would be collected, typed, and assessed by Criterion, a web based writing evaluation service. Criterion assigns a holistic score from 1 (poor) to 6 (very well done) and also identifies specific number of errors in spelling, grammar, and content. The samples would be gathered from the beginning of the year, before technology was used. First draft samples from the first, sixth, and twelfth sessions using Read&Write GOLD would be submitted to Criterion. The Criterion holistic gain score would be graphed and compared. The ACPS Middle School Descriptive Writing Rubric would also be used to assess each first draft writing sample. Each writing sample will be assessed by at least two different raters. If there is a discrepancy of more than six points on the hundred point scale, a third rater will be included. Each student Read&Write GOLD profile would be accessed and data from the writing and spelling logs would be gathered to determine the feature use, spelling corrections, number of sessions, and length of sessions.

VI. Results:

What is the anticipated value of the research?
In general?

Part I would demonstrate what may happen if students with writing needs have access to assistive technology software and use it consistently.

Part II of this study would raise awareness of the teacher attitudes of the use of assistive technology by students with special needs and give insights of ways to integrate the use of technology and assistive technology for students with writing issues, accommodations and/or modifications documented on their IEPs.

To the Alexandria School District?

Alexandria School District has recently purchased Read&Write GOLD software for both middle school buildings.

1. This study could help provide insight as to the benefits of this software for students with special needs. It is hoped that consistent use of this software for writing practice could help improve student writing skills and positively impact the results of SOL Direct Writing Prompt for students receiving Special Ed services.
2. Results will also help with the decision, whether or not, to make additional purchases of this software.
3. If the software is found beneficial and additional software is purchased, insights gleaned from this study could help teachers effectively integrate the software in classes with students with documented writing deficits.

VII. References: Please list references we may contact.

Dr. Michael Romanelli- 703-824-6650 and Thereda Cobb-Newsome- 703-824-6650

Are other school systems involved in this research? No

Please list names _____

Have you conducted research in other school systems? No

Please list names _____

VIII UPON COMPLETION OF THE RESEARCH YOU WILL BE REQUIRED TO SUBMIT TWO COPIES OF THE REPORT (OR SUMMARY).

The documents can be expected by (date): June 30, 2009

1) Signature of Applicant _____ Date _____

If a graduate student, please obtain the signature of your Advisor, Professor, or Supervisor.

2) Dr. Margo Mastropieri
PRINT - Name of Advisor, Professor, or Supervisor

George Mason University
Institution

Date _____

3) Dr. Michael Romanelli
Signature of Advisor, Professor, or Supervisor

ACPS
Office Telephone- 703-824-6650

Date _____

RESEARCH PROCEDURES

Alexandria City Public Schools recognize the need and value of educational and psychological research in developing, validating, and standardizing programs and strategies in education.

Research is defined as the process of careful, critical inquiry varying in method according to the nature of the identified problem. Basic research is predominantly theoretical and knowledge producing. Applied research is directed to solving problems or introducing planned change.

It is expected that most research conducted in the Alexandria City Public Schools will be of the applied type. Products of research should assist teachers, administrators, and the School Board as they work toward improving educational and operational practices.

Students and staff rights shall be protected in any research conducted in cooperation with the Alexandria City Public Schools. Parents of children who are subjects of research and staff who are asked to participate in research projects must be provided:

- 1) an explanation of procedures and their purposes;
- 2) a description of possible risks and benefits that might be reasonably expected;
- 3) an offer to respond to inquiries on procedures; and
- 4) the right to refuse to participate or to discontinue participation at any time without prejudice.

Written permission of parents shall be required when students or their records will be involved. Explanatory materials should be provided to ACPS staff if they are to be surveyed or interviewed. All research projects within the division involving pupils, staff, the collection of personal information, or the use of materials not commonly part of the curriculum, must have prior approval of the Superintendent or his designated representative. Staff members are encouraged to organize, promote, participate in, and cooperate with approved projects.