Culminating Experience Action Research Projects, Volume 6, Fall 2004

Edited by
Deborah A. McAllister and Susan M. Bothman

College of Health, Education, and Professional Studies
The University of Tennessee at Chattanooga

Introduction

As a part of the teacher licensure program at the graduate level at The University of Tennessee at Chattanooga (UTC), the M.Ed. Licensure candidate is required to complete an action research project during a 3-semester-hour course that coincides with the 9-semester-hour student teaching experience. This course, Education 590 Culminating Experience, requires the student to implement an action research plan designed through (a) the Education 500 Introduction to Inquiry course, (b) one of the two learning assessments required during student teaching, or (c) a newly-designed project not used as one of the learning assessments.

With funding through a UTC Teaching, Learning, and Technology Faculty Fellows award, the Education 590 course is conducted through the use of an online, course management system (Blackboard Learning System Release 6), allowing for asynchronous discussion and use of the digital drop box feature for submitting required papers.

The course syllabus for Education 590 Culminating Experience is presented in the next section, followed by action research projects from fall semester 2004.

Deborah A. McAllister

Susan M. Bothman

October 2005

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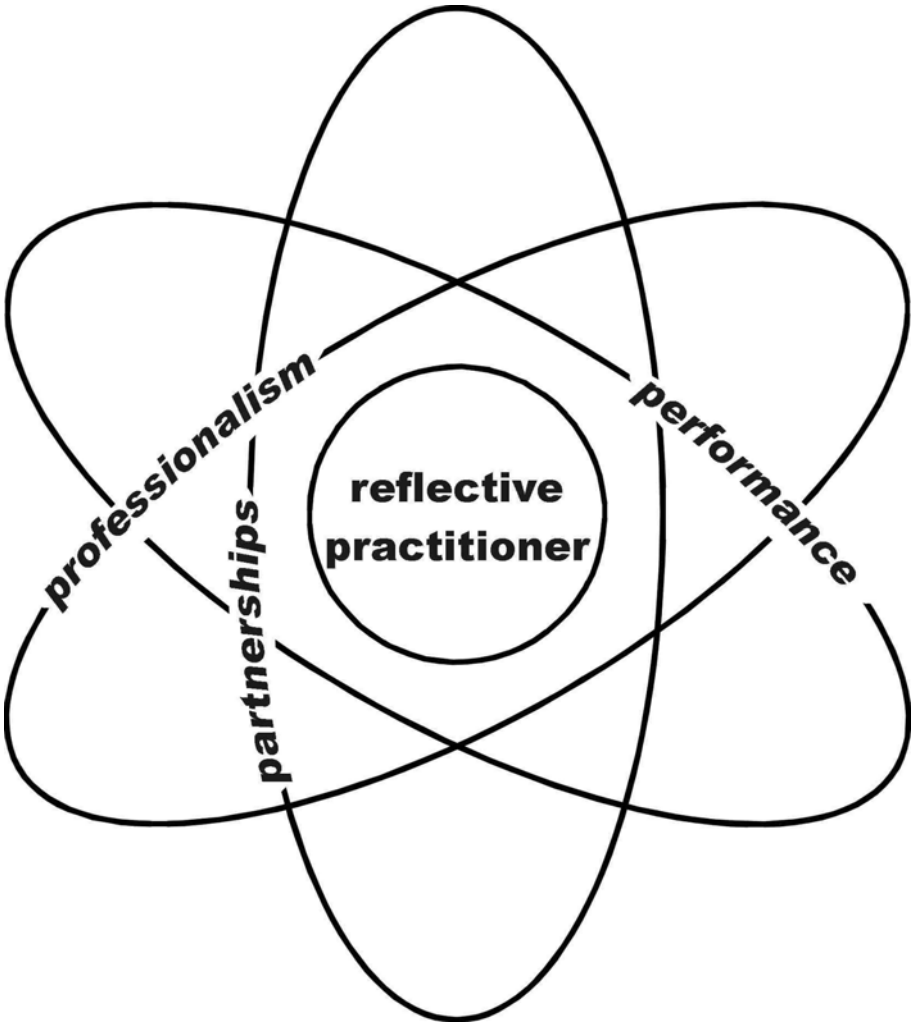

ATTENTION: If you are a student with a disability (e.g., physical, learning, psychiatric, vision, hearing, etc.) and think that you might need special assistance or a special accommodation in this class or any other class, call the Office for Students with Disabilities/College Access Program at 423-425-4006 or come by the office, 110 Frist Hall.

To enhance student services, the University will use your UTC email address (firstname-lastname@utc.edu) for communications. (See http://onenet.utc.edu/ for your exact address.) Please check your UTC email on a regular basis. If you have problems with accessing your email account, contact the Help Desk at 423-425-2678.

Educ 590 Culminating Experience – Fall 2004
Section 001, By Appointment, 3 credit hours

Instructor

Dr. Deborah A. McAllister
Office: Hunter 310C
Office hours: M 1:30 p.m. to 5:00 p.m., Tu 1:30 p.m. to 5:00 p.m., or by appointment
Phone: 423-425-5376 (Office), 423-842-1607 (Home)
Email: Deborah-McAllister@utc.edu
Graduate Assistants: Tom Allen, Susan Bothman

Catalog description

Directed research or development project under faculty supervision. *Prerequisite: Admission to candidacy, approval of M.Ed. committee.*

Recommended text and web sites

American Psychological Association. (2001). *Publication manual of the American Psychological Association* (5th ed.). Washington, DC: Author.

Online Writing Lab at Purdue University. (2004). *Using APA format.* Retrieved August 6, 2004, from the Purdue University OWL Web site: http://owl.english.purdue.edu/handouts/research/r_apa.html

Degelman, D., & Harris, M. L. (2004, July 8). *APA style essentials.* Retrieved August 6, 2004, from the Vanguard University Web site: http://www.vanguard.edu/faculty/ddegelman/index.cfm?doc_id=796

University of Wisconsin - Madison Writing Center. (2004). *Writer's handbook: APA documentation style.* Retrieved August 6, 2004, from the University of Wisconsin - Madison Writing Center Web site: http://www.wisc.edu/writing/Handbook/DocAPA.html

Objectives

1. The student can apply a variety of research strategies for use in the elementary, middle grades, and/or secondary classroom, or with professionals in the field. Reflective decision making, a process involving reading, reflecting, and responding, will be applied by the student to evaluate ongoing research techniques, procedures, and materials, in order to become a reflective practitioner.
2. The student will select or design surveys and/or rubrics for data collection in the content area.
3. The student will understand current issues in the content area, including current research methods, materials, professional development and grant opportunities, and programs suitable to all learners, from exceptional populations to diverse ethnic and cultural groups.

4. The student will demonstrate the ability to connect new learning with prior knowledge and skills through a case study conducted during the Induction Experience.

Requirements

1. Select a case study option:
   a. Implementation of the project designed in Educ 500 as your case study. Include modifications to the project, if necessary, based on knowledge gained since the completion of Educ 500. Submit a corrected copy.
   b. Plan to use one of your learning assessments from your first placement as your case study. Submit an outline of the topic, what will be assessed, who will be assessed, how and when assessment will occur, and what instruments will be used. Submit an outline.
   c. Design a new project of your own choosing. Submit an outline for approval.

2. **Prior to data collection, complete the REQUIRED process for UTC's Institutional Review Board For the Protection of Human Research Subjects (http://www.utc.edu/~instrb/). Request either an Exemption from IRB Review (Form A) if your sample includes only adults, or an Expedited Review (Form B), if your sample includes children. Form C must be completed at the end of the study. I will print Form C for you to sign. Review the information and forms on the IRB web site for additional details. An Exemption requires approximately 1 week to process. An Expedited Review may require several weeks to process. (Full board approval is required if there is more than minimal risk to the subject.) Any updates to the IRB process will be followed. Submit one signed copy; I will make the photocopies after obtaining signatures. Your instrument, consent form, and/or assent form MUST contain the following statement:**

   THIS PROJECT HAS BEEN REVIEWED BY THE INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS AT THE UNIVERSITY OF TENNESSEE AT CHATTANOOGA.

   If there is evidence of prior research that you have done or evidence stated in the literature for your project, place that on the IRB approval form (a sentence or two). If not, cite the HCDE standards that are addressed by your project so the IRB members know why you are teaching/investigating the topic. Check the IRB's Review Status link for updates on your proposal.

3. Implementation of the project will be completed during the Induction Experience (Educ 596) or the Professional Teaching Experience (Educ 591). Implementation **cannot** occur prior to IRB approval.

4. Completion of the written project, **in APA style**. Include the following elements, each of which should be centered at the top of that section of the paper (not italic,not bold; see p. 113 in the APA style manual:
   a. Introduction to the Problem. Why was this topic selected for study? Is this topic a current national, state, or local issue? Is this topic a staple of the curriculum in your field? Etc.

b. Review of Literature. Use at least five refereed sources. The online ERIC advanced search should be used to locate references in educational journals and documents. See http://www.eduref.org/ (search the ERIC database) or http://www.eric.ed.gov/ to get to the advanced search (located at http://www.ericfacility.net/teams/Search.do?action=5&model=101). **You must use a page number or a paragraph number for all direct quotes. All references should contain complete page numbers (not the first page only, as may be listed in online documents).**

c. Data Collection and Results. Describe data collection procedures. Provide results of the project, in narrative form and including a chart and/or graph to display the data collected. Analysis of results is from the perspective of higher order cognitive skills. Use descriptive statistical measures (mean, median, mode, frequency distribution, charts, graphs, etc.) for communication of project results. Charts and graphs are imported from Excel to Word and cited as tables and figures. See Microsoft Excel [spreadsheet] software, used in Educ 575.

d. Conclusions and Recommendations. What generalizations, if any, can be made, based on the results of the case study? What is the consensus of your professional organization with regard to the problem studied? What recommendations would you make for teacher professional development? Is grant money available to support further research in this area? What role could be assumed by the use of technology in this area? **Please address all items in this section.**

e. Copies of the instrument(s) used for data collection. Instrument(s) are placed in individual appendices. Word process instruments from the Web, books, etc., but place a citation on the page and in the reference list.

5. Communication:
   a. Current email address registered with UTC for communication between student and instructor. The UTC email address will point to the email address you have on file. See http://itd.utc.edu/email/stu_saindex.shtml for more details.
   b. Web access to check course announcements and post messages to the discussion forum on Blackboard a minimum of once per week. See http://bb2.utc.edu/.

6. All work is to be computer-generated and turned in through the Blackboard digital drop box. You may complete your project either on the Macintosh or Windows platform. Please use Microsoft Word and Microsoft Excel. If other software is to be used, please ask for approval. Keep a copy of your work on a hard drive or a disk so that it can be accessed, if needed. Reminder: You will need a student ID card to use the university student lab in the University Center.

7. Please note:
   a. Ask another person to proofread your work for correct syntax and semantics before submitting it. You are encouraged to post it to the Blackboard discussion forum.

b. The Writing Center is located in 119 Holt Hall. See http://www.utc.edu/~scribble/ for hours and information.
c. Case studies may be displayed at a professional meeting and/or gathered for a publication.

Grading rubric

Criteria	A	B	C	F
Project outline and IRB approval	Submitted online. Submitted for IRB approval; approval received.	Submitted online. Submitted for IRB approval; approval received.	Submitted online. Submitted for IRB approval; approval received.	Not submitted online. Not submitted for IRB approval, or IRB approval denied.
Instruments	Items appear to be reliable and valid for the case study.	Items appear to be reliable and valid for the case study.	Reliability or validity is questionable.	Reliability and validity cannot be defended.
Data collection and results	Narrative gives descriptive account of data collection and results, and higher order analysis of results; data chart and graph display results accurately and appropriately.	Narrative provides descriptive account of data collection and results, but analysis of results is weak; data chart and graph display results satisfactorily.	Narrative provides limited descriptive account of data collection and results; analysis of results is flawed; data chart and graph display results, but contain errors.	Neither narrative nor chart and graph convey the data collection procedures and results of the study.
Conclusions and recommendations	Provides a cohesive summary to the project; all recommendation areas addressed satisfactorily.	Provides a cohesive summary to the project; most recommendation areas addressed satisfactorily.	Summary lacks insight to the intent of the project; recommendation areas not completely addressed.	Conclusions do not reflect results; recommendation areas not completely addressed.
APA style	APA style elements present: headings, subject-verb agreement, citations, references, abbreviations, commas, semicolons, lists, tables, figures, appendices, etc.	APA style elements present, with minor errors.	Ideas are understandable; acceptable writing style, though not APA.	Written style is inconsistent; difficult to follow the flow of ideas.
Spelling and typographical errors	No spelling errors; minimal typographical errors; correct use of plural and possessive forms.	Spelling and typographical errors present.	Errors detract from quality of project.	Poorly written.
Completion time	All elements completed on time.	Major elements completed on time; some minor elements late.	Most major elements completed late; some or most minor elements late.	No time deadline.
Communicatio	Open communication	Response time is	Response time is	Response time is

n	between student and instructor. Progress message posted to the discussion forum at least weekly.	less than once each week.	less than once in 2 weeks	less than once in 4 weeks.
Professional quality and usefulness	Previous and current suggestions, and modifications, fully incorporated into project outline; project is relevant to education.	Previous and current suggestions, and modifications, selectively incorporated into project outline; project is relevant to education.	Previous and current suggestions, and modifications, minimally incorporated into project outline; project is relevant to education.	Previous and current suggestions, and modifications, not incorporated into project outline; project has little relevance to education.
Represents graduate level work	Completed project is presented as a coherent whole.	All project elements present but project is not presented as a coherent whole.	One or more project elements missing; project is not presented as a coherent whole.	Major project elements missing; project is not presented as a coherent whole.

Week (Tentative course schedule, subject to change.)		**Assignment due**
1	Week of 08/23/04 (and prior meeting 04/20/04) Student teacher meeting - M 08/23, 8:30 a.m. – 5:00 p.m. 1st placement begins – W 08/25	Check email account; access Blackboard. Meet at 12:00 p.m. for Educ 590.
2	Week of 08/30/04	Case study option selected; proposed outline posted to discussion forum.
		Paperwork submitted for IRB approval (Exemption/Form A, Expedited Review/Form B). **Instruments must be included with both Form A and Form B.** **Parental consent form and student assent form must be included with Form B.** **Participant consent form should be included with Form A.** **Copy of IRB approval placed in my mailbox in Hunter 311, when received, if not sent by email.**
3	Week of 09/06/04 Labor Day Holiday - M 09/06 (UTC/HCDE)	Begin case study work on introduction, review of literature, and instruments; place file in digital drop box for review and for a check of APA style.
4	Week of 09/13/04	Begin data collection, with IRB approval.
5	Week of 09/20/04	Case study work continues.
6	Week of 09/27/04	Case study work continues.
7	Week of 10/04/04 1st placement ends/Inservice – Th 10/07 – F 10/08 (HCDE) Student teacher meeting – F 10/08, 8:30 a.m. – 5:00 p.m.	Data collection is complete.
8	Week of 10/11/04 Fall break, M 10/11 – F 10/15 (HCDE)	Writing of case study.
9	Week of 10/18/04 Second placement begins - M 10/18	Writing of case study.
10	Week of 10/25/04 Fall break, 10/25-10/26 (UTC)	Writing of case study.
11	Week of 11/01/04	Writing of case study.
12	Week of 11/08/04	Writing of case study.
13	Week of 11/15/04	Writing of case study.
14	Week of 11/22/04 Thanksgiving Holiday – 11/24-11/26 (UTC/HCDE)	Proofreading of case study.
15	Week of 11/29/04	**Completed case study due, F 12/03/04, 5:00 p.m.** **Case study assembled in a single file; placed in digital drop box.**
16	Week of 12/06/04 Second placement ends - F 12/10	**Late case studies accepted.**
17	Week of 12/13/04 Student teacher meeting - M 12/13, 2:00 p.m. – 5:00 p.m. Th 12/16/04 - Grades due for all students, 12:00 p.m. Su 12/19/04 - Commencement, 2:00 p.m.	**IRB Form C completed when we meet on 12/13 (1:30 p.m. ?).** **Late case studies accepted; not guaranteed to be graded by 12/16.**

APA style (general guidelines; use reverse indent)

1. Journal

Last name, Initials., & Last name, Initials. (year). Title of the article in lower case letters except first letter of the title and proper nouns. *Journal name, volume*(number), page number-page number.

Many, W., Lockard, J., Abrams, P., & Friker, W. (1988). The effect of learning to program in Logo on reasoning skills of junior high school students. *Journal of Educational Computing Research, 4*(2), 203-213.

2. Book

Last name, Initials., & Last name, Initials. (year). *Title of the book in lower case letters except first letter of the title and proper nouns.* Place of publication: Publishing Company.

Turner, T. N. (1994). *Essentials of classroom teaching elementary social studies.* Needham Heights, MA: Allyn and Bacon.

3. Software

Last name, Initials., & Last name, Initials. (year). *Title of the Software in Upper Case First Letters* [Computer software]. Place of publication: Publishing Company.

Microsoft Corporation. (1996). *Encarta 97 Encyclopedia* [Computer software]. Redmond, WA: Author.

In example 3, the author and the publishing company are the same, so the word 'Author' is used.

4. Online source

Last name, Initials., & Last name, Initials. (year). *Title of the web site in lower case letters except first letter of the title and proper nouns*. Retrieved today's date, from complete URL

National Council of Teachers of Mathematics. (2000). *Principles and standards for school mathematics*. Retrieved August 6, 2004, from http://standards.nctm.org/

In example 4, I omit the period '.' at the end so it will not be confused in the address. Others choose to leave one space, then place the period at the end of the URL.

5. ERIC document

Last name, Initials., & Last name, Initials. (year). *Title of the paper in lower case letters except first letter of the title and proper nouns.* Paper presented at name, place, and date of conference, or other relevant information. (ERIC Document Reproduction Service No. XXXXXX)

McAllister, D. A., Mealer, A., Moyer, P. S., McDonald, S. A., & Peoples, J. B. (2003). *Chattanooga math trail: Community mathematics modules, volume 1*. Washington, DC: U.S. Copyright Office. (ERIC Document Reproduction Service No. ED478915)

Professional Organizations (examples)

American Council on the Teaching of Foreign Languages. (2003). Retrieved August 6, 2004, from http://www.actfl.org/
Council for Exceptional Children. (2003, December 22). Retrieved August 6, 2004, from http://www.cec.sped.org/
International Reading Association. (2003). Retrieved August 6, 2004, from http://www.ira.org/
International Society for Technology in Education. (2003, December 16). Retrieved August 6, 2004, from http://www.iste.org/
National Art Education Association. (n.d.). Retrieved August 6, 2004, from http://www.naea-reston.org/
National Association for Music Education. (n.d.). Retrieved August 6, 2004, from http://www.menc.org/
National Association for the Education of Young Children. (2003). Retrieved August 6, 2004, from http://www.naeyc.org/
National Council for the Social Studies. (2003). Retrieved August 6, 2004, from http://www.ncss.org/
National Council of Teachers of English. (2003). Retrieved August 6, 2004, from http://www.ncte.org/
National Council of Teachers of Mathematics. (2003). Retrieved August 6, 2004, from http://www.nctm.org/
National Middle School Association. (n.d.). Retrieved August 6, 2004, from http://www.nmsa.org/
National Science Teachers Association. (2004). Retrieved August 6, 2004, from http://www.nsta.org/

Rubrics (examples)

Barnard, P. (2004, June 8). *Learning central @ Pioneer: Rubric resources.* Retrieved August 6, 2004, from http://www.asd.wednet.edu/pioneer/barnard/index.htm
Chicago Public Schools. (2000). *The rubric bank.* Retrieved August 6, 2004, from http://intranet.cps.k12.il.us/Assessments/Ideas_and_Rubrics/Rubric_Bank/rubric_bank.html
Chicago Public Schools. (2000). *How to create a rubric.* Retrieved August 6, 2004, from http://intranet.cps.k12.il.us/Assessments/Ideas_and_Rubrics/Create_Rubric/create_rubric.html
Coxon, E. (2004, May 30). *The staff room for Ontario's teachers.* Retrieved August 6, 2004, from http://www.quadro.net/~ecoxon/
LessonPlanZ.com. (2004). Retrieved August 6, 2004, from http://lessonplanz.com/ (use 'rubric' as a search term)
South Dakota State University. (n.d.). *Rubric template.* Retrieved August 6, 2004, from http://edweb.sdsu.edu/triton/july/rubrics/Rubric_Template.html
Teach-nology. (2003). Rubric, rubrics, teacher rubric makers. Retrieved August 6, 2004, from http://teachers.teach-nology.com/web_tools/rubrics/

The Landmark Project. (n.d.). *Rubric construction set.* Retrieved August 6, 2004, from http://landmark-project.com/classweb/rubrics/4x4rubric.html

Surveys (examples)

The International Consortium for the Advancement of Academic Publication. (2004, June 5). *Resources for methods in evaluation and social research.* Retrieved August 6, 2004, from http://gsociology.icaap.org/methods/

University of Southern Indiana Sociology Department. (2003). *Social research and statistical links.* Retrieved August 6, 2004, from http://www.usi.edu/libarts/socio/stats.htm

Bibliography

American Association for the Advancement of Science. (1993). *Benchmarks for science literacy*. Retrieved August 6, 2004, from http://www.project2061.org/tools/benchol/bolintro.htm

Association of College and Research Libraries. (2004, July 26). *Information literacy competency standards for higher education.* Retrieved August 6, 2004, from http://www.ala.org/acrl/ilstandardlo.html

Creswell, J. W. (1994). *Research design: Qualitative & quantitative approaches*. Thousand Oaks, CA: Sage Publications, Inc.

Educator's reference desk. (n.d.). Retrieved August 6, 2004, from http://www.eduref.org/ (contains material previously in the database of the ERIC Clearinghouse on Information and Technology; also see http://www.eric.ed.gov/).

Fogarty, R. (1995). *The mindful school: How to integrate the curricula awareness program.* Palatine, IL: IRI/Skylight Training and Publishing, Inc.

Freiberg, H. J., Driscoll, A., & Stetson, R. H. (1992). *Universal teaching strategies.* Boston, MA: Allyn and Bacon.

Gay, L. R., & Airasian, P. (2003). *Educational research: Competencies for analysis and applications* (7th ed.). Upper Saddle River, NJ: Pearson Education, Inc.

Hamilton County Department of Education. (2003, August 4). *Standards- grademarkers-benchmarks*. Retrieved August 6, 2004, from http://www.hcde.org/standards/stindex.html

Johnson, A. P. (2002). *A short guide to action research*. Boston, MA: Allyn & Bacon.

Leedy, P. D., & Ormrod, J. E. (2005). *Practical research: Planning and design*. Upper Saddle River, NJ: Pearson Education, Inc.

Martin, D. B. (1999). *The portfolio planner.* Upper Saddle River, NJ: Prentice-Hall, Inc.

McAllister, D. A. (2004). *Faculty page – McAllister*. Retrieved August 6, 2004, from http://oneweb.utc.edu/~deborah-mcallister/

McMillan, J. H., & Schumacher, S. (2001). *Research in education* (5th ed.). New York, NY: Addison Wesley Longman, Inc.

Menges, R. J., & Weimer, M. (1996). *Teaching on solid ground: Using scholarship to improve practice.* San Francisco, CA: Jossey-Bass Inc.

Mills, G. E. (2003). *Action research: A guide for the teacher researcher* (2nd ed.). Upper Saddle River, NJ: Pearson Education, Inc.

Mills, S. C., & Roblyer, M. D. (2003). *Technology tools for teachers: A Microsoft Office tutorial.* Upper Saddle River, NJ: Pearson Education, Inc.

National Council of Teachers of Mathematics. (2000). *Principles and standards for school mathematics*. Retrieved August 6, 2004, from http://standards.nctm.org/

National Research Council. (1999). *How people learn.* Washington, DC: National Academy Press. (see also http://www.nap.edu/readingroom/books/howpeople1/notice.html)

National Research Council. (1995). *National science education standards*. Retrieved August 6, 2004, from http://www.nap.edu/readingroom/books/nses/

Novak, J. D., & Gowin, D. B. (1984). *Learning how to learn.* New York, NY: Cambridge University Press.

Palloff, R. M., & Pratt, K. (2001). *Lessons from the cyberspace classroom: The realities of online teaching.* San Francisco, CA: Jossey-Bass Inc.

Provenzo, E. F., Jr. (2002). *The Internet and the World Wide Web for teachers.* Needham Heights, MA: Allyn & Bacon.

Reed, A. J. S., & Bergemann, V. E. (2001). *A guide to observation, participation, and reflection in the classroom* (4th ed.). New York, NY: McGraw-Hill.

Roblyer, M. D. (2003). *Integrating educational technology into teaching* (3rd ed.). Upper Saddle River, NJ: Pearson Education, Inc.

Roblyer, M. D. (2003). *Starting out on the Internet: A learning journey for teachers* (2nd ed.). Upper Saddle River, NJ: Pearson Education, Inc.

Tennessee Department of Education. (n.d.). *Curriculum frameworks*. Retrieved August 6, 2004, from http://www.state.tn.us/education/ci/cistandards.htm

Treffinger, D. J., Hohn, R. L., & Feldhusen, J. F. (1979). *Reach each you teach.* Buffalo, NY: D. O. K. Publishers, Inc.

Tuckman, B. W. (1999). *Conducting educational research* (5th ed.). Fort Worth, TX: Harcourt Brace & Company.

Items available in Lupton Library

Campbell, L., Campbell, B., & Dickinson, D. (1996). *Teaching and learning through multiple intelligences.* Needham Heights, MA: Allyn and Bacon.

Haladyna, T. M. (1997). *Writing test items to evaluate higher order thinking.* Boston, MA: Allyn and Bacon.

Krulik, S., & Rudnick, J. A. (1995). *The new sourcebook for teaching reasoning and problem solving in elementary schools.* Boston, MA: Allyn and Bacon.

Ross, S. M., & Morrison, G. R. (1995). *Getting started in instructional technology research.* Washington, DC: Association for Educational Communications and Technology.

Silberman, M. L. (1996). *Active learning: 101 strategies to teach any subject.* Boston, MA: Allyn and Bacon.

Wilson, B. G. (Ed.). (1996). *Constructivist learning environment: Case studies in instructional design.* Englewood Cliffs, NJ: Educational Technology Publications.

Parental Involvement and Student Achievement: A Review of the Literature

Loraine Bailey

Problem Statement

Introduction

I have been an advocate of parental involvement for a long time. I believe that parents have a greater impact on their children's education than many realize. Parents are the first teachers children encounter and many don't even realize how much they actually teach these individuals who know absolutely nothing when they arrive. Amazingly though, in 2 to 3 years, most children have full grasp of their native language, can do many things for themselves, are beginning to learn their ABC's (the first step to reading), and are ready for the other teachers to take over the main component of their education. We would like to see all children achieve in school. A number of factors play large and small roles in that achievement, but one determining factor that has been studied for years is parental involvement. Since most children want to gain the approval of their parents, and are likely to behave and strive to earn that acceptance at home and at school, I believe that children with parents who are actively involved in their education will strive to achieve more so than children who have parents who do not take an active role in their education. There are varying degrees of parental involvement, and I hope that research will show the varying degrees and determine how much parental involvement is necessary to ensure a child's long-term achievement. The results of the research may also show that any parental involvement can brighten a child's achievement.

Description of the problem

As I started thinking about this project, I realized how much it troubles me to see students who do not seem to care about being at school, learning, or attempting to gain something from school. In my experience as a parent, a substitute teacher, and a student teacher, I've seen several children who fit that description, and, in most cases, those children have parents who seem to be preoccupied with life itself rather than their child's education. Many parents today view education as a teacher's responsibility. Although, most will agree tha,t even though teachers are getting paid to teach, without help from the home, teachers do not have a great deal of control over the student once they leave the school. As I read the educational journals, I repeatedly found material implying that parental involvement increases a child's academic achievement. I hope to find information that explains why some schools have greater success in teaching their students, why some students score higher on standardized tests, and if parental involvement plays a significant role in the success of the students. Over the years, numerous studies have shown that parental attitudes towards, and involvement in, their child's learning activities in the home and at school have an influence on the child's level and quality of learning, development, and attainment at all ages (Edwards & Alldred, 2000). As I stated earlier, there are degrees of parental involvement and, to fully study the success of children, I need to be able to determine how educators or researchers define parental involvement. Once I determine if the amount of parental involvement plays a significant role, then I can decide how to create my method of research.

Review of Literature

Parents and other family members are a child's first educators, responsible for children's early socialization, and for setting a mental and emotional foundation upon

which school and community will build (Kelley-Laine, 1998). The partnerships between home and school are important because parental involvement is associated with higher student achievement. One way that many schools support the parents in that involvement is to offer short courses (on topics such as healthcare and children's learning styles) at the school for the parents. These courses increase the confidence and capability of young, economically-disadvantaged parents. Along with that confidence, attitudes about education improve among low-income families. Lack of parental involvement does not necessarily mean lack of interest. Culture, community, and confidence play big roles in parental attitudes toward school. Many parents feel that their role has already been defined by the school itself. How parents perceive their role in their child's schooling may be a function of how the school organization treats them (Smrekar & Cohen-Vogel, 2001). Aware of this, many schools are creating programs to increase parental involvement. Findings also suggest involvement reinforces parents' attitudes about themselves and importance of school, and attitudes are usually the deciding factor in how much parents are involved.

Contributions at home have as much of an impact on a student's education as contributions at school. It is important for parents to maximize their input at home without compromising work and family time. Many families are already doing such, but there is still the drive to get more parents involved in their child's education. Many schools have tried new programs such as home-school agreements, parent education projects, and computer network links. These programs offer a variety of ways for parents of different backgrounds and socioeconomic backgrounds to offer their expertise or services.

With this in mind, teachers could gain a lot from developing strong relationships with parents. When teachers are well-prepared on curriculum night/open house, they can forge positive relationships. A couple of simple ways to do this is by giving handouts with ways for parents to reach the teacher and allowing time to answer questions the parents might have. When parents and teachers meet for the first time, they each want to make a good impression on the other. When parents have a favorable meeting with the teacher, they have the foundation of a positive relationship with that teacher for the remainder of that year. Along with that positive relationship, cooperation and support will lead to a positive climate in the classroom. A positive ambiance in the classroom will enhance children's learning aptitude (Ribas, 1998).

Schools have been around for many years. Over a century ago, schooling was extended to the masses. The problem was finding ways to draw children out of their economic and social structures of their households so they could go to school (Bentley, 1999). One hundred years later, the parents' role with school is minimal, at best. They drop their children off at school on time, sign a few homework assignments, and attend a parent teacher conference once a semester. Many parents feel that they are fulfilling their scholastic duty by doing just that, but research shows that children benefit from parental involvement at school.

There are several worthwhile definitions of what parental involvement projects, but, regardless of the definition, parental participation will likely benefit the child. As a strategy in the Goals 2000 initiative, parental involvement appears to be primarily a response to school and parental goals for increased student success (Blasi, 2001). This strategy considers the different cultures within schools and intends to implement school-

parent partnership models that consider the differences in those cultures as well as the differences in educational views. Not only do students benefit from involvement, but teachers and parents benefit, as well. Along with increased involvement, parents' attitudes about themselves, school, and teachers improve. Teachers are allowed an insight into the home environment of the students that they might not otherwise see. This increased understanding promotes greater cooperation, commitment and trust between the parents and teachers (Smrekar & Vogel, 2001). This insight is useful as parents and teachers start with different goals. A parent's main goal is to make sure their child gets the best of everything while a teacher's goal is to make sure everyone in the class has a good educational experience. However, research indicates that a teacher tends to pay attention to students whose parents are engaged and helpful in a consistent, constructive way (Rubiner, 2001).

School officials across the country are implementing ways to increase parental involvement. Elementary school parents seem to respond to the call more quickly than middle or high school parents because many believe that the participation is not significant to the older students. Contrary to those beliefs, those students who don't want their parents "always around" take comfort that their parents are "always around" (Beghetto, 2001). Some time in the late elementary school or the early middle school years, parents have to alter the ways in which they are involved with their children's education. There are ways to encourage the autonomy yet still nurture the educational ambitions. Many school officials who believe that parental involvement is important at all grade levels have found programs which offer a variety of ways parents can participate. Recognizing that parents differ greatly in their willingness, ability and

available time for involvement in school activities, these schools provide a continuum of options for parent participation (Beghetto, 2001). Just as the parents are different, students respond differently to having their parents at school, but there are many ways parents can stay involved without actually being at the school. Some of the ways a parent can stay involved at the middle or high school level are to help with homework, attend school programs, watch the students in sporting activities or other extracurricular activities, help the student choose courses, and remain informed of the student's progress in school (Gonzalez, 2002). A school in Georgia has an astounding record of parental involvement. Ninety-six percent of the George Walton Comprehensive High School class of 1997 went on to four-year colleges. School officials say that at Walton, mothers and fathers are as integral to the life and performance of the school as math instructors and football coaches. More than 2,000 parents are involved somehow in the life of the school (U.S. News and World Report, Inc., 1999).

As parents and teachers alike look to find the answers, not all will be found in the books or research. Each circumstance is different and the parents and children involved are different, as well. The importance of involving parents is partly because that parental involvement is associated with higher student achievement, but also partly because many governments want to make schools more accountable and partly because parents themselves are applying pressure (Kelley-Laine, 1998). With the No Child Left Behind Act of 2001, President Bush implemented a plan to increase student achievement across the country, and parents are held accountable for their children's achievement in school. Parents are not forced to be in the schools daily, but they are held accountable for delinquent absences and homework. With technology advancing as quickly as it is today,

it is easier than ever for parents to stay up-to-date on school events. As computer networks link homes with schools and libraries, parents are able to discuss school policies on their own over the internet and offer their time and skills to help with homework ideas, and to recommend books, study aids, Websites, and so on (Gonzalez, 2002).

Contributions at home have as much of an impact on a student's education as contributions at school. It is important for parents to maximize their input at home without compromising work and regular family life. Many families are already doing such, but there is still the drive to get more parents involved in their children's education. Many schools have tried home-school agreements, parent education projects and computer network links. These programs offer a variety of ways for parents of different backgrounds and abilities to share their expertise.

Parental involvement has become a necessity for effective schooling. The parental role has been taken for granted though. To improve student success, parental involvement has become the main strategy in many schools. Many school partnerships disregard factors such as cultural conditions and feelings about school. Schools should consider the diversity within and the schools and work together with the parents. Parents and schools are increasingly regarded by policy makers and professionals as having similar functions in relation to children, which require them to work in 'partnership.' The boundaries between home and school are becoming ever more ambiguous and blurred (Edwards & Aldred, 2000).

Benefits of enhanced student achievement are not only found at the elementary level, but at the middle and high school levels, as well. Even though middle school students don't want their parents hanging out at school, they take comfort in knowing that

their parents are always there. Some schools have come up with alternative ways for parents to stay involved at the middle and high school levels. Researchers have found that schools with the most successful parent involvement programs are those which offer a variety of ways parents can participate. Recognizing that parents differ greatly in their willingness, ability, and available time for involvement in school activities, these schools provide a continuum of options for parent participation (Beghetto, 2001).

George Walton Comprehensive High School in Atlanta, Georgia has students who excel in their schoolwork partly due to parental involvement. Administrators and teachers make a concerted effort to get parents involved. Working parents who can't contribute time are asked instead to donate goods or services. "They're involved with the child at home, and that's something you can't put a dollar amount on," says principal, John Flatt (U.S. News and World Report, 1999). Walton parents have learned that it is not the just the job of the school to educate their children, but the job of the parent, as well.

In one school district in Pennsylvania, the school superintendent proposed that parents be graded on how involved they are in their children's education. One parent asked says that it is fine with him because, "if you take care of your kids, it'll show in the report." Under the proposal, parents of 4,200 students in the district would be graded on their child's attendance and appearance, parent-teacher conferences and whether or not they sign and return parental forms. The superintendent says that it is a way to make sure kids are coming to school ready to learn without the annoying distractions. The plan is not intended to evaluate the home life of students, but some parents view it as a judgment

on their lifestyles. School officials hope that parents will realize the proposal is intended to be a positive instance not a negative instance.

Parental involvement should be a positive part of a child's education. Parents should not feel pressured into being a part of their education, but come to the realization that being involved will only benefit the child. The more positive reinforcement, the better. Practicing new skills at home will help the child to become secure in the knowledge he or she has acquired.

Data Collection and Results

Population

This study will include 90, eighth-grade students enrolled in a public middle school. These students are a racially, socially, and economically diverse group, and the students are also varied in their academic status, as grades of the 90 students range from A to F with the majority being C. This group of students also includes six inclusion students who have individual educational plans. According to the school guidance counselor, some of the students have parents who are involved in their daily academics, some of the students have parents who are aware of their academics, but are not directly involved, and some of the students have parents who are rarely involved in their academics.

Measurement

Before the project begins, the teacher will have a discussion with the students about the project. The discussion will include an explanation of the purpose of the project, the components of the project, and what will be expected of each student and his/her parents, which is having a parent or guardian review homework with the student, and sign and return it each day for 2 weeks. The teacher will explain to the students that

participation is not required, nor does participation affect their grade in any way. A question and answer session will follow the discussion, as students could have reservations with participation, or could be confused with their role in the project. The teacher will clarify any confusion or misconceptions during this time. Students will be reminded that, if they or their parents are uncomfortable with the project, they can withdraw at any time, without penalty. Students who do not wish to participate will still be required to bring back the student assent and parental consent forms with a notation that he/she will not be participating. Each student will receive a copy of each form and will be asked to return them as soon as possible. An extra credit grade is offered as an incentive to ensure that the forms will be returned, regardless of participation in the project.

To determine the results of the project, students will be given a pre-test before the unit of study and a post-test at the end of the unit of study. The pre-test and the post-test are identical tests. The rationale for administering the same test is to have a precise measurement of acquired knowledge during the unit. The pre-test is expected to yield poor results; therefore the test will not be recorded. (To ensure that each student will try his/her best, they are not informed of this until after the test is administered to all students.)

Procedure

At the beginning of the study, the pre-test score will be used as a baseline score for each student involved in the project. As the project is in progress, the teacher will keep a chart of a homework return rate. The chart categories will be as follows: *did not return homework, returned homework without a parent's signature, returned homework*

with a parent's signature. The homework grades will not be considered as part of the study, as the pre- and post-test scores will be analyzed as the main source of scores. At the conclusion of the 2-week unit, the same data will be collected by means of a post-test. Students will be given the same test they took at the beginning of the unit to determine how much knowledge they obtained or loss during the unit of study. A chart will be created to determine which group of students showed greater improvement in their scores.

Analysis

A chart will be created to show the difference in scores for the pre-test and post-test. The data will be analyzed to show which group of students had greater improvement in their scores. Each student's pre- and post-test grades will be graphed and evaluated.

Student	Pre-Test	Post-test	Variance
C.A.	25	88	63
B.A.	41	96	55
K.B.	46	101	55
C.C.	30	92	62
A.C.	52	101	49
J.D.	41	105	64
S.G	27	83	56
S.H.	34	88	54
C.J.	44	96	52
D.L.	55	101	46
C.L.	49	92	43
A.L.	29	79	50
J.M.	19	96	77

B.O.	20	101	81
L.P.	59	96	37
J.P.	25	96	71
J.S.	50	96	46
G.S.	22	101	79
C.S.	37	79	42
B.W.	19	70	51
K.W.	30	101	71

Figure 1. 2nd Period grades on pre- and post-test.

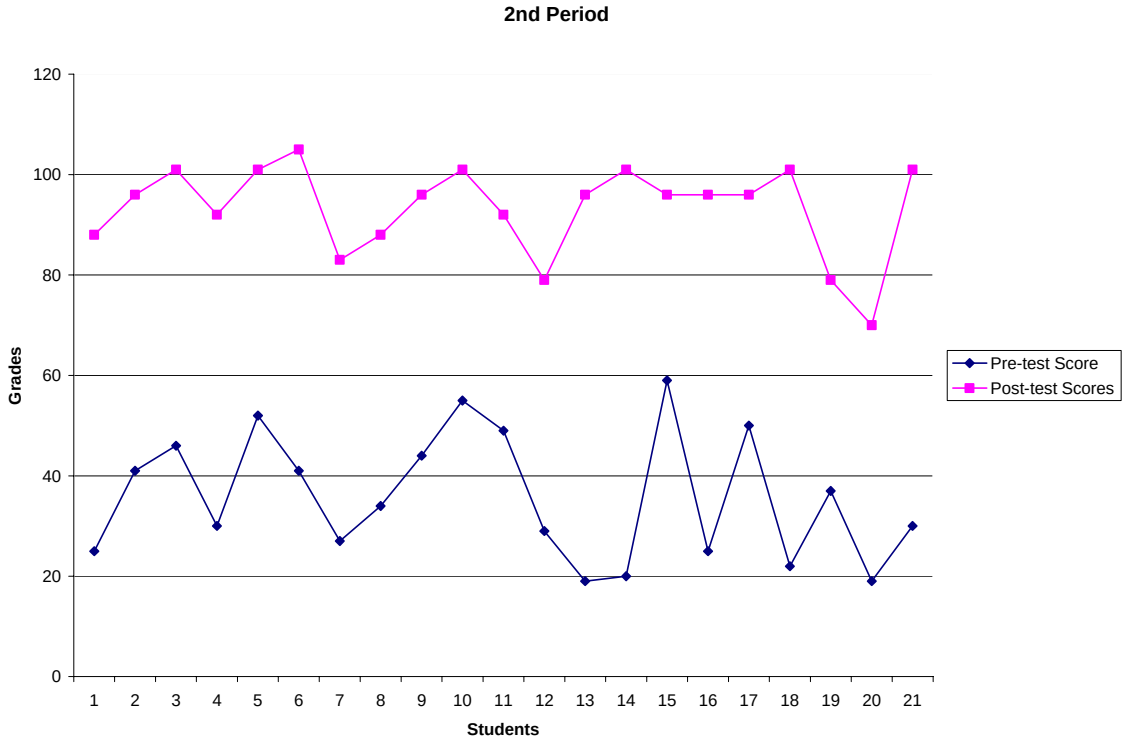

Figure 2. Representation of 2nd period scores.

Student	Pre-Test	Post-test	Variance
T.A.	17	61	44
S.B.	17	92	75
C.B.	19	60	41
K.C.	24	76	52

T.C.	19	61	42
B.F.	34	105	71
S.G.	10	76	66
S.H.	52	105	53
B.H.	27	75	48
M.H.	29	70	41
A.J.	44	77	33
S.K.	25	105	80
J.L.	18	101	83
A.M.	15	57	42
J.M.	37	75	38
C.S.	11	44	33
S.T.	21	79	58
A.W.	41	96	55
Z.D.	20	72	52
N.P.	7	53	46
M.C.	42	83	41

Figure 3. 3rd Period grades on pre- and post-test.

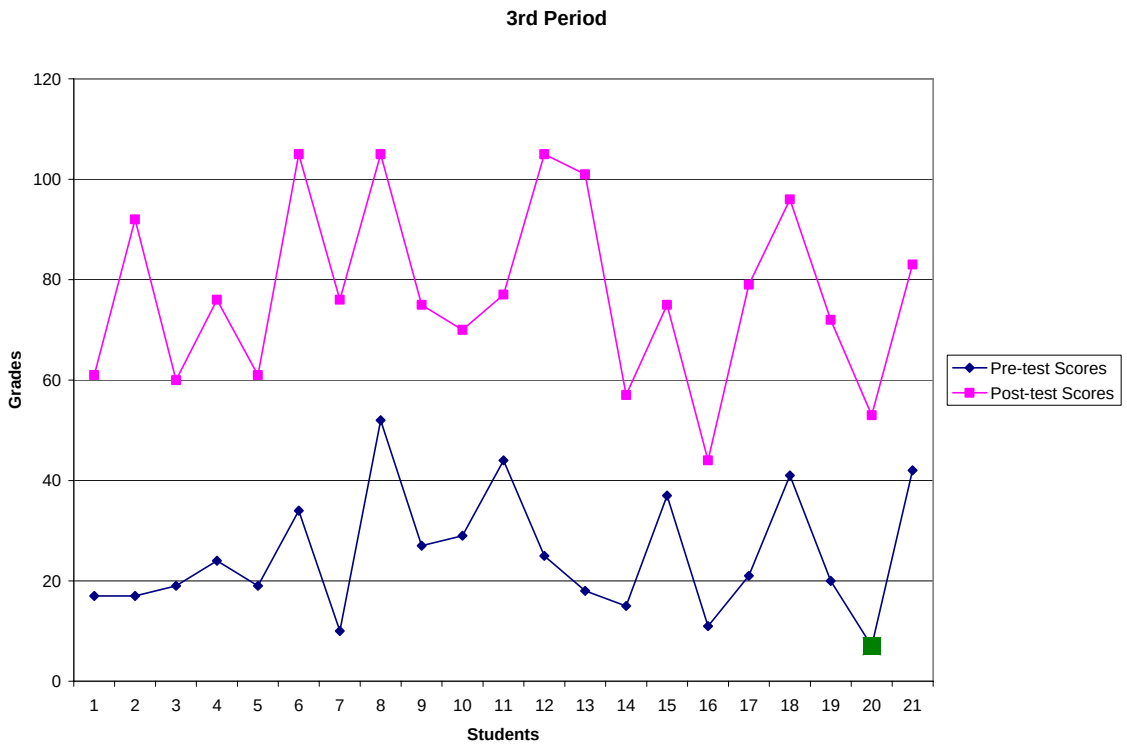

Figure 4. Representation of 3rd period scores.

Student	Pre-Test	Post-test	Variance
Hr.B.	14	88	74
H.B.	29	105	76
T.B.	39	96	57
M.C.	37	96	59
A.C.	49	66	17
J.F.	39	88	49
B.F.	53	86	33
J.G.	27	48	21
B.H.	17	94	77
D.H.	15	91	76
M.H.	25	96	71
Dy.H.	10	48	38

L.K.	31	101	70
K.M.	51	101	50
P.M.	55	88	33
S.M.	30	79	49
I.M.	12	70	58
R.R.	41	105	64
A.S.	18	93	75
B.S.	29	57	28
Z.T.	22	83	61
C.V.	17	70	53
J.V.	15	99	84
J.W.	38	70	32
G.W.	34	96	62

Figure 5. 4th period grades on pre- and post-test.

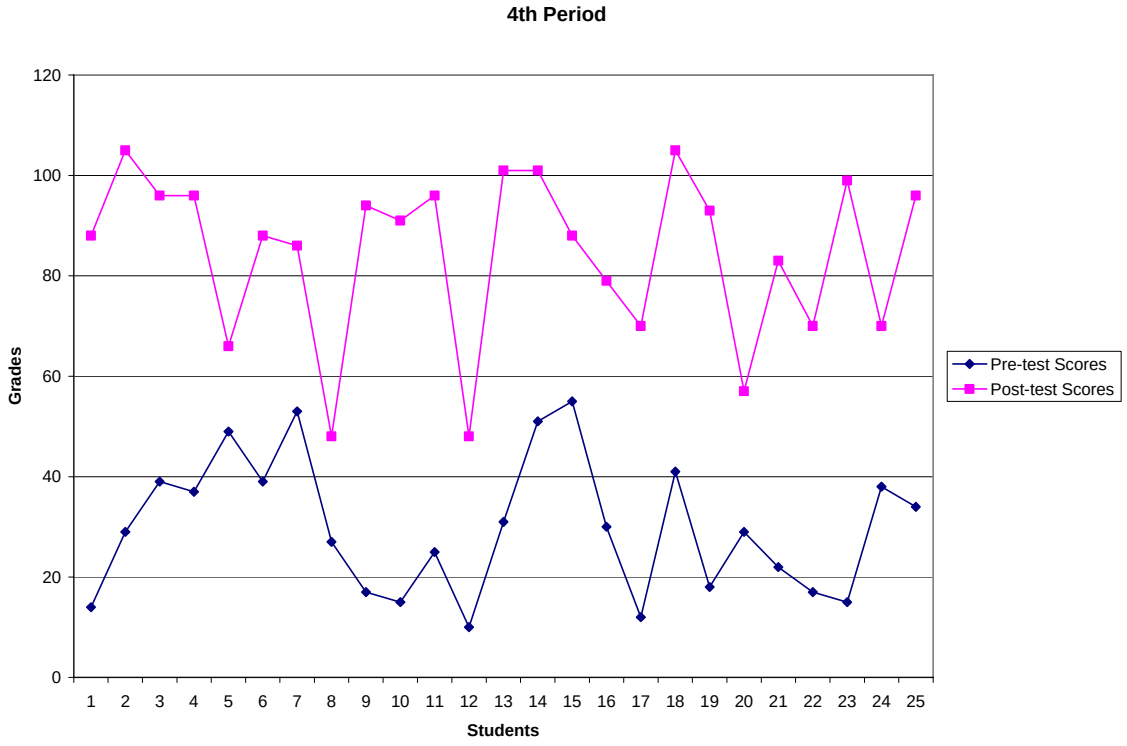

Figure 6. Representation of 4th period scores.

Student	Pre-Test	Post-test	Variance
A.A.	32	99	67
J.A.	22	70	48
C.C.	10	83	73
O.G.	25	78	53
E.G.	10	53	43
A.G.	7	44	37
An.H.	42	66	24
A.H.	22	92	70
T.H.	20	57	37
M.M.	5	83	78
J.M.	9	83	74
H.P.	21	26	5
S.S.	11	22	11
A.S.	21	94	73
G.W.	10	61	51
M.W.	39	39	0
J.W.	10	30	20
T.S.	15	22	7

Figure 7. 5th period grades on pre- and post-test.

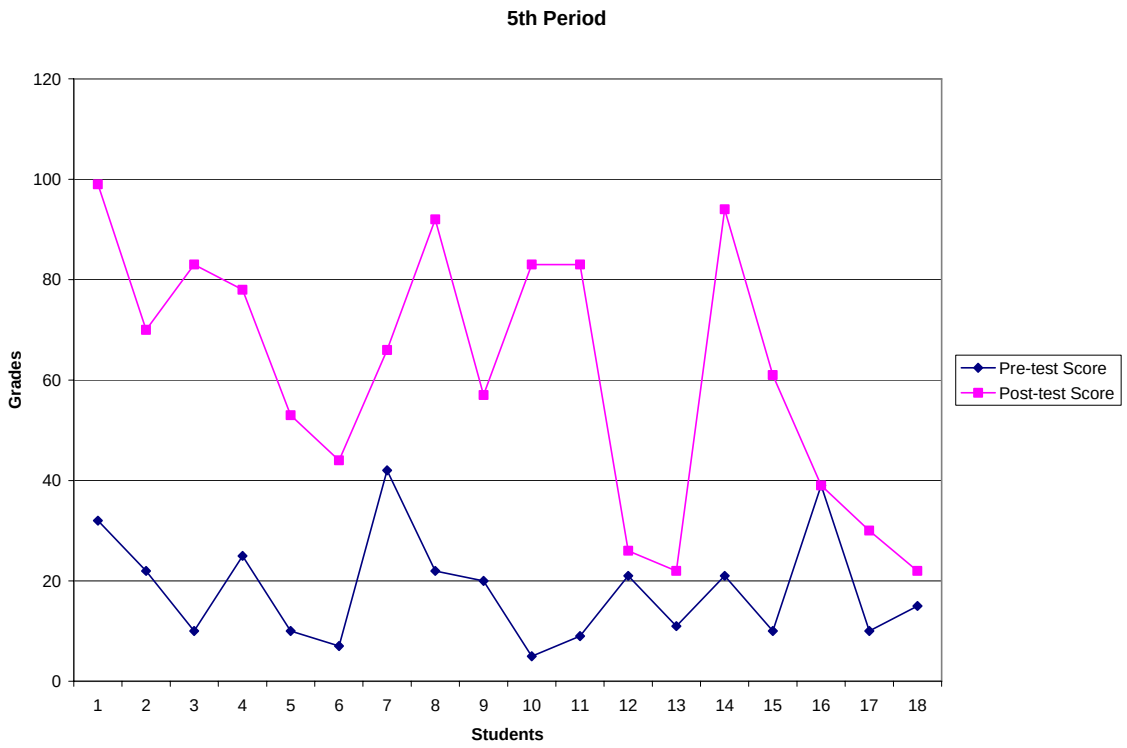

Figure 8. Representation of 5th period scores.

Student	Pre-Test	Post-test	Variance
B.A.	41	96	55
K.B.	46	101	55
C.C.	30	92	62
A.C.	52	101	49
J.D.	41	105	64
S.G	27	83	56
S.H.	34	88	54
J.M.	19	96	77
B.O.	20	101	81
L.P.	59	96	37
J.P.	25	96	71
G.S.	22	101	79

C.S.	37	79	42
K.W.	30	101	71
T.A.	17	61	44
T.C.	19	61	42
S.G.	10	76	66
S.H.	52	105	53
A.J.	44	77	33
S.K.	25	105	80
J.L.	18	101	83
S.T.	21	79	58
A.W.	41	96	55
Z.D.	20	72	52
N.P.	7	53	46
M.C.	42	83	41
H.B.	29	105	76
T.B.	39	96	57
A.C.	49	66	17
J.F.	39	88	49
B.F.	53	86	33
B.H.	17	94	77
M.H.	25	96	71
K.M.	51	101	50
P.M.	55	88	33
S.M.	30	79	49
I.M.	12	70	58
R.R.	41	105	64
A.S.	18	93	75

B.S.	29	57	28
C.V.	17	70	53
J.V.	15	99	84
J.W.	38	70	32
A.A.	32	99	67
J.A.	22	70	48
O.G.	25	78	53
An.H.	42	66	24
A.H.	22	92	70
M.M.	5	83	78
S.S.	11	22	11
G.W.	10	61	51

Figure 9. Returned homework with parent signature.

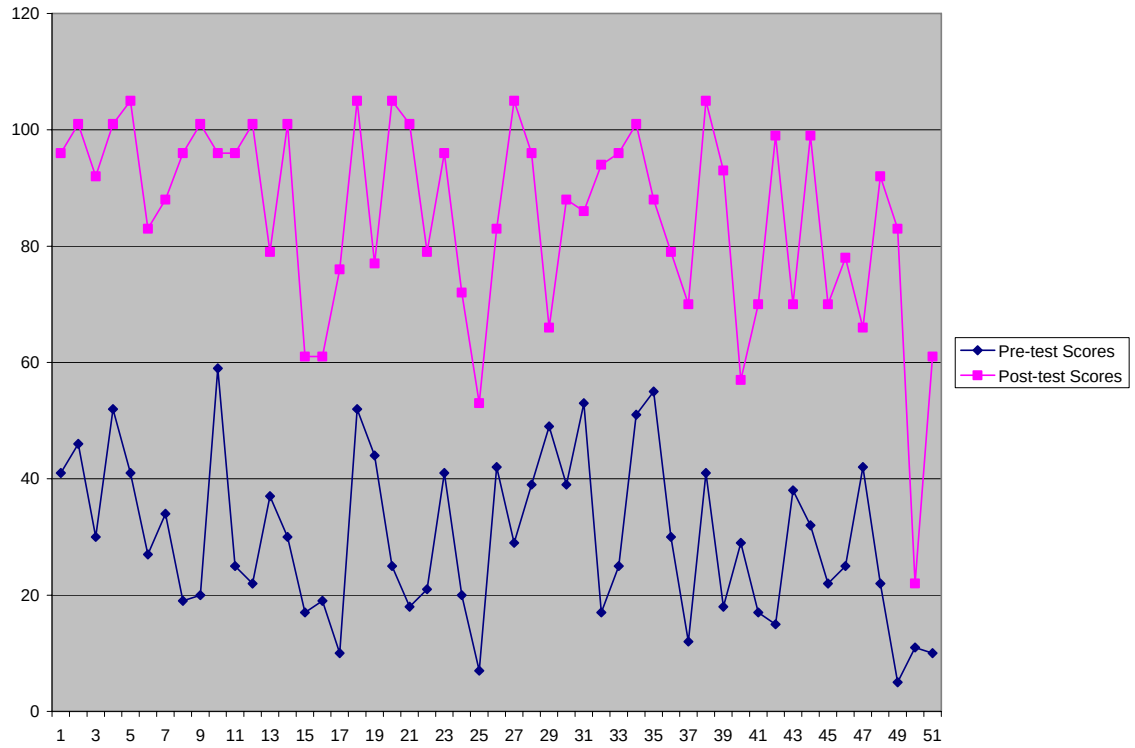

Figure 10. Representation of returned homework with parent signature.

Student	Pre-Test	Post-test	Variance
D.L.	55	101	46
A.L.	29	79	50
J.S.	50	96	46
S.B.	17	92	75
K.C.	24	76	52
B.H.	27	75	48
M.H.	29	70	41
A.M.	15	57	42
Hr.B.	14	88	74
M.C.	37	96	59
L.K.	31	101	70
G.W.	34	96	62
C.C.	10	83	73
H.P.	21	26	5
A.S.	21	94	73

Figure 11. Returned homework without parent signature.

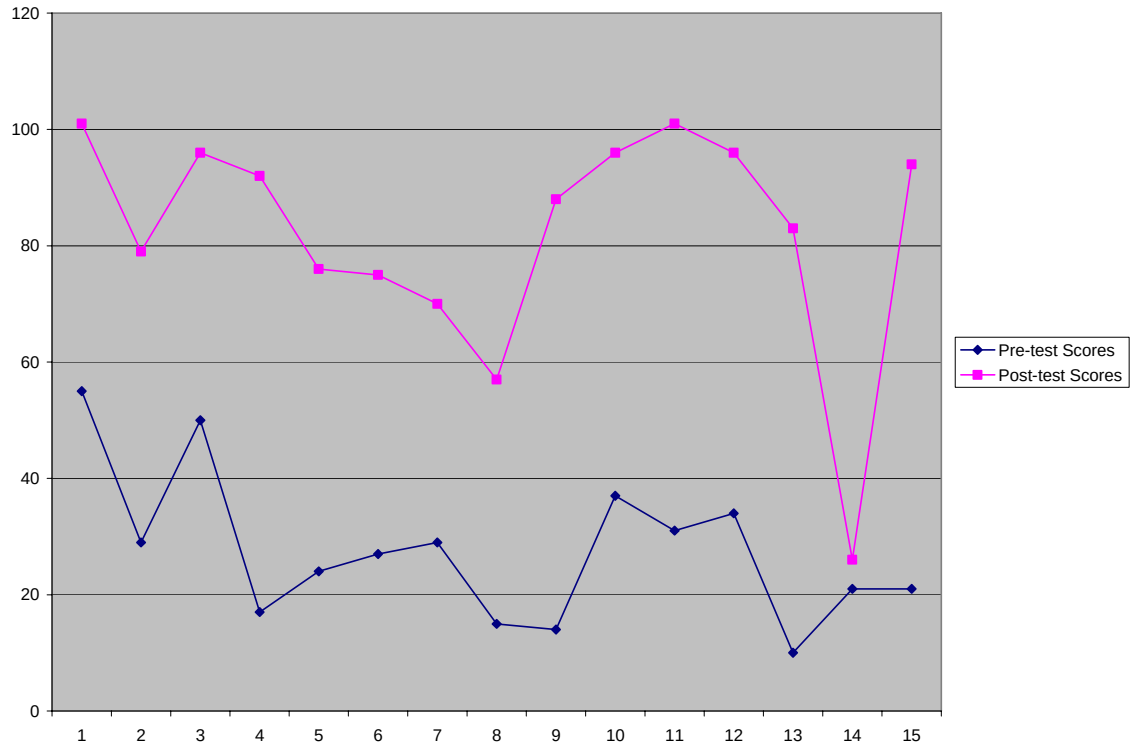

Figure 12. Representation of returned homework without parent signature.

Student	Pre-Test	Post-test	Variance
C.A.	25	88	63
C.J.	44	96	52
C.L.	49	92	43
B.W.	19	70	51
C.B.	19	60	41
B.F.	34	105	71
J.M.	37	75	38
C.S.	11	44	33
J.G.	27	48	21
D.H.	15	91	76
Dy.H.	10	48	38

Z.T.	22	83	61
E.G.	10	53	43
A.G.	7	44	37
T.H.	20	57	37
J.M.	9	83	74
M.W.	39	39	0
J.W.	10	30	20
T.S.	15	22	7

Figure 13. Homework return rate of less than 50%.

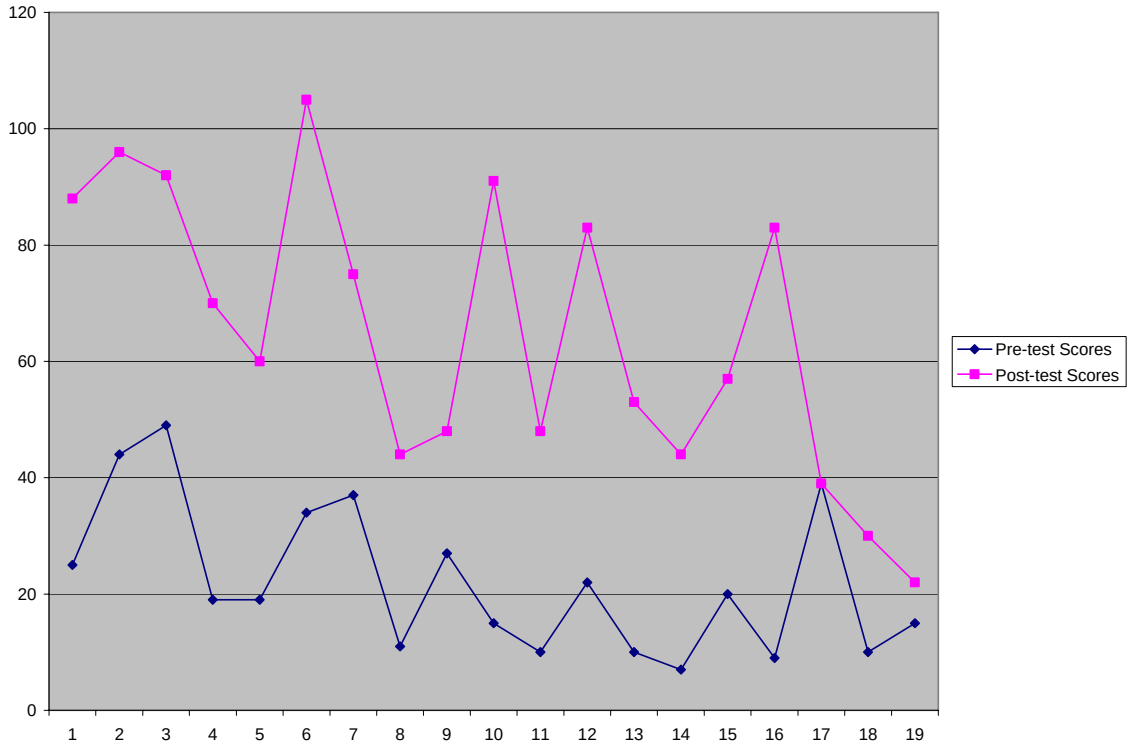

Figure 14. Representation of homework return rate of less than 50%.

The pre- and post-tests for Helen Keller's autobiography, *The Story of My Life*, were designed to evaluate the student's knowledge of Helen Keller, her life, and relevant vocabulary within her book (see Appendix A). Before I administered the pre-test, I did not discuss the contents with the students, so I did not expect many passing scores. I was,

however, surprised to discover just how low the scores were. They are as follows in Figure 15.:

Second Period: 21 students

	High Score	Low Score	Average
Pre-test:	59	19	36
Post-test:	105	70	88

Third Period: 21 students

	High Score	Low Score	Average
Pre-test	52	7	25
Post-test	105	44	77

Fourth Period: 25 students

	High Score	Low Score	Average
Pre-test	55	10	30
Post-test	105	48	85

Fifth Period: 18 students

	High Score	Low Score	Average
Pre-test	42	5	18
Post-test	99	22	61

Figure 15. Summary of pre- and post-tests for all periods.

The wide range of scores was directly related to the prior knowledge of the student and the ability level of the student. The students in three of the four classes are a diverse group of students. I had no knowledge of the abilities of these students, as there were none with a specific IEP. The fourth class, however was a lower-functioning class containing students with low TCAP scores in reading and writing. This class did not do as well on the pre-test or the post-test as the other classes, but there were a few students that did well on the post-test.

When the students were grouped into three categories of r*eturned homework with parent signature,* r*eturned homework without parent signature, and homework return rate of less than fifty percent,* I discovered that each group had significant improvement in their post-test scores when compared to their pre-test scores. In a analysis of the pre- and post-test scores, with 10 randomly selected students from each section, the students who returned their homework with a parent's signature had an overall improvement of 59 points, the students who returned their homework without a parent's signature had an improvement of 53 points, and the students who did not regularly return their homework had an improvement of 44 points. There was an obvious improvement in scores with most students. The one student whose score is designated with green is a bright, ESL student. Despite his language barrier, he did show improvement in scores yet did not pass the post-test. Only one student did not have improvement from the pre-test to the post-test, but rather scored the same on both tests.

Conclusions and Recommendations

I found the analysis of data to be inconclusive. Even the students who did not do their homework regularly improved their test scores. The students who returned their homework with a parent's signature had a greater improvement in scores than the groups who did not. Using statistical analysis, more extensive examination of the scores could yield comprehensive results of whether the parental involvement was what produced the significant improvement. Other uses of the test scores could determine which students might need assistance throughout the unit of study. Each student could use the two tests to compare his results and measure his own learning. A teacher can re-teach difficult material to ensure proficiency.

As a student teacher, the results were informative. The improvement in scores boosted the students' confidence in their learning. It allowed me to see which students might need extra assistance during the unit and how I might adjust lesson plans within the unit. I would like to do another project that could be extended for a longer period of time, and with better feedback on how the students feel about having their parents involved in their daily education.

There is grant money to fund parental involvement programs, and the programs are required to log their parental involvement hours, which is a way of researching the parental involvement programs that are already in place.

References

Beghetto, R. A. (2001) Virtually in the middle alternative avenues for parental involvement in the middle–level schools. *The Clearing House, 75*(1), 21.

Blasi, G. (2001). Reforming educational accountability. Unpublished master's thesis, UCLA, Los Angeles.

Edwards, R. & Alldred, P. (2000). A typology of parental involvement in education centering on children and young people: Negotiating familialisation, institutionalization and individualization. *British Journal of Sociology of education, 21(3), 435-55.*

Gonzalez, A. R. (2002). Parental Involvement: It's contribution to high school students' motivation. *The Clearing House, 75*(3), 132-133.

Kelley-Laine, K. (1998). Parents as partners in schooling: The current state of affairs. *Childhood Education, 74*(6), 342-352.

Ribas, W. B. (1998). Tips for reaching parents. *Educational Leadership, 56*(1), 83-87.

Rubiner, B. More parental involvement means student success

Smrekar, C., & Cohen-Vogel, L. (2001). The voices of parents: Rethinking the intersection of family and school. *Peabody Journal of Education, 76*(2), 75-100.

U.S. News and World Report. (1999, January 18). _____, 126(2), 72(1)

Other Literature Read

Seitsinger, R. M., & Zera, D. A. (2002). The demise of parent involvement in school governance. *Journal of School Leadership, 12*, 340-367.

Appendix A: Pre-test and Post-test

Pre-Test: Helen Keller

Multiple Choice

1. When was Helen Keller born?

a. June 19, 1906
b. April 20, 1850
c. July 28, 1900
d. June 27, 1880

2. Helen was born in _____.

a. Tuscaloosa, Alabama
b. Tuscumbia, Alabama
c. Talladega, Alabama
d. Tullahoma, Alabama

3. Helen was _____ when she lost her sight and hearing.

a. A newborn
b. 19 months old
c. 4 years old
d. 7 years old

4. _____ caused her to lose her sight and hearing.

a. A bad fall
b. No one knows what
c. An illness
d. Heredity

5. _____was Helen's teacher and friend.

a. Annie Sullivan
b. Mrs. Bailey
c. Mr. Perkins
d. Sarah Watson

Short Answer

6. Why did Helen act the way she did before Annie came?

7. Did Helen think she led a difficult life? Explain

Matching

___ 8. Contemptuous	a. standing above all others in merit or virtue
___ 9. Annex	b. a clash or a fight
___ 10. Akin	c. to make gestures
___ 11. Prattle	d. relating to or befitting an imp; mischievous
___ 12. Bewilderment	e. confused
___ 13. Tussle	f. the act of isolating; separation
___ 14. Oculist	g. ophthalmologist
___ 15. Eminent	h. short amusing stories
___ 16. Isolation	i. painfully affecting the feelings
___ 17. Tempest	j. to cause to lose one's bearings; confusion
___ 18. Impish	k. to add an additional part; append
___ 19. Vexed	l. related by blood; essentially similar or related
___ 20. Anecdotes	m. prate; to utter meaningless sounds
___ 21. Gesticulate	n. showing distaste or contempt
___ 22. Poignancy	o. an extensive violent wind accompanied with rain

Essay

23. Briefly **describe** Helen Keller using three character traits. (Respect, Caring, Responsibility, Honesty, Self-Discipline, Perseverance, Fairness and Courage)

Bonus: 5pts.

What was the most important day in Helen's life?

Post-test: Helen Keller

Multiple Choice

1. When was Helen Keller born?

a. June 19, 1906
b. April 20, 1850
c. July 28, 1900
d. June 27, 1880

2. Helen was born in _____.

a. Tuscaloosa, Alabama
b. Tuscumbia, Alabama
c. Talladega, Alabama
d. Tullahoma, Alabama

3. Helen was _____ when she lost her sight and hearing.

a. A newborn
b. 19 months old
c. 4 years old
d. 7 years old

4. _____ caused her to lose her sight and hearing.

a. A bad fall
b. No one knows what
c. An illness
d. Heredity

5. _____was Helen's teacher and friend.

a. Annie Sullivan
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Short Answer

6. Why did Helen act the way she did before Annie came?

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Matching

___ 8. Contemptuous	a. standing above all others in merit or virtue
___ 9. Annex	b. a clash or a fight
___ 10. Akin	c. to make gestures
___ 11. Prattle	d. relating to or befitting an imp; mischievous
___ 12. Bewilderment	e. confused
___ 13. Tussle	f. the act of isolating; separation
___ 14. Oculist	g. ophthalmologist
___ 15. Eminent	h. short amusing stories
___ 16. Isolation	i. painfully affecting the feelings
___ 17. Tempest	j. to cause to lose one's bearings; confusion
___ 18. Impish	k. to add an additional part; append
___ 19. Vexed	l. related by blood; essentially similar or related
___ 20. Anecdotes	m. prate; to utter meaningless sounds
___ 21. Gesticulate	n. showing distaste or contempt
___ 22. Poignancy	o. an extensive violent wind accompanied with rain

Essay

24. Briefly **describe** Helen Keller using three character traits. (Respect, Caring, Responsibility, Honesty, Self-Discipline, Perseverance, Fairness and Courage)

Bonus: 5pts.

What was the most important day in Helen's life?

The Effectiveness of the Paideia Method on High School English Classes

Greg Barclay

EDUC 590

Dr. McAllister

The Institutional Review Board of the University of Tennessee at Chattanooga (FWA00004149) has approved this research project 04-134.

The Effectiveness of the Paideia Method on High School English Classes

Introduction to the Problem

For years, a debate has raged in public education. The topic of the debate is the manner in which students should be taught. Many educators believe that the time-tested method of lecture and drill-and-practice is not the most effective way for young people to learn. As a result of a student teaching placement, the researcher was given the opportunity to see one of the alternatives to this method. At a K-12 school in Hamilton County, TN, the Paideia method is utilized in all classes. This manner of teaching was developed by Mortimer Adler in the early 1980s in order to make the classroom a more democratic place in which the teacher acts more like a facilitator than an instructor.

In order to complete this project, a pre-test and post-test were given to two different classes. English content lessons occurred between the two tests. The purpose of this project was to assess the effectiveness of the Paideia method of teaching. In order to complete the project, one class was taught in a manner consistent with Paideia. The other class was instructed by lecture from the teacher. The differences in the pre-test and post-test scores in the two classes were meant to determine the more successful method of teaching. The research hypothesis is that Paideia is a more effective means of teaching than a lecture-only method. The null hypothesis states that there is no difference between the two types of teaching.

Review of Literature

History. In the 1980s, education in the United States came under intense scrutiny. Weltman (2002) stated that the Reagan administration's *A Nation at Risk* report claimed that "American schools had become too lax and liberal, and [proposed] more rigorous

and exacting educational standards" (p. 61). While the different curricular and pedagogical schools of thought debated over what should be done to improve education, Mortimer Adler believed that the debate should hinge on education being democratic, and the ultimate goal should be socialism (Weltman, 2002). According to Weltman (2002), Adler believed:

> Socialism should appeal to both cultural conservatives concerned with what they saw as the breakdown of cohesion in American society, and political liberals concerned with social and economic justice. Socialism should also appeal to both conservatives concerned with maintaining a common, core educational system, and liberals concerned with equalizing educational opportunities and results. (p. 62)

A group of well-known educators was brought together by Adler to create an educational proposal. Their result was *The Paideia Proposal*. According to Weltman (2002), the *Paideia Proposal* was more concerned with the social aspects of education than with individual instruction. In addition to Weltman, Adler (1982) claimed that, without exception, public schools should implement a one-track system for all students. Adler sought to do away with competitiveness in public schools and replace it with a way in which students relate to each other and the world in which they live. Also, this manifesto deemed that "the best education for the best is the best education for all" (Adler, 1982, p. 7).

The Paideia Proposal. According to Wang, Haertel, and Walberg (1997), *The Paideia Proposal* is "a rigorous, liberal arts program designed to develop students' minds through a curriculum stressing classical works, didactic instruction, Socratic questioning,

and coaching" (p. 5). The course of study proposed by Adler is divided into three columns. The first column deals with the acquisition of organized knowledge. The second column is the development of intellectual skills--skills of learning. The third column is the enlarged understanding of ideas and values. The first column established the courses that are to be taken by all students. The courses were to be divided into three areas: (a) language, literature, and the fine arts; (b) math and natural science; and (c) history, geography, and social studies. Adler believed lectures, responses from students, and textbooks would be the means by which the material for these courses should be taught (Adler, 1982).

The development of intellectual skills in the second column brought in coaching and supervised practice. Aspects from the three areas of courses were concentrations of the coaching and practice. For example, in the language, literature, and fine arts section, reading, writing, speaking, and listening could all be coached by the teacher and practiced in the context of those classes. The third column, enlarged understanding of ideas and values, was where the seminar of *Paideia* was introduced. This column intended the focus to be on Socratic questioning and active student participation. Ideally, this would be achieved by the discussion of books, other than textbooks, and other works of art (Adler, 1982).

The purpose of seminars in *The Paideia Proposal* was to get students to discuss ideas about a topic. Adler's belief was that understanding was supplemented by the exchanging of ideas and concepts by students. Also, seminars promoted a democratic atmosphere in the classroom in which the comments of each student were equally valued.

Adler sought to make the teacher more of a facilitator than an instructor and to have the majority of talk take place between students (Billings & Fitzgerald, 2002).

Furthermore, Adler (1982) believed that elective courses serve no purpose in basic schooling. Having electives suggested that students were going in different directions with their education. Advanced learning, in Adler's opinion, was the place in which elective courses became necessary. Students in advanced schooling had made the choice of a direction to take and, therefore, could take classes that were not necessarily a requirement. In basic school, the only choice that should be afforded a student, outside his or her core course, is the choice of which second language to study. Other than that, each student should be enrolled in the same classes.

Billings and Fitzgerald (1997) researched dialogic discussion within *Paideia* seminars. Discussion is defined as interaction between two or more individuals by communicating in any means about a certain subject. Discussion is seen as a way to increase understanding about a topic. In schools, it could be used for students to see other points of view, analyze written works, or learn to support a position that has been taken.

Often, discussion by students does not occur with regularity in the classroom. Usually, the only dialogue in school is when a teacher asks a question, a student responds, and the teacher evaluates the answer. When implementing dialogic discussion, a major dilemma for teachers is the strain of allowing students to give their own meanings and choosing what he or she should tell them. However, if a teacher can find a medium in this dilemma, the flow of ideas in a dialogic discussion may lead to new

understanding and ideas that no member of the group may have held prior to the conversation (Billings & Fitzgerald, 2002).

Local Implementation. In 1986, the school to which I was assigned opened as a K-12 *Paideia* magnet school. In 1991, an additional school opened. Both of these schools became extremely popular, and parents even camped out in order to assure the registration of their child for an opening at one of the schools. With regard to standardized test scores, the *Paideia* schools rank near the top of the district. The implementation of Adler's proposal differs at each school. While seminars, coaching, and lecturing are all taking place, they are executed at different degrees in different classrooms. The ultimate goal, a one-track system, is offered by these two schools in the form of a high-quality academic program (Potter, 1995).

Data Collection and Results

In order to complete the data collection process, students from two different classes completed a 15-question multiple choice pre-test without any preparation with regard to the material (see Appendix A). After the material was taught using a lecture-only method for one class and the Paideia method for the other, the students took a 15-question multiple choice post-test consisting of the same questions as the pre-test (see Appendix B). While the two tests contained the same material, the order of the questions was changed so that students could not memorize the correct responses. The results of the pre-test were not discussed with the students.

The scores of the pre-test showed that students from both classes had little knowledge about the topic of study. As shown in Table 1, the pre-test average for the Paideia class, or control group because CSAS is a Paideia school, was 37%. The pre-test

average for the lecture class, or experimental group, was 35%. The post-test findings, although not ideal, were an improvement from the pre-test scores. The post-test average for the control group rose to 60%. That average for the experimental group also rose to 50%.

Table 1

Individual student scores for pre-test and post-test

Student Lecture	Pre-test	Post-test	Student Paideia	Pre-test	Post-test
Student 1	47%	47%	Student 21	40%	73%
Student 2	20%	7%	Student 22	27%	40%
Student 3	20%	40%	Student 23	47%	47%
Student 4	33%	53%	Student 24	27%	33%
Student 5	27%	47%	Student 25	33%	60%
Student 6	53%	87%	Student 26	40%	67%
Student 7	47%	53%	Student 27	40%	47%
Student 8	47%	80%	Student 28	27%	60%
Student 9	40%	67%	Student 29	47%	73%
Student 10	20%	20%	Student 30	47%	80%
Student 11	40%	67%	Student 31	47%	80%
Student 12	53%	27%	Student 32	40%	73%
Student 13	27%	53%	Student 33	47%	67%
Student 14	53%	53%	Student 34	20%	47%
Student 15	33%	73%	Student 35	40%	47%
Student 16	40%	60%	Student 36	47%	67%
Student 17	33%	33%	Student 37	13%	60%
Student 18	20%	27%	Student 38	27%	67%
Student 19	27%	40%	Student 39	33%	40%
Student 20	13%	60%	Student 40	47%	67%
Class Average	35%	50%	Student 41	47%	67%
			Student 42	33%	53%
			Student 43	27%	67%
			Class Average	37%	60%

A t-test for paired data was performed on the two sets of averages to check the statistical significance between the pre-test and post-test scores. Table 2 shows the data that was used to calculate the information used to determine the “p” value. The “p” value for both groups is less than .001. Therefore, these scores are very unlikely to have arisen by chance. Therefore, the null hypothesis is rejected implying there is a difference

between the means of each group. In terms of raw mean data, the control group did have a greater improvement than the experimental group. The mean of the control group increased 23%, compared to 15% improvement for those in the experimental group.

Table 2

Data calculated to determine "p" value

	Number (*N*)	Degrees of Freedom (*df*)	Mean of Differences	Standard Deviation (*SD*)	Standard Error (*SE*)	*t* value	*p* value
Paideia (control)	23	22	23.43	12.5	2.61	8.98	*p*<.001
Lecture (experimental)	20	19	18.95	13.96	3.12	6.07	*p*<.001

Conclusions and Recommendations

The results of this study show a generalization that the debate over the most effective way to teach children in public schools will continue with no end in sight. Teaching, as a profession, has not come to any consensus with regard to the way in which children should be taught. In terms of professional development, teachers should be taught how to use the Paideia method. If it is used correctly, this manner of teaching is extremely effective. The researcher's limited experience with, and minimal training for, the Paideia method could have played a role in the scores obtained by the control group. According to the United States Department of Education Web site (2004), grant money is available for educational innovations. This grant money could be used to complete a longitudinal study of the Paideia method in a classroom. Technology could be effective in the implementation of either method. In terms of lecturing, technology is effective for the visual learners in the class. Also, the Paideia method's didactic teaching column could be benefited by the use of a PowerPoint program. However, technology would not

be as effective when the Socratic seminar is taking place. Since the seminar consists of communication between teacher and students, technology would do little to enhance its effectiveness.

References

Adler, M. (1982). *The Paideia proposal*. NY: Touchstone.

Billings, L., & Fitzgerald, J. (2002). Dialogic discussion and the Paideia seminar. *American Educational Research Journal, 39*, 907-941.

Potter, L. (1995). *The transformation of a zoned inner city public high school from traditional to non-traditional*. Paper presented at the Annual Meeting of the Georgia Educational Research Association, Atlanta, GA, October 26-27, 1995. (ERIC Document Reproduction Service No. ED393161)

United States Department of Education. (2004, November 5). *Forecast of funding opportunities under the department of education discretionary grant programs for fiscal year 2005*. Retrieved November 25, 2004, from http://www.ed.gov/fund/grant/find/edlite-forecast.html#Chart%205

Wang, M., Haertel, G., & Walberg, H. (1997). *What do we know: Widely implemented school improvement programs*. Philadelphia, PA: Laboratory for Student Success. (ERIC Document Reproduction Service No. ED461690)

Weltman, B. (2002). Individualism versus socialism in American education: rereading Mortimer Adler and the Paideia proposal. *Educational Theory, 52*, 61-79.

Appendix A: Pre-test

Name_____

1. What was Ralph Waldo Emerson's occupation before he became a writer?
   a. Farmer
   b. Minister
   c. Teacher
   d. Soldier

2. What is the rhyme scheme of Emerson's "Concord Hymn?"
   a. abcd
   b. abab
   c. abba
   d. abcc

3. In "Concord Hymn," what will redeem the deaths of the heroes?
   a. Memory
   b. Self-sacrifice
   c. Bravery
   d. Freedom

4. In what state was Henry Wadsworth Longfellow born?
   a. Tennessee
   b. Maine
   c. Georgia
   d. California

5. According to Longfellow's "A Psalm of Life," what is "our destined end or way?"
   a. To go further each day
   b. To return to dust
   c. To become great
   d. To enjoy life

6. What is the setting of Longfellow's "The Tide Rises, The Tide Falls?"
   a. In the morning at a tavern
   b. At noon in the town square
   c. At twilight on the beach
   d. At midnight on the lake

7. What literary magazine did Oliver Wendell Holmes help found?
   a. *New Yorker*
   b. *American Writer*
   c. *Atlantic Monthly*
   d. *Harvard Quarterly Review*

8. In Holmes's "Old Ironsides," what does the poet consider a better end for the old battleship?
   a. To be docked for all to see
   b. To be sunk in battle
   c. To be let out to sea
   d. To sink in a storm

9. In Holmes's "The Chambered Nautilus," what did the nautilus leave year after year?
   a. Its old dwelling for a new one
   b. The shell it had shed
   c. Other nautili
   d. Its parasitic fish

10. According to Emily Dickinson's "Because I could not stop for Death," why did Death stop for the speaker?
    a. The speaker was very old
    b. The speaker was killed in an accident
    c. The speaker could not stop for death
    d. The speaker committed suicide

11. What color did Emily Dickinson predominantly wear?
    a. Purple
    b. Green
    c. Black
    d. White

12. In Emily Dickinson's "'Nature' is what we see," compared with what is our wisdom impotent?
    a. Heaven
    b. Nature's Simplicity
    c. Harmony
    d. Nature's Intricacies

13. In Emily Dickinson's "My life closed twice before its close," how does the poet define parting?
    a. As sweet sorrow
    b. As something we should look forward to
    c. As all we know of heaven and all we need of hell
    d. As a glorious event in our lives

14. In Emily Dickinson's "I heard a Fly buzz—when I died," what interposes between the light and the speaker?
    a. A fly
    b. A window
    c. A storm
    d. A person

15. How many of Emily Dickinson's poems were preserved?
    a. 36
    b. 10,347
    c. 112
    d. 1,775

Appendix B: Post-test

Name_____

1. According to Emily Dickinson's "Because I could not stop for Death," why did Death stop for the speaker?
   a. The speaker was very old
   b. The speaker was killed in an accident
   c. The speaker could not stop for death
   d. The speaker committed suicide

2. In Holmes's "The Chambered Nautilus," what did the nautilus leave year after year?
   a. Its old dwelling for a new one
   b. The shell it had shed
   c. Other nautili
   d. Its parasitic fish

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   c. Harmony

d. Nature's Intricacies

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   d. At midnight on the lake

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    a. A fly
    b. A window
    c. A storm
    d. A person

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    b. abab
    c. abba
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    a. As sweet sorrow
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    a. To go further each day
    b. To return to dust
    c. To become great
    d. To enjoy life

15. What color did Emily Dickinson predominantly wear?

a. Purple
b. Green
c. Black
d. White

Can Dress Codes Improve Students' Academic Achievement?

Jesse T. Compton
Spring 2004
EDUC 590
Dr. Deborah A. McAllister

Introduction to the problem

In the past 15 years, there has been a nationwide trend to adopt stricter dress codes and grooming codes in U.S. public schools. In some public schools, uniforms are being worn. Is there a connection between the way students dress and their academic achievement? Those in favor of dress codes or uniforms argue that students have grown so fashion conscious that they are distracted from their studies and that the popular clothing has become so expensive their families are being economically squeezed by peer pressure. Uniforms are a source of affiliation. School uniforms produce an "espirit de corps" among students at school (Myers & Cameron, 1990).

Schools need a calm, business-like atmosphere in which absenteeism is reduced and academic performance is increased (Loesch, 1995). Dress codes cut down on distractions that keep students from concentrating on their lessons. Dress codes increase students' self-confidence. Uniforms can improve classroom behavior and remove some of the causes of school crime, violence, and gang activity (Myers & Cameron, 1990).

Uniforms and dress codes help establish a sense of discipline, without which, there would be no education. For inner-city schools, uniforms decrease school crime. Dress codes and uniforms help smother violence (Forbes, 1990).

In general, advocates of uniforms and dress codes present several arguments. The first argument is that uniforms and dress codes affect student safety by lowering student victimization (Scherer, 1991). Students' safety is increased by uniforms and dress codes because they decrease gang activity and fights (Kennedy, 1995; Loesch, 1995) and uniforms differentiate strangers from students in school buildings (U. S.

Department of Justice, 1996; Gursky, 1996). Second, advocates believe that uniforms and dress codes increase student learning and positive attitudes toward school through enhanced learning environments (Stover, 1990), heightened school pride (Jarchow, 1992), increased student achievement (Thomas, 1994), and conformity to organizational goals (LaPoint, Holloman, & Alleyne, 1992; Workman & Johnson, 1994). Third, advocates believe that wearing uniforms leads to decreased behavior problems by increasing attendance rates, lowering suspension rates, and decreasing substance use among the student body (Gursky, 1996). Finally, those in favor of uniforms and dress codes attribute increased self-esteem (Thomas, 1994), increased spirit (Jarchow, 1992), and reinforced feelings of oneness among students (LaPoint, Holloman, & Alleyne, 1992) as outcomes of uniforms and dress codes being implemented in schools.

As a national and local issue, the researcher for this study is primarily interested in the effects that dress codes and uniforms have on students' academic achievement. As the investigator, I have collected Tennessee Comprehensive Assessment Program (TCAP) scores for specific middle schools in Hamilton County. These scores are individual school averages for five different subject areas and are correlated to the year before the school implemented uniforms or dress codes and the year after the school began using uniforms or dress codes.

Review of the literature

Introduction

Many public schools across the United States have adopted student uniforms or strict dress code policies to help eliminate the many problems associated with public schools. The literature was somewhat limited in its dealings with dress codes and

students' academic achievement. Much has been written and researched about dress code and its correlation to violence in school, students' constitutional rights, and student attendance in school.

Literature Review

The M*anual on School Uniforms*, published by the U.S. Department of Education (1996), stated that a safe and disciplined learning environment is the first requirement of a good school. Young people who are safe and secure, and who learn basic American values and the essentials of good citizenship, are better students. Benefits of school uniforms include decreasing violence and theft, preventing gang members from wearing gang colors and insignia, instilling discipline in students, helping parents and students resist peer pressure, helping students concentrate on their school work, and helping school officials recognize intruders.

In Long Beach, California, uniforms are mandatory in all elementary and middle schools. Long Beach was the first major U.S. city to make uniforms standard dress for its public schools (Kennedy, 1994). This program includes approximately 59,000 students. School district officials state that, in the first year of wearing uniforms, overall school crime decreased 31 percent. Fights decreased 51 percent, sex offenses decreased 74 percent, weapon offenses decreased 50 percent, assault and battery offenses decreased 34 percent, and vandalism decreased 18 percent. This saved $100,000 per year in the district (Paliokas, 1996).

A voluntary uniform policy at Maymont Elementary School in Richmond, Virginia was implemented. The policy has 85 percent of its 262 students participating. The principal of Maymont Elementary, Sylvia Richardson, identifies many benefits from

the uniform program including an increase in attendance rates and higher student achievement (U.S. Department of Education, 1996).

In Kansas City, Missouri, the reputation of Martin Luther King Middle School was among the lowest in the city. After four years of required uniforms as part of its Latin Grammar Magnet program, the school has shown a dramatic turn-around in attendance, scores, and school pride (Fadden, 1996).

At Granger Junior High, in Jolee, Kansas, administrators have seen nothing but a positive impact on students since the introduction of uniforms. Attendance has gone up, grades have significantly improved, and incidents of physical violence have greatly diminished. School is seen as a safe haven with a calming effect. With students getting along better, grades improving, and absenteeism dropping, it seems uniforms are making school a better place to learn (Fadden, 1996).

At Cardinal Hayes High School in New York, 85 percent of the students are from minority groups. Eighty-five percent of its graduates go on to college compared with less than 15 percent in comparable public schools with an identical composition of students. The principal attributes this to their school uniforms. The uniform identifies the student as a member of the school community. Students are expected to be in uniform, be punctual, and behave in an orderly fashion. Only two percent of the students at Cardinal Hayes are expelled (Buckley, 1996).

The attitudes of parents toward a uniform student dress code were surveyed at a Chicago, Illinois public school. Subjects were 15 Black parents (10 females and 5 males) and 15 Hispanic-American parents (10 females and 5 males) who answered a questionnaire sent home with their child. The questionnaire examined attitudes toward

designer clothing, peer pressure, uniforms as a measure of safety and financial savings, and the impact of dress codes on self-esteem and academic achievement. Seventy-seven percent of the parents agreed that children are pressured by their peers over clothing, and approximately 87 percent believed that uniforms eliminated some of the competition. Sixty percent of the parents thought that wearing uniforms provided some protection against gangs and identification with gang clothing. Most parents felt that uniforms were more economical that the purchase of school clothes. Ninety-three percent thought that wearing uniforms helps children realize that clothes do not make the person. Finally, sixty percent of the parents agreed that their child focused more attention on learning and studying (Woods & Ogletree, 1992).

A 20-item likert scale questionnaire was developed in a study by Padgett (1998). This study was an attempt to determine whether or not the teachers in a rural Georgia elementary school believed that a strict dress-code or student-uniform policy was needed to improve student behavior. The questionnaire was distributed to 44 teachers who taught grades 3, 4, and 5. Chi-square analyses were performed the 41 returned surveys. Of the 20 questionnaire items, 18 showed a significant difference in the teacher's responses. The percentage of responses marked "strongly agree" or "agree" was higher on 15 of the questions which upheld the researcher's hypothesis favoring a strict dress code. Teachers perceived that students would behave better and work harder on academics if they were dressed professionally.

A 1997 study, "Effects of Student Uniforms on Attendance, Behavior Problems, Substance Use and Academic Achievement," concluded that, contrary to national opinion and the testimony of thousands of school administrators, student uniforms have no direct

effect on substance abuse, behavior problems, attendance, or students' academic achievement. The researchers, David L. Brunsma, a sociologist at the University of Alabama, and Kerry A. Rockquemore, a sociologist at the University of Notre Dame, used the National Educational Longitudinal Study of 1988 (NELS:88) to test the relationships mentioned above. The NELS:88 provided the researchers with a number of variables that were used to analyze the relationship between student uniforms and various student outcomes. Controls for student characteristics were implemented for variables such as race, gender, and socioeconomic status. Variables to control school characteristics were implemented, too, in the research. Characteristics such as school academic achievement (gifted and special education) and vocational-technical programs were omitted. Another crucial school variable that was controlled in the analysis was school sector. The results of this research concluded that school uniforms did not improve student attendance, behavior problems, or academic achievement, and did not reduce substance abuse. In fact, the results showed that uniforms had a negative effect on student attendance, behavior problems, and academic achievement (Brunsma & Rockquemore, 1998).

Data Collection and Results

Tennessee Comprehensive Assessment Program (TCAP) test scores for the Hamilton County middle schools used in this study were gathered from the Hamilton County Department of Education in Chattanooga, TN (personal communication, Testing and Assessment Department, August 23, 2004). The TCAP scores are from the school years 1998 to 2003. These years are the only time range in which TCAP scores were available at the time of this study. The TCAP scores used are the mean NCE scores in five

subjects (reading, language, science, math, and social studies). These scores are based on a national percentile with 50 percent as the national average.

The schools selected in this study were all the middle schools that began implementing dress codes or uniforms after 1998. There is no difference made between dress codes and uniforms for this study. These schools were selected because their dress code implementation started after schools in Hamilton County began using yearly TCAP tests for assessment. The year dress codes began for each school used in this study was determined by calling each school and asking a school official when the dress code was implemented in that particular school.

Hamilton County public schools give the TCAP test in the spring of every year. TCAP test scores from the year prior to a school implementing dress codes were compared to TCAP test scores the year school dress codes were implemented. In general, this comparison was used to determine if TCAP test scores were raised for each school after the implementing of dress codes.

So as not to be partial to any particular subject matter, five TCAP test scores subjects were chosen and averaged for an entire year. These averages were calculated for the year prior to dress code implementation and for the year dress codes were implemented. Figure 1 lists each school, followed by the year's (before and after the year dress code was implemented) TCAP test scores. To the right of "year of test, are the mean NCE scores for the five different subjects. The total yearly average score of all five subjects is located at the far right. Each yearly "before and after" average total was then compared. The comparison is presented in Figure 2.

School	***Year of Test***	NCE Reading Total (Mean)	NCE Language Total (Mean)	NCE Math Total (Mean)	NCE Science Total (Mean)	NCE Social Studies Total (Mean)	**Average of yearly scores**
A							
	2000	47.04	50.87	46.82	47.52	51.55	49.295
	2001	48.48	50.85	46.78	46.64	48.74	48.61
B							
	1998	31.55	35.09	34.82	30.3	34.44	32.995
	1999	31.86	36.35	36.49	33.09	35.49	33.675
C							
	1998	51.76	54.93	51.57	52.12	52	51.88
	1999	50.57	53.65	49.25	51.09	50.46	50.515
D							
	1999	24.61	29.58	29.18	28.69	28.95	26.78
	2000	26.79	31.52	28.39	25.16	29.39	28.09
E							
	2002	46.82	51.39	51.47	46.2	45.36	46.09
	2003	49.99	50.93	51.7	45.53	46.84	48.415
F							
	1998	55.29	59.98	53.83	54.87	55.24	55.265
	1999	54.45	60.22	55.19	55.77	52.19	53.32
G							
	2000	48.08	51.86	43.45	47.71	48.99	48.535
	2001	49.83	51.84	45.1	47.49	46.36	48.095
H							
	1998	68.8	72.56	68.43	68.79	69.15	68.975
	1999	68.2	72.11	69	67.27	66.67	67.435
I							
	1998	49.29	52.76	50.65	49.93	50.67	49.98
	1999	51.32	53.5	51.25	50.83	47.85	49.585
J							
	1999	38.92	45.2	44.59	39.94	42.37	40.645
	2000	43.34	50.95	45.99	44.81	47.92	45.63

Figure 1. TCAP scores for middle schools before and after implementing a dress code or school uniform policy.

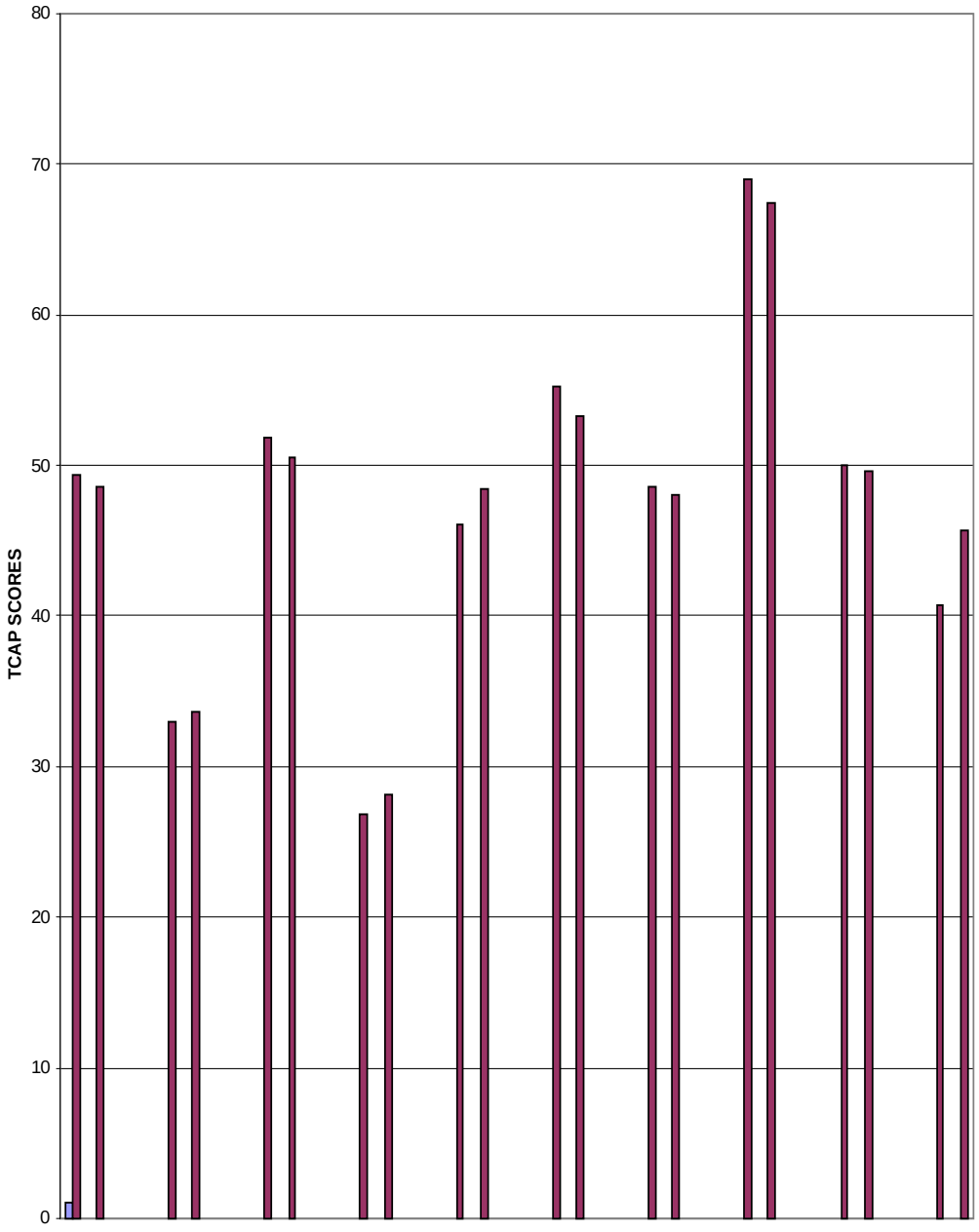

Figure 2. TCAP scores before and after dress codes were implemented.

The results from this study show that only 40 percent of the schools surveyed improved or increased in TCAP test scores after dress codes were implemented. Out of the 10 schools used in this study, only 1 had significant increase TCAP test scores the year dress codes were implemented. Thirty percent of the schools decreased significantly in TCAP test scores as compared to other schools surveyed after implementing dress codes.

Conclusions and Recommendations

Although much of the literature reviewed was favorable for increased academic achievement as a result of dress codes, the results of this study do not support such allegations. Only 40 percent of the schools surveyed showed an academic increase based upon TCAP scores. Seventy-five percent of the schools that did improve only improved a little. That small amount of improvement could be the result of dress codes being enforced or something else such as teachers taught the students in such a way as to improve their TCAP scores. Another factor could be differences in tests from year to year. Comparing 3 years of data from both before and after the change to a dress code may yield more consistent results. The 1 school out of the 10 surveyed that had a significant increase in TCAP scores looks out of place when compared to the other 9 schools surveyed. This large increase therefore is probably the result of some other change that took place in the school the same year dress codes were enforced. These were the first and second years that this school was a magnet school. It is the conclusion, therefore, of this study based upon the results that dress codes do not significantly, if at all, increase academic achievement. Although the results of this study do not give

supporting evidence for increased academic achievement, it is recommended that schools have dress codes for other reasons which are supported by the literature reviewed.

It is recommended to teachers and administrators for professional development that they dress appropriately so as not to support violence and inappropriate behavior. Dressing appropriately supports enthusiasm and self-esteem, and models social citizenship. Encouraging or enforcing students who are not old or mature enough to know the importance of dress and the significance of their actions may or may not increase their academic achievement. But, the evidence from literature reviewed, testimonies from teachers and principals, and statistics support the notion that dress codes improve the behavior of students, reduce dress competition between students, encourage a better atmosphere, and help identify strangers in the school building.

Grant money has been used for research concerning dress codes in schools. Two of the articles studied in the literature review used federal government data which was gathered by grant money. Based upon what a researcher is studying about dress codes will determine if a grant is feasible. A considerable amount of data is readily available from local, state, and federal governmental agencies. The researcher for this study found an abundance of data at the local board of education and the local library. Nearly all states have Web sites with a wealth of information and statistics about the education in their state. Federal government Web sites, like ERIC and The National Center of Educational Statistics, are but just a couple to mention.

The role of technology in the area of dress codes can be used in two ways. Both ways are centered around the use of the internet. First, the internet is a great way for teachers and principals to communicate. What works and doesn't work in certain areas

of the country and communities can be communicated all over the nation via the internet. There are many Web sites for principals thinking of implementing a dress code in a school. The Web sites tell the positive, negative, financial, attitudinal, and support aspects of implementing a dress code. Secondly, teachers can use the internet to communicate their ideas, creativeness, and strictness in enforcing dress codes.

References

Brunsma, L. D., & Rockquemore, K. A. (1998). Effects of student uniforms on attendance, behavior problems, substance use, and academic achievement. *The Journal of Education Research*, *92*(1), 53-61.

Buckley, W. F. (1996, February 26). School uniforms?! *National Review*, 48(3), 70-71.

Fadden, C. Y. (1996, Spring). Uniforms are worth the wear. *Family Press School Directory*, *66*, 46-47.

Forbes, M. (1990, September 17). Democratic uniformity. *Forbes*, *146*(6), 20.

Gursky, D. (1996, March). Uniform improvement? *The Education Digest*, *67*, 46-48.

Jarchow, E. (1992). Ten ideas worth stealing from New Zealand. *Phi Delta Kappan*, *73*, 394-395.

Kennedy, J. M. (1994, August 25). Clothes make the student, schools decide. *The Los Angeles Times*, pp. A2.

Kennedy, M. (1995, August 21). Common denominator: Schools see les s violence when kids wear uniforms. *The Los Angeles Times*, p. 1.

LaPoint, V., Holloman, L., & Alleyne, S. (1992, October). The role of dress codes, uniforms in urban schools. *NASSP Bulletin*, 20-26.

Loesch, P. (1995). A school uniform that works. *Principal*, *74*(4), 28-30.

Myers, D., & Cameron, D. (1990). Should schools enforce dress codes? *NEA Today, 8*(8), 31.

Padgett, J. B. (1998). *Perceptions of the effect uniforms or strict dress codes have on elementary school children.* Unpublished education specialist degree research report. Mercer University, Macon, GA.

Paliokas, K. L. (1996, January). Trying uniforms on for size: Mandatory uniform policies. *American School Board Journal*, A18.

Scherer, M. (1991). School snapshot: Focus on African-American culture. *Educational Leadership, 49*, 17-19.

Stover, D. (1990). The dress mess. *American School Board Journal, 177*, 26-29.

Thomas, S. (1994, October 20). Uniforms in the schools: Proponents say it cuts competition: Others not so sure. *Black Issues in Higher Education*, *11*, 44-47.

U.S. Department of Education. (1996). *Manual on school uniforms*. Washington, D.C.

U. S. Department of Justice. (1996). *Manual on school uniforms* (Publication No. BBB00482; EDD00101). Washington, DC: Office of Elementary and Secondary Education.

Woods, H., & Ogletree, E. (1992). *Parents' opinions of the uniform student dress code* (Report No. UD0259580). Chicago, IL: Office of Educational Research and Improvement. (ERIC Document Reproduction Service No. ED367729)

Workman, J., & Johnson, K. (1994). Effects of conformity and nonconformity to gender-role expectations for dress: Teachers versus students. *Adolescence, 29*, 207-223.

The Literacy and Technology Challenge: Review of Literature to Determine Data on Best Practices in the Areas of Literacy and Technology Education

Kelie R. Day

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Introduction to the Problem

When I consider my own personal educational experience in literacy, I realize that, even though I was given a fairly adequate background, there is one element that was missing – computer technology. As I remember it, when I was in elementary school and I was learning to read and write, computers were just beginning to have a place in the classroom. Even though I remember having a computer in the classroom by the third grade, there was precious little time that each of us actually were allowed to use it. I remember, vividly, that the teacher was easily frustrated with her lack of knowledge with it and, therefore, we were not given the opportunity to experience its value in our education.

As I reflect upon how computer technology has changed in the last 20 years, I am continually amazed at all of the areas that it is capable of benefiting. I am becoming more and more aware that, in our society today, if you are not technologically literate, you will eventually be left behind because all around us is a world that revolves around technology. In my professional life, I realize the power and necessity of technology on a daily basis. It has become strikingly obvious to me that it can be a tool to help me not only "get the job done," but it can help me learn, as well. As a society, we have become progressively more reliant on the internet and electronic media to gather information and learn about new concepts or ideas. May (2003, p. 36) explains that, "for our students to be prepared for the 21st century, they will need to have technological knowledge and skills. One way for students to get that knowledge is for teachers to integrate technology into their daily curriculum."

With this in mind, I would like to focus my research on determining to what extent technology can aid and extend emergent literacy among elementary-aged children. In analyzing emergent literacy, there is no real beginning or ending; it is a continual improvement process that begins with the very earliest cooing and eventually leads into successful reading comprehension and flourishing writing. It is a process that is subtle, but traceable, nonetheless. As Hutinger, Robinson, Schneider, and Johanson (2002, p. 3) explain in *The Early Childhood Interactive Technology Literacy Curriculum Project: A Final Report*, "…emergent literacy is an important process that gives children the ability to deal with abstractions later used in writing and reading which has roots in the scribbles, images, and pretend play of the young mind."

Literacy development itself involves many different steps including the following:

1. Putting words together to make sentences.
2. Recognizing pictures and their words.
3. Using words to express needs.
4. Rhyming.
5. Writing stories, poems, songs.
6. Understanding the meanings of words and describing them.

It includes reading, reading comprehension, writing, listening, speaking, and communicating with others. Because this is a cornerstone to a person's later abilities to learn, it is imperative that we, as educators, provide age appropriate, stimulating, and positive experiences to encourage the optimal growth of our students in their emergent literacy.

As expressed by May (2003, p. 34),

> Instructional technology does not mean that the teacher uses the computer to keep his or her grade-book or create worksheets, and it does not mean that the teacher is the only one using the technology. It means that the teacher is using numerous types of technology to enhance what the students are learning.

Such technology might include computers, the Internet, digital cameras, and computer learning software used to blend into daily lessons. Students should be given adequate opportunities to experiment with these tools on a regular basis.

According to studies by the National Reading Panel, "word processing supports reading-writing connections, and process writing; computer technology supports motivation to read and write…" (Asselin, 2001, p. 49). Does it not make sense that these skills should be applied in the best manner so that they positively impact our students? In this vein, I would like to determine to what extent different forms of computer technology can work within the classroom to positively enhance students' emergent literacy. As a pre-service teacher, I am interested in using technology, as much as possible, to encourage learning and to stimulate motivation within my students for further exploration. I believe that technology can provide the necessary motivation to push students towards success in literacy acquisition. Computer technology has the potential to affect not only a student's learning, but also the student's affinity for the educational process.

After reviewing the literature, it is evident that there has been research on technology as it applies to classroom learning enhancement, but there seems to be little research on how technology specifically affects literacy achievement. I believe that it

will be beneficial to delve deeper into the implications that technology could potentially have on literacy development. In my research, I would like to work with students in a class who have had little exposure to appropriate instructional technology. I would implement language arts and literacy projects (including WebQuests, CD-ROM storybooks, and Internet projects) that expose the students to appropriate instructional and information technology in order to test their level of improvement in three main areas: (a) reading and reading comprehension skills, (b) writing skills, and (c) computer literacy.

Review of Literature

In reviewing multiple pieces of literature, I have seen a noticeable connection between English literacy and computer technology. Sullivan suggests that, with new information and computer technologies, a quiet movement is taking place that may reshape the way that teachers approach emergent literacy (1998). However, another author, Asselin, suggests that, "While new information and communication technologies have permeated our social, economic and personal lives, their place in literacy education has been much slower to establish" (2001, p. 49). It seems clear that some recognize the importance of technology as it relates to emergent literacy, but that not all educators have come to incorporate computer technology into literacy education. Molebash and Fisher state that literacy, from a holistic approach, is primarily concerned with drawing meaning from different sources of media (2003). This would seem to imply that, to be literate in English, there must be other forms of literacy that need to be understood. Weikle and Hadadian propose that there is sufficient evidence to infer there is a growing need for technological literacy that should accompany our traditional forms of literacy (1999). In this vein, Molebash and Fisher state that, "Teaching our children how to wring out

meaning and understanding from the multitude of today's and tomorrow's information sources should be our goal – that is literacy is the goal" (1999, p. 69).

The United States Department of Education put out The Technology Literacy Challenge with the hopes of "demonstrating that technology can transform learning and teaching in profound ways" (Salpeter, 1997, p. 24). This challenge places emphasis on not only improving education, but providing access to technology for all students (Salpeter, 1997). With similar goals, quite a few states and school districts have implemented their own programs in the hopes of advancing education with the use of technology (Salpeter, 1997). If this the case, does it not seem possible that technology can realistically be used to improve English literacy skills when applied to emergent readers? According to studies by the National Reading Panel, "…word processing supports reading-writing connections, and process writing; computer technology supports motivation to read and write; and electronic books are challenging assumptions about the nature of text and reading as a linear, chronological process" (Asselin, 2001, p. 49).

Just as computer technology has become a part of our society as a whole, should we not also include it in our educational lives as well? According to May,

> There is a big consensus that for our students to be prepared for the 21st century, they will need to have technological knowledge and skills. One way for students to get that knowledge is for teachers to integrate technology into their daily curriculum. (2003, p. 36)

Walker provides that, even though this seems like a grueling task, it has the ability to create great opportunities for our students (1999). Weikle and Hadadian suggest that students who enter school with inadequate technological skills and limited emergent

literacy skills are at a higher risk for not achieving their educational goals (2003). Does it not seem fair that exposing these types of students to better literacy activities through the use of computer technology might help them improve their chances of achieving educational goals? Sullivan implies that, if we continue to use the strategies of yesteryear to teach our students literacy, we will inadvertently prepare our students for the jobs of yesteryear (1998). Walker states that technology has already transformed the workplace and that, "educated people will be expected to creatively use what they know; to express themselves; to design, build and invent" (1999, p. 20). Walker and Yekovich supply that, with the increasing emphasis on technology in the workplace, children should have as much access as possible now to the tools they will later be expected to use (1999).

What kinds of technology may promote our students' mastery of expected goals? Many researchers and authors tend to suggest that Internet projects, WebQuests, CD-ROM storybooks, word-processing, and telecollaborative projects have a positive impact on the literacy of emergent readers and writers. According to Molebash and Fisher, today's students are so used to technology in their everyday lives that they cannot remember a time when it wasn't present. They suggest that different forms of media are almost second nature to our nation's youth today (2003). While some students may be used to technology in their everyday lives, the use of technology *in the classroom* may be new to most students. Some teachers and researchers, however, are finding unique ways to incorporate technology as a tool for learning. Leu, Karchmer, and Leu provide that a growing number of teachers are using what is called the "Internet Project" in their classrooms (1999). They continue to add that the, "Internet Project is a collaborative instructional strategy in which learning experiences are developed and exchanged

between two or more classrooms over the Internet" (1999, p. 26). They suggests that, with this opening up of the classroom to other classrooms, learning is enriched and potentially more meaningful for students (1999).

Distance learning and telecollaborative projects are ways in which students can authentically connect their reading with others' readings. In a recent telecollaborative study by Sullivan, she states that, from the onset,

> We believed that, through distance learning, we would be able to accomplish the following three goals: a) bring elementary school children together and pre-service teachers together, b) discuss literature, and c) integrate the language arts by weaving together activities that would involve reading, oral discussion, writing and the use of technology. (1998, p. 47)

The study, itself, was seen as successful because it was able to fulfill all of its original goals and it improved the interest in literature-based activities of the students involved. Noticeable differences were reported by both the teachers of the students involved and the parents of the students. Teachers have also stated that CD-ROM storybooks and electronic portfolios are excellent means of using technology as a tool within the classroom to motivate students to improve emergent literacy skills (Walker, 1999; Weikle & Hadadian, 2003).

From what we know about children and their interest in multimedia and video games, does it not seem that technology, if used appropriately, could be used as a motivator for students in their learning? Baker suggests that, even though there is much to be discovered about the way technology affects learning, some specific characteristics have emerged from studies where students have been exposed to technology as a tool for

learning (2001). May relates that one of the reasons for using technology with students is it "…is a great motivator for students" (2003, p. 36). Walker provides that, "technology motivates children and is a medium that engages them for extended, productive periods of time" (1999, p. 60). During Sullivan's study mentioned earlier, the elementary students' incentive to read appeared to increase and they began reading more independently (1998). Their teacher responded that students told her they were reading more carefully because they would later have to write about it to their e-pal (Sullivan, 1998). During another study by Baker, "students commented that technology facilitated the searching of sources for specific information…these students perceived that technology made the search process easier" (2001, p. 21). Students often appreciate the use of computer technology when it is used with their own writing because it makes editing, copying, sharing, and revising much more appealing as compared to handwritten works (Walker 1999). Baker also noticed that, because of the publishing nature of literacy, students seemed more motivated to write and share their writing with others (2001). Turner and Paris concluded that, "The motivational outcomes of literacy tasks influence how students interpret their roles in learning to read. Those interpretations can affect their desire to persist and to remain involved in literacy" (1995, p. 668).

Beyond motivating our students, May suggests that research is beginning to show that integrating technology into literacy education is providing gains in our students' ability to read (2003). In a recent study by Apple Corporation, the Apple Classrooms of Tomorrow research, "has demonstrated that the introduction of technology to classrooms can significantly increase the potential for learning, especially when it is used to support collaboration, information access, and the expression and the representation of students'

thoughts and ideas" (Salpeter, 1997, p. 28). In studies noted by Asselin, researchers have seen improvements in the areas of writing fluency, quality and quantity of writing, affinity for writing, and, even, the social environments within the writing classroom (2001). Walker states that some people will find it hard to believe that technology will challenge students more, but that despite this negative perception, "it (will) enable people to do new and more challenging things" (1999, p. 19). Asselin suggests that computers must be employed to expand our students' higher order thinking skills such as collaboration, constructivism, and information evaluation (2001). Weikle and Hadadian promote that,

> Computers can also be used in teaching such cognitive skills as sequencing, problem-solving, making choices, and improving memory. Receptive language skills such as vocabulary, grammar, syntax, and expressive language skills, such as labeling, articulation, expression, and interactive conversation, are also areas where computer technology can have positive effects. (2003, p. 181)

It is clear that much has been learned about the nature of technology as it relates to the learning and growth of our nation's students in general. Just in utilizing technology itself, we seem to be able to enhance our students' technology literacy. It is also evident, from the literature and sources presented in this review, that technology has the potential to stir great motivation within our students, and perhaps, with this, lead to more interest in educational goals. In conclusion, although thorough research has been done to indicate that computer technology can enhance learning in the regular classroom,

more research is needed to better understand the depth of the implications that technology can have on emergent English literacy.

Measurement

One very important variable that should be considered in working with children of this age is the natural maturation process that occurs in second graders. Their progress as emergent readers and writers usually takes place at a fairly rapid pace. To be able to take this into consideration when testing and making inferences about the results, there will be several pieces of data collected from each group to make a fair assessment of the outcomes. The pieces of data that will be analyzed and their purposes are listed in Figure 1.

Research Questions	Data Source	
	1	2
1. Pre-Test Levels of Achievement (Literacy & Computer)	Pre-Test (T1)	Survey 1 (S1)
2. Attitudes toward technology	Survey 1 (S1)	Survey 2 (S2)
3. Attitudes toward reading/literacy	Survey 1 (S1)	Survey 2 (S2)
4. Achievement throughout study	Pre-Test (T1)	Post -Test (T2)

Figure 1. Research questions and data sources.

The timeline for collecting data from both the experimental and control groups will be as follows:

Week 1

Student Survey 1 (S1) is completed by students.

Parental Consent Form is sent home.

Students take Pre-Test (T1), Student Survey 1 (S1) and Parent Survey is turned back in.

Week 2

Intervention occurs for both groups.

Week 3

Intervention occurs for both groups.

Week 4

Intervention occurs for both groups.

Week 5

Intervention occurs for both groups.

Week 6

Intervention occurs for both groups.

Week 7

Intervention occurs for both groups.

Week 8

Student Survey 2 (S2) is completed by students.

Students Take Post-Test (T2)

Both the pre-test and the post-test will be a written, teacher-made test that assesses basic computer knowledge and skills, reading comprehension, and writing skills. There will be approximately four sections and each will be comprised of four to five questions. The pre-test and the post-test will assess identical skills to ensure that the data being assessed is the same. The two student surveys are identical and will ask questions about students' attitudes towards literacy activities and computer activities (see forms S1 and S2 in Appendix A).

Intervention and Procedure

Students who receive the experimental intervention will be involved in three major activities during weeks 2 through 7. Each of these students will experience one CD-ROM book activity, one word processing activity, and one Internet activity based on the literature lesson for the week. Because of testing, there will be no intervention planned for week 1 or week 8. Each student in this group can expect to spend roughly 3 to 4 hours working on literacy projects through the use of technology. Students in the

control group will simply receive 3,half-hours of educational games added to their schedule; the games will be literature-based and will rely on the use of technology. Neither of the groups will know if they belong to the experiment group, or the control group because both will receive an intervention.

Data will be collected from both groups at the same time. Data collection for both groups will include student surveys, and a pre-test and a post-test. Because the control group is receiving an intervention that is drastically less, in terms of time and content, than that of the experimental group, it should make comparing any differences more accurate and reliable. The study's activities, and interventions are presented in Figure 2.

Week	Activity/Intervention	Form
1	Acquire approval from principal and cooperating teacher for project. Acquire approval from parents, and students for students to participate in study. Pre-intervention surveys will be completed by students.	A, S1
End of 1	Pre-intervention testing of students in both groups using teacher- made informal assessment.	T1
2	Intervention begins for both groups.	
3	Intervention continues for both groups.	
4	Intervention continues for both groups.	
5	Intervention continues for both groups.	
6	Intervention continues for both groups.	
7	Intervention continues for both groups.	

8	Post-intervention testing of students in both groups using teacher made informal assessment. Post-Intervention questionnaire.	T2 S2

Figure 2. Activities and interventions.

Data Analysis

Students' progress was compared based on numerical data from Tests 1 and 2 and the assessment of student surveys. Numerical data for both tests and the student attitude surveys was compiled by group and compared using the mean and median of each group. Forms S1 and S2 are contained in Appendix A. Forms T1 and T2 are contained in Appendix B.

A pre-test was given to both groups during the first week of this project. A follow-up post-test was given after all interventions were complete. The nearly identical tests covered reading, reading comprehension, writing, and basic computer skills. Overall, the students from both groups scored well on both tests. The mean pre-test score for the experiment group was 87.7 out of a possible 100 points. The mean post-test score for the experiment group was 96.4 out of 100 possible points. The mean pre-test score for the control group was 87.7 out of a possible 100 points. The mean post-test score for the control group was 92.7 out of a possible 100 points. The data from both groups are shown in Figures 3 and 4 below.

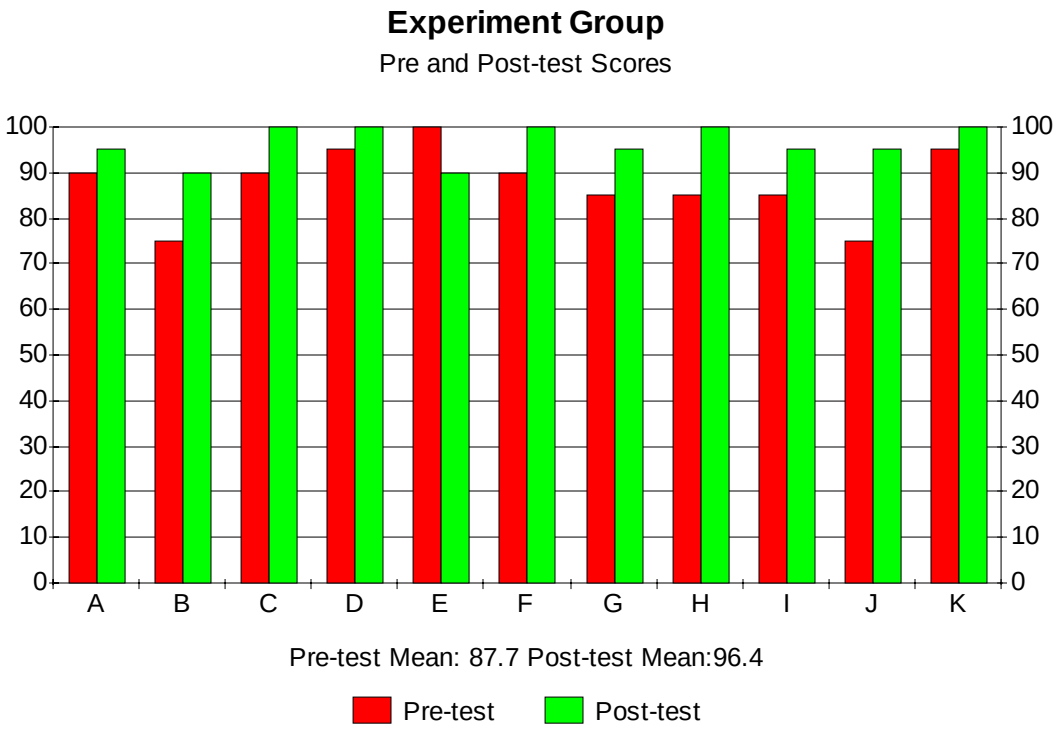

Figure 3. Experiment group – pre- and post-test scores.

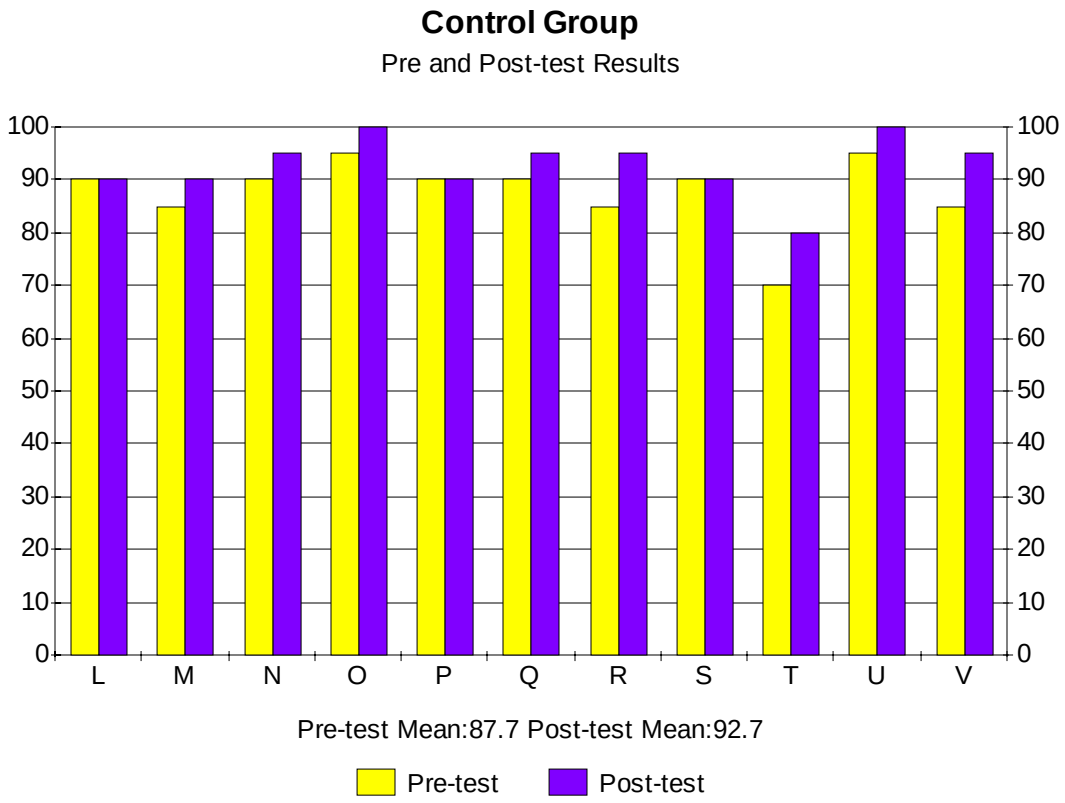

Figure 4. Control group pre- and post-test scores.

As you can see, both groups made progress throughout the study in the areas of reading, reading comprehension, writing, and basic computer skills. The experiment group, however made more of a positive change than the control group. The experimental group saw an overall positive change of 8.63 points from pre-test to post-test. The control group experienced an overall positive change of 5.0 points from pre-test to post-test.

Two identical attitude surveys were given to both groups that requested children rate their attitudes on reading for pleasure, how often they read, and how they felt about using computer technology. The first survey was given during the first week of the study, and the second survey was given upon completion of all interventions. When

studying the attitude survey results of both groups, there was very little change throughout the study. The biggest change that was noted on individual response sheets was a more positive attitude towards using the computer. This difference was seen for the majority of students from both the experiment and the control groups. The results of both groups are listed below in Figure 5.

Experiment Group				Control Group		
Student #	RS 1	RS 2		Student #	RS 1	RS 2
A	2	2		L	2.66	2.33
B	1	1		M	1	1
C	1.33	1		N	1.33	1
D	1.66	2		O	1.33	1.33
E	1.33	1.66		P	1.33	1.33
F	2.33	2.33		Q	1.66	1.33
G	1.66	1.33		R	2	1.66
H	2	2		S	1.66	1.66
I	1	1		T	1	1
J	1	1		U	1	1
K	1	1		V	1.33	1.33
Mean:	1.48	1.48		Mean:	1.48	1.36

Figure 5. Reading survey results for experiment and control groups.

As stated in the chart above, there was relatively no change in the attitude of the students within the experiment group from the beginning of the survey until the end. However, the control group saw a decrease of 0.12 points from beginning to end in the attitudes of their members toward technology and literacy experiences.

Conclusions and Recommendations

In conclusion, it was my experience, throughout the study, that the students who were involved in the experimental group seemed to have a more positive attitude towards technology literacy experiences. While both groups showed progress academically, it was the experiment group who gained the most by having technology experiences added to their regular schedule. The results of this study seem to suggest that literacy technology

is a teaching strategy that deserves more research. This approach would not only be beneficial to the education field, but it would also greatly benefit our students. Although this study is in no way conclusive that literacy technology will work for every student in every situation, it does lead one to the impression that most students stand to gain more from their literacy experiences, in the areas of reading, reading comprehension, writing, and basic computer skills, if technology options are added to the regular curriculum.

Appendix A

Form S1

Student Number:_____ Date:_____

Reading Survey 1

Circle the face that bests describes how you feel about reading:

☺ I love it! 😐 It's Ok. ☹ It's no fun at all.

Do you read at home? Yes No

What kinds of things do you like to read? _____

_____

What is your favorite book?

How do you feel about using the computer? Circle your answer:

☺ I love it! 😐 It's Ok. ☹ It's no fun at all.

Form S2

Student Number:_____ Date:_____

Reading Survey 2

Circle the face that bests describes how you feel about reading:

☺ I love it! 😐 It's Ok. ☹ It's no fun at all.

Do you read at home? Yes No

What kinds of things do you like to read? _____

_____

What is your favorite book?_____

How do you feel about using the computer? Circle your answer:
☺ I love it! 😐 It's Ok. ☹ It's no fun at all.

Appendix B

Form T1

Student Number:_____ Date:_____

Writing

1. Write the alphabet in lower and upper case letters below.

2. Write two sentences about school.

Reading

1. Read the following passage aloud to your teacher:

   Katie and her sister, Amy, like to go to school. They go to Daylily Elementary School. They ride the bus every day. When they get to school, they go to different classes. They both like art and math. Katie is in the first grade and her sister is in the third grade. The girls have fun with their friends at school.

Reading Comprehension

1. What is Katie's sister's name?_____
2. How do Katie and her sister get to school?_____

3. What are their favorite subjects?_____
4. Is Katie in the fifth grade?_____
5. What school do Katie and her sister go to?_____
_____

Basic Computer Skills

1. Point to the mouse.
2. Point to the screen or monitor.
3. Use the mouse, and open one program.
4. Close the program using the mouse.

Form T2

Student Number:_____ Date:_____

Writing

1. Write the alphabet in lower and upper case letters below.

2. Write two sentences about school.

Reading

1. Read the following passage aloud to your teacher:

   Amy and Mary are twins! The girls both like to go to school. They go to Big Tree Elementary School. They walk to school every day. When they get to school, they go to the same class. They both like science and math. The sisters are both in the third grade. The girls have fun with their friends at school.

Reading Comprehension

1. What is Amy's sister's name?_____
2. How do Amy and her sister get to school?_____
3. What are their favorite subjects?_____
4. Are Amy and Mary in the fifth grade? Yes No
5. What school do Amy and her sister go to?_____

_____

Basic Computer Skills

1. Point to the mouse.
2. Point to the screen or monitor.
3. Use the mouse, and open one program.
4. Close the program using the mouse.

Resources

Asselin, M. (2001). Literacy and technology. *Teacher Librarian, 2*(3), 49-51.

Baker, E. A. (2001). The nature of literacy in a technology-rich fourth-grade classroom. *Reading, Research and Instruction, 40*(3), 159-184.

Hutinger, P., Robinson, L., Schneider, C., & Johanson, J. (2002). The early childhood interactive technology literacy curriculum project: A final report. Western Illinois University, Macomb. Center for Best Practices in Early Childhood, p. 1-99. Retrieved September 22, 2003, from ERIC database. (ERIC Document Reproduction Service No. ED468324)

Leu, D. J., Karchmer, R. A., & Leu, D. D. (1999). The Miss Rumphius effect: Envisionments for literacy and learning that transform the Internet. *The Reading Teacher, 52*(6), 636-642.

May, S. W. (2003). Integrating technology into a reading program. *T.H.E. Journal, 30*(8), 34-38.

Molebash, P., & Fisher, D. (2003). Teaching and learning literacy with technology. *Reading Improvement, 40*(2), 63-70.

Salpeter, J. (1997). Lighting the way: What we're learning from model schools. *Technology & Learning, 18*(3), 24-30.

Sullivan, J. (1998). The electronic journal: Combining literacy and technology. *The Reading Teacher, 52*(1), 90-93.

Turner, J., & Paris, S. G. (1995). How literacy tasks influence children's motivation for literacy. *The Reading Teacher, 48,* 662-673.

Walker, C. H., Yekovich, F. R. (1999). TRALES to literacy. *Educational Leadership, 57*(2), 57-60.

Walker, D. (1999). Technology & literacy: Raising the bar. *Educational Leadership, 57*(2), 18-21.

Weikle, B., & Hadadian, A. (2003). Can assistive technology help us to not leave any child behind? *Preventing School Failure, 47*(4), 181-186.

The Daily Quiz as a Reading Comprehension Tool

Nicholas Hall
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Culminating Experience
EDUC 590

The Institutional Review Board of the University of Tennessee at Chattanooga (FWA00004149) has approved this research project 04-133.

Problem Statement

There are many problems that educators face today. Student apathy and motivation are two of the most prevalent and observable of these problems. I decided, long ago, that reading, especially readings outside of the textbook, would be a central part of my instructional pedagogy. An effective teacher in the field of social studies emphasizes the importance of reading and the importance of outside materials within the reading, especially primary sources. Students often display an apathy and unwillingness to do work outside of the classroom and reading assignments are no exception. The problem I wished to study was how to address this lack of motivation and participation in outside readings.

I hypothesized that the most effective way to get students to read assignments was to hold them accountable through an assessment strategy. This can be accomplished through a variety of methods. If a student does not participate in the classroom discussion of the reading, then it may be inferred that they have not read the assigned text. Having students write essays is a way to hold them accountable. Projects and guided reading assignments are other ways that readings may be assessed. But, perhaps, the best way to hold students accountable for their reading assignments is to give them a quiz over the material they were supposed to read.

I expected to find many sources that would enlighten me on the effect of quizzes in a variety of areas. I was surprised to find very little information or studies about quizzes. Most of the quiz research I found dealt with mathematics or science in higher education. Very little of the material I researched compared how a quiz might affect or improve a student's understanding of text. Therefore, I came upon my problem to

research. I would determine if a daily quiz over a primary source would help a test class perform at a higher level than a control class on the final assessment of that primary source. I hypothesized that the test group would benefit from the quizzes in two ways. First, because they were to have prior knowledge of the impending daily quizzes they would be motivated to closely read the material. Second, they will perform better on the formal assessment because they did read the material and because the quizzes, themselves ,would act as a teaching tool. The question my research sought to answer was this: Does a daily quiz (not a pop quiz) aid in student reading comprehension? To solve this question, I would try to measure the effectiveness of the daily quiz in increasing student performance. My hypothesis was that using daily quizzes would result in better class performance because of higher teacher expectations, student participation, and motivational factors.

Review of Literature

I began my research on the value of the quiz with one simple idea in mind: to find out how effective the daily quiz can be for a novice teacher. In particular, I was interested in determining if the quiz could effectively encourage students to complete homework assignments and outside readings. Would daily quizzes encourage students to do their work and would this cause a positive increase in overall course grade? Would quizzes result in more thorough understanding of homework and a subject's contextual characteristics? Would quizzes result in a better understanding of assigned readings? These are some of the questions I turned over in my mind as I began a search for academic, refereed articles.

I had a preconception of how good uses of quizzes would affect teaching. The perception, or initial hypothesis, was that using daily quizzes would result in better class performance because of higher teacher expectations, student participation, and motivation. I expected to find many articles that would support such an assertion. I was surprised to find little actual research on the effectiveness of the quiz as a learning or assessment tool. In fact, I only found six articles that related to my query. Furthermore, the articles I found dealt mostly with collegiate courses. However, the courses that these studies used as samples were mainly introductory courses with students that were close to the age group that I was likely to work with in my study. I was hoping to be working with 16-18 year olds in a United States history course. These studies dealt with students who likely fell between the ages 18-21.

The information I did find supported my initial hypothesis, but there were some surprise results that seemed to invalidate at least some of my theory. There is evidence for testing often and evidence against it. "It has been suggested [by studies] that students who were given weekly tests scored significantly higher on a final examination than those who only had a midterm examination." Another study found, "no differences on final examination scores for students tested frequently when compared to less frequent testing" (Johnson, 1989, p. 468). Most of the support to my hypothesis came in the form of higher student motivation and responsibility. One example was the daily essay quizzes that Professor Patricia A. Connor-Greene of Clemson University gave to her psychology students. Conner-Greene started using the daily essay quizzes in lieu of four scheduled tests that had previously monitored whether the students were reading the materials or not. She hoped that the quiz would also act as a teaching tool and assessment and not

merely as a monitoring device. The evidence that students gained increased motivation and responsibility was gathered from a questionnaire. On this questionnaire, 92% of the quiz group reported that they read the materials as opposed to only 12% of the control group. Furthermore, 72% of the control group responded that they read little or none of the material. Not one member of the quiz group reported that they read little or none of the material (Conner-Greene, 2000).

Another study found other types of quizzes could also improve motivation and responsibility. Gregory J. Marchant conducted a study that found students who anticipated a quiz over assigned reading were more likely to closely study while reading the material than those students who did not anticipate a quiz. The study reported 60% of students who anticipated a quiz would thoroughly read the text. If they knew there would be a quiz, these students took time to highlight text or break text down into notes. Less than 10% of those students who thought they were reading only for class discussion or for their career reported that they would read the text this closely. Furthermore, few students answered that they would not read or only skim the material if they were reading for a quiz. Significant numbers of students reported that they would skip the reading or just skim it if they were reading for non-tested reasons (Marchant, 2000).

One paper suggested an added bonus of higher attendance when students knew they would have daily quizzes. One professor's physics class saw an increase in daily attendance from 60-70% to over 90% (Ehrlich, 1995). Whether a student knowing that they had daily quizzes would help increase attendance at the high school level is very difficult to determine because of state and federal requirements that every student attend school daily.

Studies also showed that students' own perceptions were positive about the value of quizzes. Students reported that daily essay quizzes required more preparation and more thorough reading. They believed that the quizzes fostered greater class participation and better understanding of the course material. Ninety-six percent of the quiz group in the Clemson study preferred the daily quizzes, believing it most conducive to learning. Even 57% of the control group believed that daily quizzes would have been more conducive to their learning. Interestingly though, the control seemed to fear the added responsibility that comes with the quizzes. Only 22% answered that they preferred that type of schedule (Conner-Greene, 2000). Students from Marchant's (2002) experiment groups also reported on a self-report survey that they would read more closely when anticipating a quiz.

When it comes to actual evidence of an increase in student productivity, as measured by higher grades, the results are much more varied. One study did report that students scored significantly higher on their quizzes if they thought their reading was to be tested. Students scored lower if they thought they were reading articles because it was for discussion or because it would be beneficial to their future careers. There was a significant difference between these two groups, with the quiz group scoring 20 percentage points higher (Marchant, 2002).

When it came to the final course grades, however, these same studies suggest that quizzes had little effect on the overall performance. Conner-Greene reported that there was no significant difference between the quiz group and the control on the final grades. She also reported no difference between the quiz group and the previous year's class of

the same subject. The previous year's class of Women and Psychology did not have the essay quizzes, but had final grades that were slightly higher (Conner-Greene, 2000).

Charles Johnson's research echoed this result. In his mathematics classes, there were no significant differences between any of the group's scores for algebraic performance. In his study, there were four types of classes covering the same material. There was a graded homework class (all classes had this same homework, but non-graded), a quiz class, a test class that had four exams, and the control class that had only a mid-term and final. Since the homework class was considered low tension and the quiz class considered the highest tension class, Johnson concluded (1989), "It appears as though a student does not need to be under undue tension from classroom examinations to perform well in college algebra" (p. 475). The major implication of Johnson's research is that, as far as college mathematics is concerned, "required homework as a testing strategy will improve retention while it is no different from "other" testing strategies relative to improving adjusted performance on a final examination," (Johnson, 1989, p. 476).

Another study went so far as to suggest the very objectivity of quizzes is even mythological. Lew Romagnano shows, in his article, that in the most objective subject, mathematics, something as simple as a quadratic equation quiz can and will be scored in different ways by different teachers. If objectivity does not exist, then what do we look for in an assessment? Romagnano stresses three things: consistency, reliability, and meaning or validity. He suggests that the best way to get these characteristics into an assessment is to build a design that is likely to elicit the information you seek. Also, to increase consistency, reliability, and meaning, assessments should have guidelines, such

as rubrics, for scoring the work. These guidelines should be shared with the students. Sharing the guidelines tells the student that they are expected to meet certain desired criteria and, therefore, they are more likely to report the information you want (Romagnano, 2001). This information does not make the quiz any less of an effective assessment, but it does suggest that the quiz design should be as well thought out as any of the more complex assessments of today.

There were several other suggested benefits for the quiz as an assessment. The essay quiz was reported to be a catalyst for all levels of thinking. It encouraged preparation. Daily essay quizzes can incorporate daily writing into a class. Also, the essay quiz can prepare students for discussion, causing them to come to class thinking in ways that enable them to better articulate their ideas (Connor-Greene, 2000).

If a quiz is used often enough, daily or weekly, and is announced, then it is an anticipated quiz. These quizzes can have measured benefits. "It is likely that anticipating and taking quizzes has a cumulative effect on long-term learning, especially for average students" (Marchant, 2002, p. 50). The implication of Marchant's research is that assigned reading is much more likely to be read and understood if students believe that they will be tested over such material.

Robert Ehrlich also believed his daily quizzes to be beneficial, especially for those students who struggle and have a greater risk of dropping or failing a course. Ehrlich suggests, "these students typically either have motivation problems or weak math backgrounds; they seem to benefit from the imposed structure of a quiz every day, and the resulting immediate feedback" (Ehrlich, 1995, p. 379). His students admitted that the

quizzes made them more likely to attend class and also tended to make them pay more attention in class.

When I reflected on the literature I reviewed, I came to the conclusion that a high school study on the effectiveness of a daily quiz would be worthwhile. It was clear to me that there was sufficient evidence to keep my initial hypothesis. I was particularly pleased with the positive correlation between reading comprehension and quizzes that Conner-Greene (2000) and Gregory Marchant (2002) provided in their respective studies. Therefore, I set out to design a study that would measure the reliability of the daily quiz as a comprehension aid for secondary students.

Data Collection and Results

Population

The sample of students in this study came from a suburban high school in Chattanooga, Tennessee. I classified the school as a suburban because it was far from the downtown business district of Chattanooga. It was also over 1 mile to the nearest urban sprawl. There was, however, some diversity similar to what is typical for an urban school in a mid-sized city. The school had a large minority of African-American students who represented about one-third of the total population. There was not much further division of minority populations; only a few Hispanics and Asian-Americans were present. My classes had a larger representation of the minority. Both classes were about 50% Caucasian students and 50% African-American students. One class contained a Hispanic-American student.

The socioeconomic status of the sample at the high school was also diverse. There were a few students who could be considered upper middle class, children of small

business owners for example. Most students were middle class and lower middle class. There were also a large number of upper lower class students and socioeconomically-disadvantaged students. These were children of blue-collar workers, hospitality industry workers, general laborers, and the unemployed. According to the No Child Left Behind (NCLB) profile, the economically-disadvantaged students at the high school closely resembled the African-American proportion of the total population. I infer from this data that it is likely a vast majority of the students designated economically-disadvantaged by the state were also African-American. The geography of the home locations of the sample was wide-ranging, as well. The school is inside city limits but draws students from areas ranging from rural farmland to urban housing.

The samples I worked with were opportunity samples. I had two 11th-grade American History classes to compare. The classes were on a block schedule; therefore, there was no other choice of samples. This presented some inconvenience because the samples differed in number. One class had 35 students while the other had only 23 students. Both classes did have adolescents of the same age group and resembled one another in diversity, being about half African-American and half Caucasian. It would be up to the pre-test and grade-point aveage (GPA) comparisons to determine the compatibility of the samples.

Measurement

There were two blocked classes of United States History to measure. One class was used as a control. The other class was the intervention group. Operational definitions (instruments) were the following: surveys, comparative grade point averages, a comparative pre-test on general history topics, and a final test.

Before the intervention, each sample had its students' grade point averages compared. By comparing the mean, median, and other values of GPA, I was able to find statistical data that allowed fair comparison of the two groups. I used a second instrument to collect comparative data between the groups before the intervention. After all, student ability and motivation may be represented in GPA comparisons, but that told me little about their general knowledge and ability in history. Therefore, I used a comparative pre-test that aimed to measure the students' general knowledge of history. Results from this same test were widely reported in 1999 and 2000 in various publications including the *New York Times* and the *St. Louis Post-Dispatch*. I obtained the test from a social studies methods course at The University of Tennessee Chattanooga. After the intervention, I used two other instruments, surveys and a final test over reading comprehension. There were two surveys, one for the control group and one for the intervention group. They were designed to measure student motivation and participation (see Appendices A & B). They included questions asking about student reading trends and student opinions of daily quizzes. The surveys were given on the last day of the study. The last instrument used was a final test designed to measure student understanding of the text. It was a 20-item multiple choice test (see Appendix C). Figure 1 contains a summary of data collection measures.

Research Questions	***GPA Comparisons***	***General History Knowledge Pre-Test***	*Surveys*	***Final Test***
How comparable are the samples?	Mean, median, etc. of the samples' GPAs	Mean, median, etc. of the samples' test scores		
How did the students view the intervention and its effectiveness on motivation and understanding?			Control group survey and intervention group survey responses	

How successful was the intervention in improving performance on a final reading assessment?				Mean, median, etc. of the samples' test scores

Figure 1. Data collection measures.

Timeline of Data Collection

Pre-intervention

- 1 week prior to intervention: gathered class GPAs. To protect anonymity, names were not corresponded to GPAs. Calculated statistics to show comparability.
- 1 week prior to intervention: administered pre-test. Calculated statistics to show comparability.

Week of Intervention

- Administered daily oral quizzes over the reading assignment for intervention group. Control group assigned the text and told test on Friday.
- On Friday, administered the final test.
- After test, gave surveys to both samples.

Post-intervention

- Calculated final statistics and examined survey responses.

Intervention

The purpose of my intervention was to determine if a class that had previous knowledge of impending daily quizzes over assigned reading would perform at a higher level than a control group that did not have daily quizzes. I hypothesized that, if a class felt that they were being held closely accountable for a primary source reading, they would perform at a much higher level on a final test covering that reading than a class that was not monitored over the same primary source. I believed that the class that had

daily quizzes would read the selection with a greater eye for detail.

I found a primary source that could neatly be incorporated into my American History unit. Chief Joseph of the Nez Percés Indians wrote the essay I found. The essay appeared in *The North American Review* in April of 1879 and is titled "An Indian's View of Indian Affairs." The essay is a passionate appeal by Chief Joseph aimed to educate America's public to the tragic events that relocated his tribe to the Oklahoma territory. In his appeal, Joseph draws on some of the same themes, such as natural human rights, that founding fathers Thomas Jefferson and James Madison drew upon in their own renderings of the Declaration of Independence and the Constitution.

Both groups were given "An Indian's View of Indian Affairs" on a Monday, and told that a test over the reading would come on Friday. The groups were informed that the test would be a major grade. The final test would not actually be recorded as a grade, but, by informing the groups that it would be a major grade, I hoped to provide both groups with motivation to complete the reading and provide a placebo for the control. The control group was then left alone throughout the week. I only gave them daily reminders of the impending test on Friday.

The intervention for the test group went as follows. I told them to read an amount of the text each day. For example, on Monday I told them to read pages 412-415 (William Hare's introduction). I informed the test group that there would be a small quiz over the reading the following day. I repeated this process for sections of the essay throughout the week. Each day, the students were to expect a short oral quiz over the previous night's assigned reading. The short oral quizzes consisted of multiple-choice questions that they answered on their own paper. Students then exchanged their answers

and graded the sheets as I went over the questions and answers. The questions were not the same as the ones that appeared on the final test; instead, they were designed to get students to read on a daily basis (see Appendix D). On Friday, I gave both the control group and the intervention group the final test. Results from this test would determine which sample read and studied the material with a more thorough eye.

Timeline of Intervention

Monday: Students read pages 412-415.

Tuesday: Students answered five multiple-choice questions over the reading. Assigned to read pages 415-420.

Wednesday: Students answered five multiple-choice questions over the reading. Assigned to read pages 421-426.

Thursday: Students answered five multiple-choice questions over the reading. Assigned to read pages 427-433.

Friday: Final test for test group and control group.

Results and Analysis

Pre-intervention

The first data I examined were comparison statistics. The fact that the opportunity samples were so varied in size (the control had 35 and the intervention sample had 23 students) increased the need for valid pre-intervention comparisons. The comparison was executed through two methods: a grade point average comparison and a general history knowledge test.

First, the GPAs of both classes were requested. To protect student anonymity, I requested a list of GPAs without corresponding names. I hoped that both classes would have similar GPA averages. However, it was revealed that the larger of the two groups

had an edge in this comparison. This class would ultimately become my control. As seen in the Figure 2, the control had a higher student performance capacity as measured by GPA, a reflection of past work in all classes.

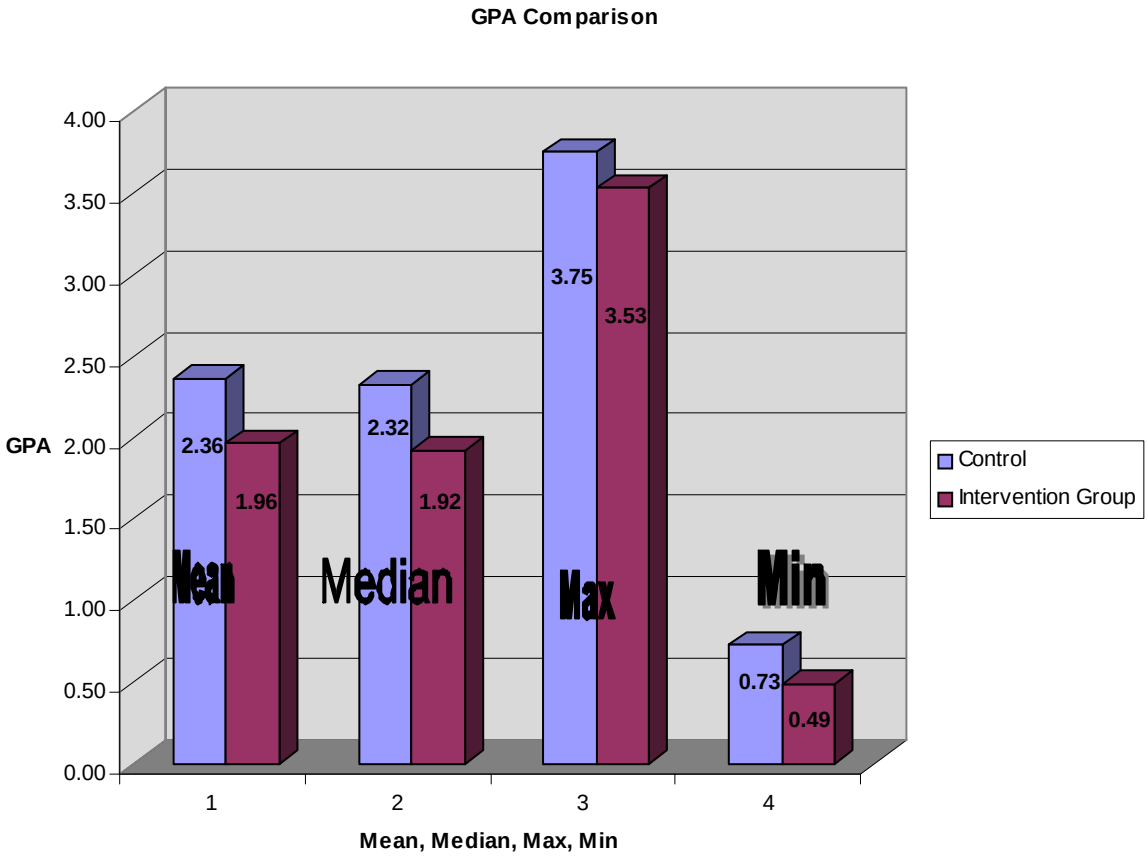

Figure 2. GPA comparison.

The control had a higher mean GPA than the smaller class. I made the smaller class the intervention group. This half letter grade difference was mirrored in the median GPA of 2.32 for the control compared to 1.92 for the intervention group. The control group had students with higher maximum and minimum GPAs, as well.

I now had two problems with my opportunity samples. First, one sample was 52 % larger than the other. Second, the larger sample appeared to have more studious learners, (a 20% higher mean GPA), than the smaller class. I hoped that my final

comparison would help produce a more equitable comparison that could indicate that the intervention group could compete or surpass the control in a reading comprehension experiment.

This second measure was a general American history exam. This test would be used to measure the two samples' previous knowledge of U.S. History. This was a necessary measure because, if one class had a better understanding of American History, then they might have some advantage through some familiarity with the primary source topic.

Again, the control sample scored higher than the intervention sample. The control had a higher mean of questions answered correctly, however, their advantage was much lower (see Figure 3). The control scored 5% better per student on the pre-test than the intervention group. This advantage was even less when the median score from the pre-test was compared. This was promising data. On the negative side, seven students from the control scored higher on the pre-test than the maximum score from the intervention group.

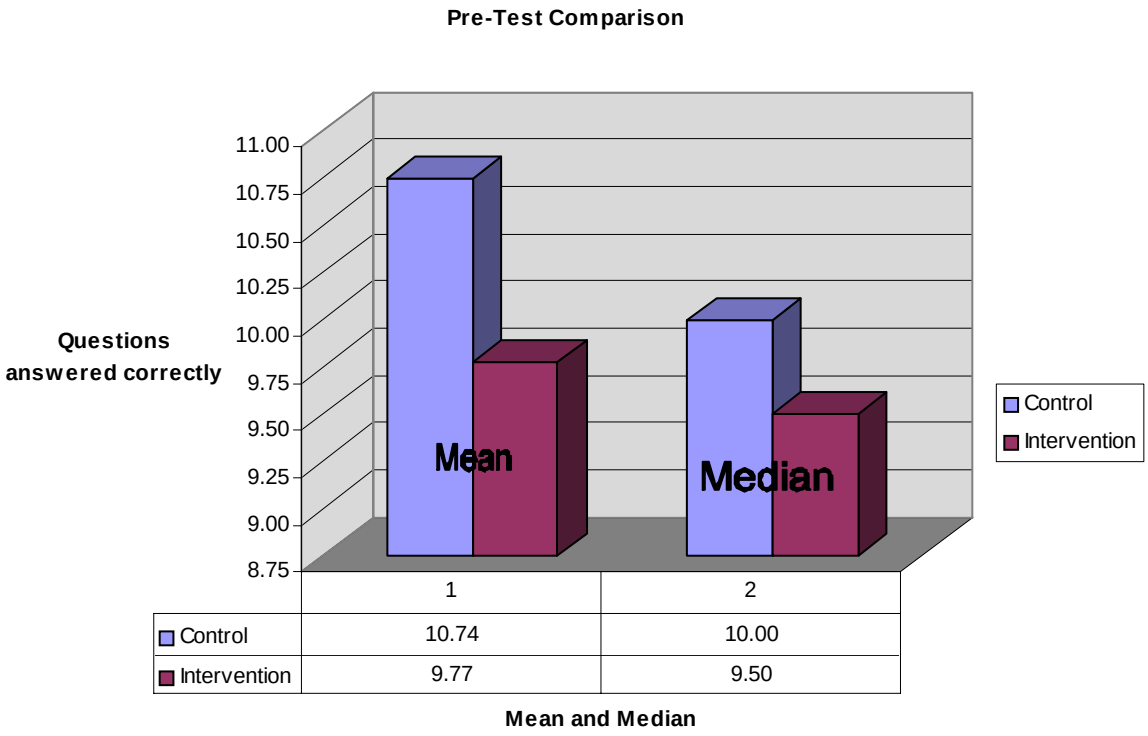

Figure 3. Pre-test comparison.

The significance of the pre-intervention comparisons was the implication that one class was better equipped to do well on my primary source reading and assessment. I decided that I would use the lower performing class as my test group and stuck to my initial hypothesis that this group would perform much better on the final assessment after the intervention. I believed that the intervention was strong enough to offset any sample differences.

Post-intervention

There was one instrument to measure the statistical success or failure of the intervention. The final test would determine how well students read "An Indian's Views of Indian Affairs." Since there was no class discussion of the reading in either class, I expected averages below the typical 70% passing mark. I did, however, expect the

intervention group to score significantly better than the control group. There was some data to support such a theory.

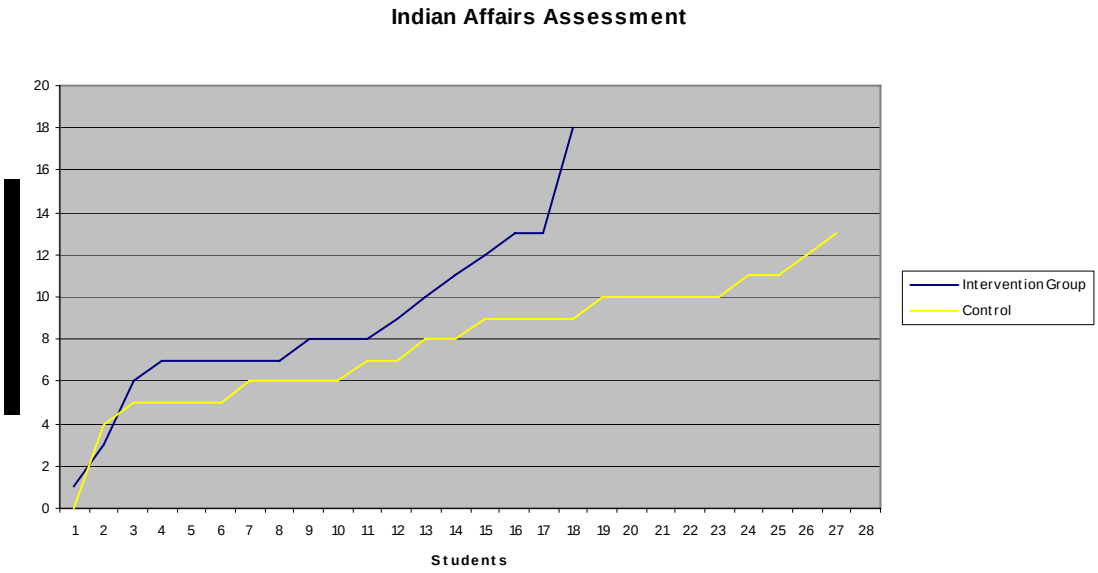

Figure 4. Indian affairs assessment.

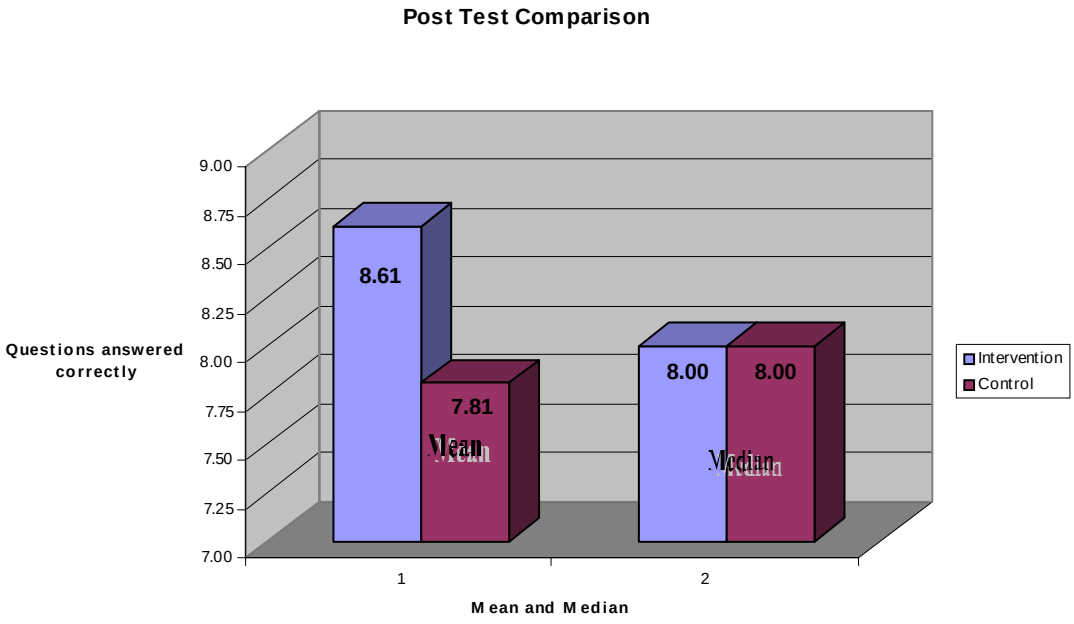

Figure 5. Post-test comparison.

Over half of the material measured on the assessment was recognized by 27.7% of the intervention students. Only 14.8% of the control recognized over half of the same material. The only outstanding performance (90% of material recognized) came from the intervention group. The mean score of the intervention group was also 10% higher than that of the control group (see Figures 4 and 5).

The findings were inconclusive; success was limited by other data. The median for the final assessment was equal for both samples. The mode for the control was 15% higher than the mode of the intervention group.

Survey results

The survey was designed to record student motivation instead of performance. Some questions were designed to record student reading habits. When students were asked how they read the selection, the quiz group gave a variety of answers. Seventeen percent said they thoroughly read the selection. Thirty-three percent said they read most of the selection, but skimmed some. Only 17% said they read little to none of the selection.

The control group was asked the same question about their reading habits. While 20% said they did skim most of the text, the rest reported that they read little to none. A clue to the poor reading habits of the control group can be linked to procrastination; 80% reported they put off the reading until Thursday night, the night before the test. The other 20% did not even look at the text; this, despite the fact that nearly all respondents from the control reported that the time allotted was enough time to read the 20-page essay.

The rest of the questions were designed to obtain student perceptions of daily quizzes over reading. Thirty-three percent of the intervention group reported that the

quizzes helped them do well on the assessment, but 42% of the same sample reported that the quizzes did not help them. Many more of the intervention group students reported that having prior knowledge of an impending quiz did, in fact, encourage them to read for more detail. Fifty percent reported that they strongly agreed or somewhat agreed that the quizzes did motivate them because of the daily accountability. Even the control group had a positive perception of daily accountability. When asked if daily quizzes over sections of the material would have motivated them to read the text with more detail, 80% reported in the affirmative.

Conclusions and Recommendations

What can be concluded from the post-intervention assessment and surveys? Considering that the quiz group was at a disadvantage compared to the control group based on pre-intervention measures, the slight advantage of the quiz group over the control group on the final assessment indicates that the intervention was at least somewhat successful. I am not, however, prepared to say that my hypothesis, that using daily quizzes would result in better class performance, was correct. There were simply too many problems with the study.

First, as a student teacher, the limited time for the intervention and collection of data rendered the study awkward. A longer design for the intervention would yield more accurate results. Second, problems with the samples sizes and academic abilities created problems for a true assessment of success or failure. Third, not enough of the surveys were returned to get a thorough idea of the samples' opinions of quizzes or the samples' reading habits.

The fact that students in the quiz group did slightly outperform the control group

in the final reading assessment does, I believe, warrant further investigation into the merits of the quiz as a reading comprehension tool. If students expect to be quizzed over their assigned readings, and are held accountable by daily quizzes or assessments of many types, then they will learn what content in a text is most important to look for, understand, and remember. The reason why I chose a simple recognition quiz as the intervention was because it is easy to administer orally and easy to grade. This makes it practical for even the largest of classes and the busiest of teachers. The important thing we need to accomplish as teachers is to hold students responsible by whatever means. It is impractical for educators to implement means that are too time-consuming when holding students responsible for readings in text heavy classes. Conner-Greene (2000) admitted as much in her research on the daily essay quiz.

While not all I had hoped was gained from this study, there was some part of my thesis that evidence suggests was confirmed. The statistics gathered by the surveys indicate that students were motivated to read the selected text. Also, the surveys reported that students read the text with a closer eye for detail than they normally would exhibit. Even those students in the control reported that they would have read the text closer if they knew they would be quizzed daily. These findings were consistent with the findings of other studies that link quizzes to motivation.

The significance of these findings for teacher professional development is simply a reminder of a basic educational truth, a truth that is even more important in today's world of distracted youth. We need to remind ourselves, in any development workshop, that what is taught must be held accountable before it is learned. Too often, teachers get caught up in designing assessments that demand higher-order thinking and critical

thinking skills. Sometimes we forget that assessments also are key motivational factors in student learning. Simple daily assessments, like quizzes, hold students accountable to study and learn. As teachers, we owe it to students to hold them accountable by whatever means. A daily quiz can be a reasonable and efficient way to do so.

References

Chief Joseph. (1879). An Indian's view of Indian affairs. Retrieved December 10, 2004 from http://cdl.library.cornell.edu/gifcache/moa/nora/nora0128/00423.TIF6.gif

Conner-Greene, P. A. (2000). Assessing and promoting student learning: Blurring the line between teaching and testing." *Teaching of Psychology*, 27(2), 84-88.

Ehrlich, R. (1995). Giving a quiz every lecture. *The Physics Teacher*, 33, 378-379.

Johnson, C. W. The association between testing strategies and performance in college algebra, attitude towards mathematics, and attrition rate. *School Science and Mathematics*, 89(6), 468-477.

Marchant, G. J. (2002). Student reading of assigned articles: Will this be on the test? *Teaching of Psychology*, 29 (1), 49-51.

Romagnano, L. (2001) The myth of objectivity in mathematics assessment. *Mathematic Teacher*

84(1), 31-37.

Appendix A: Questionnaire for Control

How did you read the selection, “An Indian’s Views of Indian Affairs?”

a) Very thoroughly and with reflection
b) Somewhat thoroughly, but skimmed some parts
c) Skimmed most of the selection
d) Did not or barely read any of the selection

When did you read the selection?

a) Throughout the week with good pacing and review
b) Put it off until the last night
c) Other (Please write)
_____

Do you feel that you had enough time to read and reflect for the test? Yes or no. Explain.

Do you think if you were quizzed over several pages of the reading every day that you would have read the selection more closely?

Appendix B: Questionnaire for Test Group

How did you read the selection, “An Indian’s Views of Indian Affairs?”

e) Very thoroughly and with reflection
f) Somewhat thoroughly, but skimmed some parts
g) Skimmed most of the selection
h) Did not or barely read any of the selection

Do you think that being quizzed over the reading on a daily basis aided in your comprehension of the reading?

How do you think you would have performed on the final test if you were not required to read daily and take a quiz?

a) I would have done better
b) I would have done about the same
c) I would have done worse

Knowing that I had a quiz on the daily reading encouraged me to read the selection more carefully and with greater attention to detail.

a) Strongly agree
b) Agree
c) Neutral
d) Disagree
e) Strongly disagree

Appendix C: Post Test

1- Generally, the author of the introduction (*the Bishop missionary William H. Hare)* has:

a) sympathy for Chief Joseph, the Nez Percés, as well as all Indians and their plight
b) a superior attitude of the white race over Indians
c) financial interests in supporting Chief Joseph's appeal
d) financial interests in exposing Chief Joseph as a fraud

2- William Hare believes that the Federal government should

a) take the land from the Nez Percés
b) return traditional tribal land to the Nez Percés
c) protect all Indians under the same constitutional law that protects American citizens
d) protect only those Indians who swear an oath to the Constitution from hostile local white governments

3- Nez Percés was the name given to Chief Joseph's people by French fur trappers. What does Nez Percés mean?

a) those of the valley
b) nose pierced Indians
c) nine tribes
d) fierce warriors

4- The first Americans that the Nez Percés encountered were Lewis and Clarke.

a) true
b) false

5- What did Governor Stevens propose to the Nez Percés people at the first big treaty council?

a) That the Nez Percés enter into a trade arrangement with the army
b) That the Nez Percés enter into a trade arrangement with local whites
c) That in order to live in peace with the whites, Indians needed separate land (a reservation)

6- What did one Nez Percés' chief, named Lawyer, do in the big treaty council in 1863?

a) He sold nearly all Nez Percés territory to the United States, even those lands which he did not have authority to sell.
b) He sold only those lands his specific tribe owned to the United States.
c) He attacked Governor Stevens and killed him.
d) He attacked Governor Stevens and started a war.

7- What did Joseph's father mean when told Joseph, "Never sell the bones of your father and your mother"?

a) Do not sell their bones as ornaments.
b) Do not give up the land in which they are buried.

c) Do not betray his parents' memory.
d) Both a and c

8- What did General Howard offer Joseph to try to get him to submit and move onto the reservation?

a) Prime land inside of the reservation that was already occupied by another tribe.
b) A chest full of US currency.
c) To spare destruction of his people.
d) A governmental post as "head of the reservation."

9- How did Chief Joseph react to General Howard's ultimatum to move to the reservation?

a) He promised he would move within the time limit of 30 days.
b) He flatly refused to comply.
c) He asked for more time so his people could be ready for the winter.
d) He went home and told his people they were moving to Canada instead of the reservation.

10- The Nez Percés held one more grand council before all the tribes moved to the reservation. What happened in the Rocky Canon council?

a) There was a great deal of war talk, especially among those who already lost family members.
b) One young brave, whose father was murdered by whites, left the council calling for revenge.
c) Both a and b
d) None of the above.

11- Which of the following WAS NOT one of the defenses Joseph used to defend Too-hool-hool-suit and the other young braves who started the war?

a) They were homeless and desperate.
b) Their fathers and brothers had been killed.
c) Their mothers and wives had been disgraced.
d) Their children had been stolen.
e) They had been driven to madness by whiskey sold to them by white men.

12- Whom did Joseph specifically name as the man responsible for the war?

a) The President because of unclear federal policies.
b) General Howard because of his impatience and rudeness.
c) Too-hool-hool-suit who rashly gathered a war band of young braves.

13- What can be inferred from the fact that, during their run for the Canadian border, the Nez Percés encountered many different regiments who seemed to act in different ways?

a) The US Army had no clear commander in the region.
b) In the 1870s Northwest, communication in the area was extremely difficult because of terrain and lack of telegraph wire.

c) Some Army generals were insubordinate and incompetent.
d) Some generals sympathized with the Nez Percés.

14- After Chief Joseph reported that General Gibbon caught them by surprise and charged their sleeping camp, what did he say was shameful and cowardly?

a) That Gibbon attacked a sleeping camp.
b) That Gibbon's men killed their horses.
c) That Gibbon's men stole their horses.
d) That Gibbon's men killed women and children.

15- What happened after General Miles split the Nez Percés camp in two and captured nearly all of their horses?

a) General Miles sent an officer to stay in the Nez Percés camp while he negotiated first with Yellow Bull, then Joseph, over terms of surrender. This was a sign of trust to guarantee Joseph would not be killed or arrested during negotiations.
b) General Miles sent an officer to stay in the Nez Percés camp while he negotiated first with Yellow Bull, then Joseph, over terms of surrender. The officer was a spy.
c) General Miles sent an officer to stay in the Nez Percés camp while he negotiated first with Yellow Bull, then Joseph, over terms of surrender. The officer was sent to poison Joseph.
d) General Miles surprisingly withdrew allowing Joseph and his men to escape.

16- Joseph said he would have never surrendered if he thought that General Miles word would be broken by his superiors and they would not be allowed to return to the Snake river region. Why did he believe he had a choice *to not* surrender?

a) He believed that it would have been worth it to escape and leave the women and children behind to continue the war.
b) He knew they were near "King George's land" (Canada) and that Sitting Bull would come to his rescue from there.
c) He believed that his braves could drive General Miles and his men from the mountain.
d) He knew that the US army would soon run out of provisions.

17- Chief Joseph's Nez Percés eventually ended up in the Indian Territory, (Oklahoma).

True
False

18- Finish this statement: You might as well expect the rivers to run backward as that any man who was born free should be contented when...

a) he has his women and children stolen from him.
b) his homes are burned, his horses stolen, and his cattle stolen.
c) penned up and denied liberty to go where he pleases.

d) he is denied the right to vote.

19- What are the two things that Chief Joseph hopes Indians will gain from his article and trip to Washington?

a) equality with all men and liberty for individuals.
b) equal rights and equal protection under the same law.
c) money for his lost land in Wallowa Valley.
d) both a and b
e) both b and c

20- How does Chief Joseph feel about being forced onto a reservation in Oklahoma?

a) he is content because it is fine land.
b) he mad because there are few rivers, mountains, and forests.
c) he is angry because the Indians may only stay in one place, but the white man can go where he pleases.
d) he is indifferent, he has lost all his emotion due to losing so many fellow warriors.

Appendix D: Examples of questions from daily quizzes given to intervention group

In the introduction, William Hare compares Chief Joseph's appeal to:

d) the Magna Carta
e) the measured words of a scheming politician
f) the appeal of the old Hebrew prophets (a reference to the bible)
g) the rambling of a mad man

In the introduction, William Hare compares Chief Joseph's appeals to the natural rights of man: to similar words in

a) the Gettysburg Address
b) the Declaration of Independence
c) the Monroe Doctrine
d) the Star Report

William Hare suggests what in the closing of his introduction?

a) Treatment of Indians should be based on an acknowledgment of their rights as *fellow men.*
b) Treatment of the Indians should be kind only when they give up their lands peaceably.
c) Treatment of Indians should be left up to local officials, not the federal government.
d) Treatment of Indians should be harsh, swift, and violent.

William Hare suggests that the government of the United States:

a) has been fair to all Indians
b) has tried to be fair, but few promises have been kept because too many governmental departments and too many different officials are involved in negotiations and treaty making
c) has been unfair to some Indians
d) does not have any clear policy in dealing with the Indians

William Hare points out that one problem with treaties is that

a) they are unfair to white settlers
b) they are ignored by white settlers
c) they are broken by many tribes
d) if a tribe was not present at the signing, then they usually do not consider it binding, no matter how many other tribes may have signed the treaty

Which of the following IS NOT one of the laws Chief Joseph's ancestors passed down to his tribe?

a) treat all men as they treat us
b) never be the first to break a bargain
c) it is a disgrace to tell a lie, only speak the truth
d) it is a shame for one man to take from another his wife or property without first paying for it
e) 10 % of income must be paid to the tribe

According to Chief Joseph, when did his people first encounter whites?

a) When Spanish conquistadors came through their valley
b) When French fur traders came into the region one hundred winters before
e) When Settlers first started trying to build homes on their lands
f) When the army attacked them

What happened when whites first started settling the Snake river region of Idaho and Oregon?

a) At first, the Nez Percés made no complaint.
b) The Nez Percés began to kill the settlers.
c) The Nez Percés began to see that the white men were growing rich and were greedy possess everything the Indian had.
d) Both a and c
e) Both b and c

Chief Joseph's father signed the first treaty.

a) true
b) false

How did Joseph's father react after Lawyer sold the Nez Percés land?

a) He accepted that his people would eventually have to move to the Lapwai Reservation.
b) He sent a war party against Lawyer's tribe to get revenge.
c) He set poles around all of his tribe's land marking a boundary.
d) He begins to have his warriors attack homesteaders.

What did Chief Joseph say after taking his father's place as chief at his first council with American negotiators?

a) That Lawyer had no authority to sell his tribes land.
b) His tribe had never accepted any presents from the government that could be taken as payment for these lands.
c) That his tribe would defend the land of their fathers, "as long as a drop of Indian blood warms the hearts of our men."
d) All of the above
e) None of the above

What did Chief Joseph say brought so many white men into their region so suddenly?

a) The discovery of gold in the surrounding mountains.
b) The discovery of silver in the surrounding mountains.
c) The discovery of diamonds in the surrounding mountains.
d) The warm climate.

What analogy did Joseph use to explain why he viewed Lawyers treaty as false?

a) He compared it to a neighbor selling crops that the real owner refused to sell
b) He compared it to refusing to sell horses and then the buyer going next door and buying the same horses from one who does not own the horses.
c) He compared it to a confession gained under torture.

What did Joseph tell General Howard at the next grand council?

a) That red men and white men were alike and should not quarrel or cheat one another.
b) That the Great Spirit Chief (god) did not give one kind of man the right to tell the another kind what to do.
c) That the Great Spirit Chief would protect the Nez Percés and bring plague to the whites.
d) Both a and b
e) None of the above

According to Joseph, what happened when he and the other chiefs questioned General Howard's authority?

a) General Howard got scared and ordered his men to attack the chiefs and arrest them.
b) General Howard convinced Joseph and the chiefs that he had the proper authority.
c) General Howard grew angry and threatened to punish the Nez Percés for disobeying the law.
d) General Howard resigned when he saw that the Indians would not listen to him.

Before this meeting was over, Too-hool-hool-suit was arrested for speaking out. How did the other Nez Percés react to this event?

a) They went home angry and determined to go to war.
b) Some of the men wanted to attack and kill Howard and his men on the spot, Joseph counseled them to submit to the arrest their friend.
c) Joseph swore vengeance to Howard and left before any more arrests could be made.

How did Howard react to Joseph's refusal of the land on the reservation?

a) He resigned when he saw that the Indians would not listen to him.
b) He offered him another piece of land in Northern California.
c) He gave Joseph an ultimatum to leave his valley in 30 days or be driven out by soldiers.
d) He had the waters in Wallowa country poisoned.

What did Joseph's tribe decide when Howard refused their appeal not to be moved before winter?

a) They went on the warpath.
b) They fled to Canada.
They sent a representative to Washington to appeal to the President.
d) They decided to move as soon as possible to avoid bloodshed.

The young man who left the Nez Percés council swearing revenge led a war party that killed four whites, beginning the Nez Percés War.

a) true
b) false

What happened when the Nez Percés came upon a group of soldiers in Bitter Root Valley?

a) The soldiers, unaware of the war, allowed the tribe to pass through the valley and trade with the whites there.
b) They ambushed the soldiers killing every last one, including Col. Custer.
d) They retreated the way they came only to find General Howard at their rear.
d) They surrendered.

After moving through the Yellowstone basin and nearing the Canadian border, Joseph's Nez Percés encountered a fourth US army that eventually captured them. Who was the General who captured them?

a) General Custer
b) General Grant
c) General Miles
d) General Patton

Could Joseph and his men escape from Bear Paw Mountain?

a) No, General Miles had all of their horses.
b) Yes, but Joseph was tired of running and depressed over the loss of so many warriors.
c) No, General Howard reinforced Miles and had them surrounded.
d) Yes, but Joseph and his remaining warriors refused to leave the wounded, women, and children behind.

General Miles was ordered to take the Nez Percés to Bismarck, North Dakota and turn them over for transport to Fort Leavenworth. According to Joseph, why did many of his people die at Fort Leavenworth?

a) Because they were not fed by the soldiers.
b) Because the soldiers shot them randomly.
c) Because they were placed on a low river bottom were they only had access to tepid, dirty water.
d) Because they were not given adequate clothing or medicine

What happened after Fort Leavenworth?

a) Nothing, the Nez Percés stayed there until Joseph and other leaders were hung.
b) They were moved by train to Kansas. Several died in the boxcars.
c) They were allowed to return to their home.
d) Joseph was sent in shackles to Washington to be tried by the Supreme Court.

What were the reasons Commissioner E. A. Hayt gave Joseph when explaining that they could not return to their home land in Wallowa Valley?

a) White men had already settled there.
b) General Miles had no authority to tell them they could return the reservation.
c) The government could not protect them there from hostile whites.
d) Both a and c
e) None of the above.

When representatives from a Congressional Committee told Joseph that they would find him a healthy country, why did Joseph say he did not know who to believe?

a) That the whites had too many chiefs who did not understand each other and said different things.
b) That all whites break their word.
c) That the whites idea of healthy land was unacceptable

While in Washington, Joseph met lots of important people. None of these important figures could explain...

a) how to get around town.
b) how the government would send out a General to fight, but then break his word.
c) why the government was allowing Joseph to speak as an equal.
d) why the army attacked the Nez Percés.

Spanish Research Project: An Evaluation of the Effectiveness of Using Video in the Classroom

Micah Holloway

EDUC 590

Dr. Deborah McAllister

December 2, 2004

The Institutional Review board of the University of Tennessee at Chattanooga (FWA00004149) has approved this research project 04-162.

Introduction

This project is an evaluation of the effectiveness of instruction based on video and guided discussion versus a more traditional lecture-based format. Effectiveness was judged based on a comparison of the mean scores of the classes on a test and a student survey of their opinion of which method of instruction they prefer. The experimental classes were shown the video and had a study guide to complete during the watching and was discussed afterwards. The control classroom was given a lecture with photos from the internet covering the same material as the video. The evaluation took place at a Hamilton County, TN, a suburban high school, in Spanish II, III, and IV classrooms. The video covered Mayan and Aztec civilizations until Cortes conquered Mexico City in 1521. This material was selected because the history and culture of Latin America is an important feature in the Hamilton County Benchmarks and Standards at all levels.

Review of Literature

It is easy for anyone to see in today's society that motion pictures have a powerful influence. On average, the TV is on in American homes for 7 hours per day (Paxton & Meyerson, 2002). One of the more common activities on a weekend is to go see the latest release and it is not uncommon on a Monday to hear conversations about what was seen over the weekend. It is almost a truism that visual images are more powerful than the written word, but it is only relatively recent that educators and educationalists have started viewing film as having a legitimate place in the classroom. Indeed, as author Mark Carnes remarks, a Hollywood product, "…gleams, and often it sears the imagination" (Carnes, 1995, p.). Thus, this paper will examine the power of film, ideas for its use in the classroom, and some cautions for educators.

"Who can forget even Malcolm X, whose meteoric career blazed through our own times, is hard to fix in memory after we have seen Denzel Washington's electrifying portrayal of him" (Carnes 1995). Probably all of us have experienced this same effect after seeing a movie. Maybe we always see a certain actor in our mind's eye after seeing a movie portraying historical event or we visualize a set when reading a book after seeing the movie. These responses testify to the power that visual images can have on our perceptions.

Do these movies affect us? Absolutely. Professor William J. Palmer offers as an example the taboo nature of the Vietnam War until 1977. From 1977 to 1980 there were a number of quality Vietnam movies that came out and suddenly it became okay to be a Vietnam vet. (Do movies shape your opinion?, *USA Today Magazine*, 1995, p. 6). More specifically, movies affect how we view history. Professor Palmer maintains that, "People in mass society get their sense of history form the way it's portrayed in movies…I am not sure it is the best source, but it is certainly the main source" (Do movies shape your opinion?, *USA Today Magazine*, 1995, p. 6).

Given the power of movies to influence our view on history, we should now look at what movies get right and what they do not do so well. The first aspect is visual authenticity. Hollywood often spends big bucks to reproduce the material culture of the past. These are items like clothing, furniture, and architecture. John Wayne's reconstruction of The Alamo is mistaken by many for the real thing (Carnes, 1995) and the battles in the movie, *Gods and Generals*, were painstakingly researched down to the unit insignias.

Also, movies can exceed prose in replicating the intensity and atmosphere of historical events. James McPherson regards the final battle scene in the movie, *Glory*, when the 54th Massachusetts Volunteer Infantry charges the Confederate fort, as "the most realistic combat footage in any Civil War movie" (Carnes, 1995, p. 74). Also, in my personal opinion, no movie comes close to portraying the fear and horrible reality of World War II as well as the opening 20 minutes of the movie, *Saving Private Ryan*.

Lastly, Hollywood movies sometimes happen upon truths that historians miss. The movie, *The Buccaneer*, insisted on the significance of the Battle of New Orleans while many historians dismissed the battle as insignificant. However, Sean Wilentz insists that, had the British won, they would have disregarded the Treaty of Ghent. Also, Vivien Leigh's gritty portrayal of Scarlett O'Hara as a bellum Southern belle is closer to reality than previously assumed (Carnes, 1995).

However, not all in Hollywood's historical repertoire can be taken at face value. A history teacher should be careful about historical inaccuracies and be on the alert for agendas behind the film's making that may bring the movie into question. Steven Spielberg's movie *Amistad*, was touted as accurate history and thus historians swooped down on it like so many birds of prey. The broad strokes of the film seem to be fairly accurate but many of the details were exposed as wrong. For example, the movie exaggerates the impact of the Amistad case on the ending of slavery in the United States and on the South's secession. Also, President Van Buren (whose nickname was the "Little Magician") is inaccurately portrayed as dull and Nixonesque. Furthermore, evangelical Protestantism, which provided a vital source of anti-slavery sentiment, was portrayed in a negative light. Meanwhile, African spirituality is held in a very noble

light; a definite anachronism. And while the slave trade was definitely a cruel one, the sequence portraying the slaving ships is a mélange of all the worst moments (Paquette, 1998). Teachers would do well to point out these and other major inaccuracies to students. Other historical inaccuracies that I noted in the literature were minor and unlikely to be of concern in a classroom.

History instructors should also be concerned about bias in films. While it is a hopeless pipe dream to find a film totally without bias, it is worthy to note its more prominent incarnations. In the previously mentioned example of the movie *Amistad*, co-producer Debbie Allen's comments should raise some flags: "the real history has been castrated-left out-and great historians have done it. It's beyond racism, I think." (Paquette, 1998, p. 74). Also, movie critic James Bowman describes *Amistad's* morality as "one-sided" with the Progressive hero surround by "benighted fools." Even in one of my own favorites, *Saving Private Ryan*, the main characters display a cynicism to the war that is more at home in Vietnam era cinema (Bowman 1999). A final example is the Ameri-centric theme present in many movies. Recent films like *The Patriot* and *U-571* portray foreign cultures (in this case the British) as unrealistically evil (*The Patriot*) or steal their glory (*U-571*, the Brits were the ones to steal the Enigma code machine, not the Americans) (Hollywood on Britain, 2000). It would behoove history instructors to look into the historical context of the films to see if the view being portrayed is accurate. This will aid students in viewing movies in a more intelligent manner and give students an opportunity to use their higher-order thinking skills.

The third aspect we need to examine is how to use film in the history classroom. There are a variety of ideas out there and these are but a few. In the selection of the film,

look for one that develops both sides of the story (Chalk, 2002). Then the student should be able to gain insight by discussing the film or reading some journal articles. Then the pupil should be ready to apply what they have learned in the form of a writing assignment (Sprau & Keig, 2001).

Another article gives more specifics, like having the class research the real event and the movie. Then they move on to asking specific questions like "Is the history accurate?" and "Is there a linkage between the past and present?" (Paquette, 1996). I would encourage a class format that author John Mack Faragher uses in his essay found in the book, *Past Imperfect*. The author first sets out the real history behind the event, then uses that as a context to talk about the film (Faragher, 1995). From this point, the teacher can show the film and use the writing suggestions proposed by other authors.

Since "students' understanding of the past is influenced by the representations put forth in commercial movies " (Paxton & Meyerson, 2002) it seems obvious that history instructors should tap into the valuable resource that movies provide. According to one pilot study done by Paxton and Meyerson (2002) most students felt that movies have a place in the classroom and "the motivational aspect…was apparent." However, it is incumbent on the teacher to guide the class through the historical trash, to the treasure. Along the way, the activities give students the opportunity to sharpen their critical writing and thinking skills.

In summary, the literature seems to clearly confirm that movies not only have a powerful influence on our values, but on our historical understanding, as well. This influence should be harnessed for the good of students' education to, hopefully, both increase their understanding and interest in history.

Data Collection and Results

Data was collected after the showing of the film to all experimental classes and having a guided discussion with the experimental groups. The students completed an 11-question test in a multiple choice format without any outside assistance (see Appendix C). After the test, a student survey was distributed asking which would be a more interesting format in which to learn about the Mayas and Aztecs: video or lecture (see Appendix A).

The test showed a high level of knowledge retention from both formats. The experimental groups averaged 9.85/11 with the high group averaging 10.1 and two low groups averaging 9.7. The control group averaged 10.0/11. In the survey, 78% of students from two experimental groups surveyed indicated that they preferred video as a method of instruction to lecture. Results are displayed in Figures 1, 2, and 3. Appendices B contains a study guide.

Experimental Group 1	Experimental Group 2	Experimental Group 3	Experimental Group 4	Control Group 1
9.7/11	10.1/11	9.9/11	9.7/11	10.0/11
		79% approval to video	77% approval to video	

Figure 1. Aztec and Maya test results.

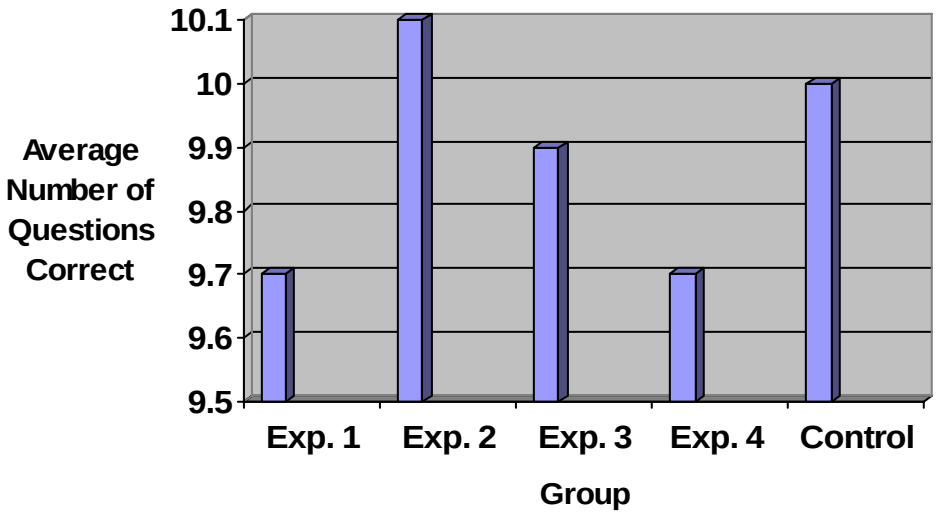

Figure 2. Test averages.

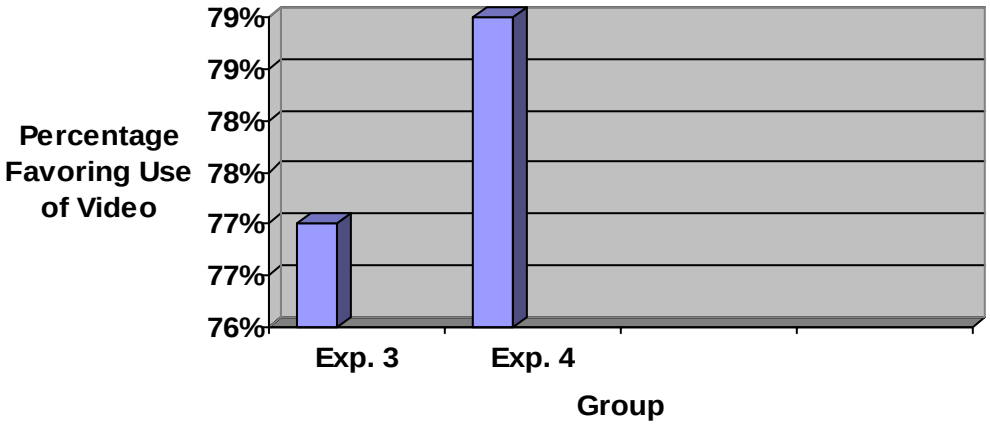

Figure 3. Survey averages.

Conclusions and Recommendations

The evaluation of the test data does not yield a decisive conclusion one way or another regarding which is the most effective means of instruction. Both strategies indicated that the experimental and the control groups had a high retention of knowledge. However, there was a marked preference on the survey for instruction that incorporates

video. As can be seen in the literature review, this has an impact on the quality of learning. However, video should not be used as a primary means of instruction and it should only be a part of culture curriculum that should incorporate other technology like Powerpoint and the Internet.

With regard to professional development on the part of the author, the first resource is other experienced colleagues. Those foreign language teachers who effectively use video now can give advice that can be incorporated. However, the inquiry should not be limited to foreign language teachers but expanded to other instructors like history and geography. These instructors' subject area overlaps Spanish and would be a valuable resource. Secondly, grants for professional development and research can be found from the American Council on the Teaching of Foreign Language (ACTFL, n.d.). More information on this can be found at http://www.actfl.org/i4a/pages/index.cfm?pageid=3343. The aforementioned ACTFL is the leading foreign language teaching organization and the use of video to teach culture and history is something they seem to greatly encourage. They offer a workshop on teaching culture and instruction in using video, to this end.

Since the testing data did not point to a definite conclusion, further testing would be in order. In a more extended study, there would need to be a greater number of control groups to allow for greater differences in ability levels. Also, it would be necessary to teach a greater number of lessons since a truer measurement of interest demands a greater length of time. However, in the author's opinion, this study is enough to at least merit further exploration on how to most effectively use video and film in the classroom.

References

American Council on the Teaching of Foreign Language. (n.d.). Retrieved December 2, 2004, from http://www.actfl.org/i4a/pages/index.cfm?pageid=3343

Bowman, J. (1999, September). How today's movies distort and denigrate the past. *The American Enterprise. 10,* 66.

Carnes, M. C. (1995, September). Hollywood History. *American Heritage. 46,* 74.

Chalk, A. (2002, Spring). Teaching Pearl Harbor Films, American and Japanese. *Education About Asia. 7*, 22.

Do Movies Shape Your Opinions? (1995, March). *USA Today Magazine*. *123*, 6.

Faragher, J. M. (1995, September). Fact and truth: Wyatt Earp in the movies. *American Heritage*. *46*, 74.

Hollywood on Britain. (2000, July 15).*The Economist. 356*, 54.

Paquette, R. L. (1998, March). From history to hollywood: The Voyage of *La Amistad*. *New Criterion*. *16*, 74.

Paquette, W. A. (1996, April). *Literature, history, film, Sam Malone, and the research paper*. Paper presented at the Annual Meeting of the College English Association.

Paxton, R. J., & Meyerson, P. (2002, April). *From "Birth of a nation" to "Pearl Harbor": The influence of a movie's perspective on students' historical understandings*. Paper presented at the Annual Meeting of the American Educational Research Association.

Sprau, R. & Keig, L. (2001, March). I saw it in the movies: Suggestions for incorporating film and experiential learning in the college history survey course. *College Student Journal*. *35*, 101.

Appendix A

Learning Survey

1. I believe that a lecture would have been a more boring way to learn about the Mayas and Aztecs than the video.
    A. Yes
    B. No

2. I believe that the video was a more interesting was to learn about the Mayas and Aztecs than a lecture.
    A. Yes
    B. No

Appendix B

Study Guide
The Buried Mirror: The Mayas and Aztecs

1. List some of the significant features of the Great Pyramid of Chichen Itza?

2. What were some of the uses of the observatory at Chichen Itza?

3. Which tribe came after the Mayas?

4. What capital did the Aztecs found in 1525?

5. For what reason did the Aztecs practice human sacrifice?

6. What was the purpose of death masks?

7. What is the English name of Quetzaquatl and name something he gave to man?

8. What was prophecied to happen in the year that Hernan Cortes landed in Mexico?

9. What is significant about Malinche?

Appendix C

Maya and Aztec History Assessment

Spanish II

1. Where is the Great Pyramid located?

A. Chichen Itza
B. Copan
C. Tikal
D. Sequachie

2. What was a use of astronomy to the Maya and Aztec?

A. Building
B. Navigation
C. Agriculture

3. Which was the last to come to power?
A. Toltec
B. Maya
C. Olmec
D. Aztec

4. What capital city did the Aztecs found in 1325?
A. Tegucigalpa
B. Mexico City
C. Tijuana
D. Belmopan

5. What purpose did death masks serve?
A. Scare evil spirits
B. A way to carry wealth after death
C. To give and ideal face in death
D. Keep the face warm

6. Why did the Aztecs practice human sacrifice?
A. To keep the sun in the sky
B. To appease the moon goddess
C. To cover their own wrongs
D. In order to defeat their enemies

7. Which Aztec god was known as the contribution
Plumed Serpent?
A. Popocatapetl
B. Xeninche
C. Quetzoquatl
D. Donopoapetl

8. Which of the following is not a

of the Plumed Serpent?
A. Corn
B. Time
C. Writing
D. Horses

9. Hernan Cortes is remembered as a hero in Mexico.
A. True
B. False

10. What is the dual legacy of Malinche?
A. Traitor and Mother of the first Mexican
B. Mother and Farmer
C. Traitor and goddess
D. none of the above

11. What did Cortes do to motivate his men to capture Mexico City?
A. Beat them
B. Burn their ships
C. Offer them gold

Classroom Management Effectiveness

Michael Kavur

The University of Tennessee at Chattanooga

The Institutional Review board of the University of Tennessee at Chattanooga (FWA00004149) has approved this research project 04-149.

Introduction

Classroom management is a topic of perennial interest and concern to educators. Most teachers will admit that, if their classrooms were better managed, they could be more successful at teaching and students would have more opportunities to learn. Many first year teachers, especially, have a difficult time with classroom management. It would be helpful for such teachers to be equipped with effective management tools before they begin teaching. There have been numerous studies on the effectiveness of various classroom management strategies, and there are many proven techniques available for teachers to use. As student populations change over time, however, educators will be faced with new challenges in classroom management. It is important then, that strategies for effective classroom management be up-to-date to accommodate an ever-changing student population.

The purpose of this project is to evaluate the effectiveness of a new classroom management plan (classroom A) developed by two teachers (one of whom was my cooperating teacher) in the middle school setting. This plan contains highly structured procedures for every activity that students may be required to perform in the classroom. During the first 3 weeks of the new school year, my cooperating teacher did not incorporate any content material into the lessons, but, instead, lead out activities designed to teach the comprehensive classroom procedures to the students (see appendix A). I spent my student teaching in classroom A, where I became well-acquainted with the procedures and even used them, myself, while I student taught. My curiosity led me to question how effective this plan was in comparison to other management plans used in the same middle school. The object of my research is to design an assessment tool to

evaluate the effectiveness of the classroom A management plan in comparison to other management plans used in the same middle school. Furthermore, if the classroom A plan proves effective, I would like to recommend this plan as an effective classroom management tool for first-year, middle school teachers.

Review of Literature

The foundation of middle school classroom management originates largely from the theoretical contributions of B. F. Skinner, Fritz Redl and William Wattenburg, William Glasser, and Thomas Gordon (Bucher & Manning, 2001). Although the work of some of these theorists did not directly address behavioral problems in the school setting, they have withstood the test of time, and have proven very effective when applied to the middle school setting. Skinner's main contribution to education includes positive reinforcement and behavioral contracts as ways to shape student behavior. Redl and Wattenburg's group dynamics theories suggest that situational assistance and helping students regain self-control and appraise reality, is an effective behavioral management strategy. Glasser demonstrated that, when schools are caring environments and students feel a sense of belonging, there is an improvement in the learning environment. Finally, Gordon's theories stress the importance of three key factors that educators should use to improve behavior: First, insist that students learn self-discipline. Second, demonstrate empathic understanding. And third, send "I-messages" (cited in Bucher & Manning, 2001). The contributions of these foundational theorists laid the groundwork for contemporary classroom management.

The amount of research and literature currently available to the educator on classroom management is overwhelming. The online ERIC database

(http://www.eric.ed.gov/), alone, contains over one thousand resources for classroom management. Researchers have modified, adapted, refined, and applied the basic concepts of behavior management, as outlined by the foundational theorists, to the middle school setting. Regardless of the educator's problematic management situation, there is more than likely a management strategy suitable for the situation. Laurel M. Garrick Duhaney (2003) provides a comprehensive repertoire of behavior management strategies that educators can use for any of numerous behavioral problems in the classroom. Her management strategies include the following subtitles:

1. Organize the classroom to promote attention.
2. Address the affective component of learning.
3. Provide interventions for students who are impulsive.
4. Attend to scheduling.
5. Reinforce the importance of classroom rules.
6. Consider consequence-based interventions.
7. Token economics.
8. Contingency Contracts.
9. Cognitive-behavioral therapy.
10. Response Cost.
11. Peer-mediated interventions.
12. Social skill interventions.
13. Family involvement.
14. Time-out. (p. 269-279)

Duhaney's list of strategies represents one of literally hundreds of classroom

management plans that researchers have developed.

Disruptive student behavior in the classroom is a serious problem that diverts both time and attention away from teaching and lends to an unproductive learning environment. Most educators admit that their classrooms could be better managed, and many are frustrated with the problem behaviors that occur despite their best efforts to control the class (W. C. Wilson, personal communication, Nov. 17, 2004). Hunter (2003) found that the percentage of students with at-risk to intense problem behaviors can be as high as 21% in the regular classroom. With such high numbers of behavioral problem students in a regular classroom, effective classroom management strategies are an absolute necessity. With the incredible amount of research and literature dealing with effective classroom management, it might seem odd that many teachers do not take advantage of the wealth of information, and still struggle with unmanageable classrooms.

Logan and Stein (2001) point out that, although there may be good research available, teachers seldom read journals, and when they do, they often do not see the relationship between what they read and how they might apply that to their own classroom situations. Furthermore, teachers who struggle with classroom management problems may be afraid to ask administrators for help because they think that will result in a poor teaching evaluation. Others may get so frustrated they choose to leave the profession of teaching altogether (Logan & Stein, 2001) This somewhat odd cycle brings us to a predicament. Teachers feel frustrated, alienated, and eventually hopeless when it comes to classroom management, yet there are abundant resources available to help them maximize the efficiency of their classroom.

What some educators are doing in an attempt to achieve effective classroom management is developing their own management strategies especially tailored to the needs of their students and the issues of their schools (W. C. Wilson, personal communication, Nov. 17, 2004). Bucher and Manning (2001) found that, “unless a middle school formally adopts one classroom management model for all teachers to use, educators usually select an eclectic approach, seeking what works best for them and their students” (p. 89). Wilson (2003) is one such educator who developed an eclectic approach in an effort to curb the, “over-activity, impulsivity, and short attention span of children that create difficulties in the biology classroom” (p. 260). Wilson’s plan includes four steps in dealing with a problem or assignment:

1. Identifying the approach.
2. Developing a plan of action.
3. Monitoring performance.
4. Evaluating outcomes and performance. (Wilson, 2003, p. 260)

After using this plan for many years, Wilson (2003) found that, “such a structured plan helps keep the student on-task with assignments” and that, “the student’s self-esteem increases with recurrent successes in the classroom” (p. 262). Wilson’s approach to the problematic behaviors in his classroom exemplifies an optional route educators may take in solving classroom management problems.

But how does an educator know whether or not his classroom management plan is the most effective plan possible? In my research, I did not find an assessment tool available to educators that would help them gauge how effective their personalized classroom management plan really is in comparison to other potential plans. My research

involves a simple assessment tool that works by comparing the amount of disruptive student behavior in one classroom to another.

Data Collection and Results

Evaluating a classroom management technique in comparison to other techniques without using quantitative data remains a subjective call. Since poorly-managed classrooms are indicated by disruptive student behavior that hinders learning (Hunter, 2003), this research evaluates the effectiveness of classroom management by recording the number of student disruptions to the classroom during a typical 50-minute class period. A high number of classroom disruptions indicate a poorly-managed classroom, and a low number of disruptions indicate an effectively managed classroom (Hunter, 2003). To avoid skewed results, this research employed a strictly objective tally system to record the number of student disruptions in each classroom evaluated.

Data was collected using the following techniques:

A tally system was used to record the number of classroom disruptions during a typical 50-minute class period (see appendix B). The definition of a classroom disruption used in this survey was borrowed from Logan and Stein (2001). Classroom disruptions using this definition are divided into two categories, acting-out behaviors and social behaviors. Acting-out behaviors include out of seat, calling out in class, interrupting the teacher, physical noncompliance, verbal noncompliance and talking back, hitting, choking, squeezing, spitting, refusal to complete work, chronic inappropriate vocal noises, and masturbation during class. Social behaviors include not taking turns during group work, grabbing materials or verbally bothering peers,

and not initiating or responding to verbal exchanges during play (Logan & Stein, 2001). Both acting-out and social behaviors were recorded equally as disruptive behaviors.

Five different classrooms were observed, not including classroom A. Prior to observations, a packet of student and parent consent forms were given to the homeroom teacher to distribute to the students. Once both parental consent and student assent were obtained, the observations began. Each observation lasted the full 50 minutes of the class period. All observations were done from an inconspicuous location in the classroom to avoid attention from students. Classroom disruptions were recorded from the time the school bell rang at the beginning of the period until the end of the period.

Of the six classrooms observed, the number of occurrences (N) of disruptive behavior varied. The mean number of occurrences was N = 19. Classroom A had an N value of 21. Figure 1 shows a graph for all six classrooms observed and the corresponding N values for each classroom. The results show that the amount of classroom disruption in classroom A was slightly above the average. Classrooms C, D, and F were below the average number for disruptive behaviors, while classrooms B and E were above the average.

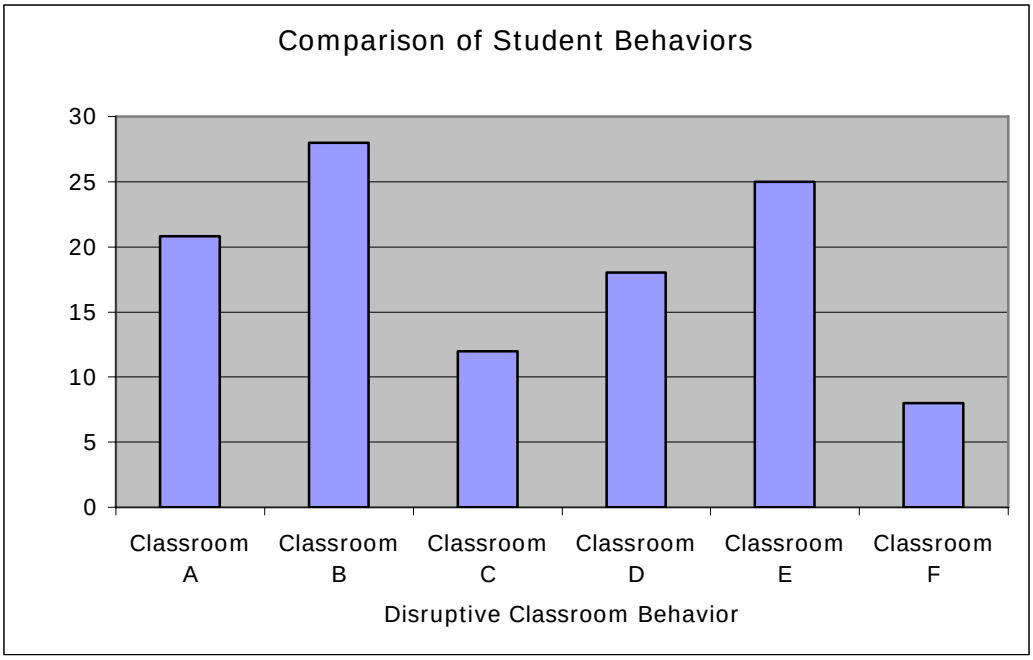

Figure 1. Comparison of student behaviors.

Conclusions and Recommendations

The results of this study show that the classroom management plan used by my cooperating teacher (classroom A) was not typically better or worse than any of the other five classrooms observed. During the first 3 weeks in classroom A, only classroom procedures were taught. I had expected that, with the amount of time invested in teaching the comprehensive list of classroom procedures, that better behavior would have been observed. Since a significant amount of time had been taken away from teaching content material to teach classroom procedures, and not much improved behavior resulted, I do not see the advantage of using the procedure of classroom A. Because there were no significant advantages to having such a lengthy list of procedures and time spent on teaching them, I would not rank the classroom A management plan as superior to other management plans, and, therefore, would not recommend this plan to first-year teachers.

Since new teachers often do not know what type of school they will be teaching in or what the needs of students may be in a particular area, it is important that first-year teachers walk into the classroom with an effective classroom management plan (Landau, 2004). Educational journals are excellent resources to learn the most up-to-date classroom management strategies that work in today's classrooms. Classroom management books are another rich resource in which established classroom management principles may be found. The amount of research done on classroom management since the contributions of Skinner, Redl and Wattenburg, Glasser, and Gordon is enormous, and will provide any new teacher with effective classroom management strategies.

Though such strategies may not completely meet the needs of students in a particular classroom, they may form the foundation upon which a more personalized, eclectic management plan may be built. An ongoing assessment of the effectiveness of any management plan, put into practice by the teacher, would be an excellent means for teacher professional development. Since assessment tools for classroom management are not very abundant, a comparative analysis of various classrooms within a similar setting may provide the best clues as to the effectiveness of an individualized management plan.

Grant money is available to support further research in the area of classroom management. The U.S. Department of Education spent $688,409.00 in the year 2004 on classroom management projects (2004). The use of technology in classroom management plans can have very positive effects on behavior. W. C. Wilson has found that children respond with more interest and enthusiasm and attention span is longer when new educational technologies are used to teach content material (W. C. Wilson, personal communication, Nov. 17, 2004).

Appendix A - Classroom A Management Procedures

Appendix B – Data Collection Tool

Disruptive Classroom Behaviors	**Number of Occurrences (N)**
Acting-Out Behaviors	
Out of Seat	
Calling Out in Class	
Interrupting of the Teacher	
Physical Noncompliance	
Verbal Noncompliance and Talking Back	
Hitting, Choking, Squeezing, Spitting	
Refusal to Complete Work	
Chronic Inappropriate Vocal Noises	
Masturbation During Class	
Social Behaviors	
Not Taking Turns During Group Work	
Grabbing Materials or Verbally Bothering Peers	
Not Initiating or Responding to Verbal Exchanges During Play	

References

Bucher, K. T., & Manning, M. L. (2001). Exploring the foundations of middle school classroom management. *Childhood Education, 78*(2), 84-97.

Duhaney, L. M. G. (2003). A practical approach to managing the behaviors of students with ADD. *Intervention in School & Clinic, 38*(5), 267-284.

Hunter, L. (2003). School psychology: A public health framework III. Managing disruptive behavior in schools: The value of a public health and evidence-based perspective. *Journal of School Psychology, 41*(3), 39-59.

Landau, B. M. (2004). *The art of classroom management*. Upper Saddle River, NJ: Pearson Merrill Prentice Hall.

Logan, K. R., & Stein, S. S. (2001). Helping general education teachers deal with classroom behavior problems. *The Council For Exceptional Children, 33*(3), 10-15.

Wilson, W. C. (2003). A non-medical approach to dealing with hyperactivity in adolescent students. *The American Biology Teacher, 65*(4), 259-262.

The U.S. Department of Education. (2004). *Grant award – abstract search*. Retrieved December 2, 2004, from http://wdcrobcolp01.ed.gov/CFAPPS/ *grantaward/search_abstract.cfm?RequestTimeout=300*

Helping Students Use Comprehension Strategies to Understand Text

Carey Kelley
December 3, 2004
EDUC 590
Culminating Experience
Dr. McAllister

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Introduction to the Problem

There is a great deal of emphasis placed on reading in today's discussions of education. Reading is one of the areas with which some students really seem to struggle. There are numerous ideas about strategies that work best. Some strategies encourage students to use their prior knowledge and experiences to help better understand the texts they are reading.

Some students experience difficulties in the area of decoding text, while others have difficulty comprehending text. Decoding problems and comprehension problems can be very closely related. Some students may experience particular difficulties in comprehension as a direct result of decoding problems. In small, guided reading groups, students were given the opportunity to put into practice specific comprehension strategies. Helping students learn to make predictions, ask questions, and make connections allows them to better monitor what they are reading. By using these particular strategies, students were able to use their own prior knowledge and experiences to become more involved in the text.

Review of Literature

Comprehension is the ultimate goal of reading. If we can't make meaning out of what we are reading, why are we doing it? Harvey and Goudvis state "the aim of the comprehension instruction and practice… is to help readers interact more completely with their reading, bringing themselves to the text to engage in a richer, deeper, more thoughtful reading experience" (2000, p. 1).

Students sometimes experience difficulties in decoding text. Students sometimes work so hard to decode a text, that they often forget to comprehend. Harvey and Goudvis

state, “Reading demands a two-pronged attack. It involves cracking the alphabetic code to determine the words and thinking about those words to construct meaning” (2000, p. 5). When children focus so much on decoding text they forget to pay attention to what the text is all about. Decoding is not the goal; comprehension is the goal of reading.

Helping students become more engaged in reading will help bring their current knowledge to use and give them the opportunity to figure out the strategies they can use to become more successful readers. There are eight things that good readers do: (a) make predictions, (b) make connections, (c) ask questions, (d) create visual images, (e) find important details, (f) draw inferences, (g) retell/generalize, and (h) use fix-up strategies (Sandefur, personal communication, February 5, 2004). Research suggests strategies are best utilized when modeled separately (Keene & Zimmermann, 1997). When readers do these things while reading, they are better able to understand the text they are reading. These strategies allow students to utilize the things they know. Students will be more equipped to understand any text if they can relate something they know, something they have done, or something they have experienced to what they are reading.

The best way to show students how to use comprehension strategies is to model them. “Modeling is an essential, inestimably important step in helping children observe and then use the mental processes used by proficient readers” (Keene & Zimmermann, 1997, p. 39). Modeling strategies can be done during read alouds and in small reading groups. By modeling the strategies, students are able to see what is going on in the teacher’s head when the teacher is reading. Miller states, “When we began to pay attention to what was going on inside our heads as we read, we were amazed at what we learned about ourselves as readers…. We were able to seriously consider the implications

of the research for the children in our classroom" (2002, p. 9**).** Miller states using the strategies in her own reading is like "a soft, quiet, more natural conversation…" (2002, p. 9).

Harvey and Goudvis recommend that students "leave tracks" in their reading (2000, p. 19). "Leaving tracks" refers to students coding text. Coding text means students can write on post-it notes to keep track of predictions, connections, and questions. After reading, students can review the notes and determine if the predictions occurred and if their questions were answered. The notes help students remember what they were thinking as they read. When students write down their thoughts, it shows that they are actively engaging the text and allows them to monitor their comprehension as they go along.

Fountas and Pinnell state, "Good readers continually search and access information that enables them to build meaning before they read a text, while they are reading it, and as they reflect on it after reading" (2001, p. 315). Students use the information about the characters and plot to make predictions based on what they already know. Series books lend themselves to be very useful in teaching students to make predictions as they read. As students continue to read and make predictions, they will find that, sometimes, their predictions are more accurate than others. Teachers can help students with making predictions by encouraging them to "(a) use knowledge of characters, plot, setting, or theme to predict what will happen next in a text, (b) generate expectations based on genre, author, or topic, (c) predict kinds of information available given the topic or the organization of the text" (Fountas & Pinnell, 2001, p. 313).

Encouraging students to use their prior knowledge and experiences allow students to make a connection with a text. Making connections while reading encourages students to think about what they are reading. Making connections is a great "launching point for strategy instruction because every student has experiences, knowledge, opinions, or emotions to draw on" (Harvey and Goudvis, 2000, p. 21).

There are three different types of connections that a student can make: (a) text-to-self, (b) text-to-text, and (c) text-to-world. Text-to-self connections are "connections that readers make between the text and their past experiences or background knowledge" (Harvey & Goudvis, 2000, p. 21). A text-to-text connection allows students to make a connection between something they have read or seen including "books, poems, scripts, songs, or anything that is written" (Harvey & Goudvis, 2000, p. 21). Text-to-world connections are the connections that readers make between the "bigger issues, events, or concerns of society and the world at large" (Harvey & Goudvis, 2000, p. 21). Teaching students the different types of connections allows them to look in different directions when "activating prior knowledge" (Harvey & Goudvis, 2000, p. 21).

Students ask questions to clarify what they are reading; questions allow them to make sense out of the text. "When readers have questions, they are less likely to abandon the text. Proficient readers ask questions before, during, and after reading. They question the content, the author, the events, the issues, and the ideas in the text" (Harvey and Goudvis, 2000, p. 22). Keene and Zimmerman state "The research shows that children who struggle as readers tend not to ask questions at any time as they read --- before, during, or after" (*Annual Summary of Investigations Relating to Reading,* cited in Keene & Zimmermann, 1997, p. 99).

There are several reasons students ask questions: "(a) clarify meaning, (b) speculate about text yet to be read, (c) determine an author's style, intent, content, or format, (d) focus attention on specific components of the text, and (e) locate a specific answer in the text or consider rhetorical questions inspired in the text" (Miller, 2002, p. 126). Readers then determine if the answers to their questions can be found in the text, from their background knowledge, or from an outside source (Miller, 2002). It is important for the reader to know that not all questions will always be answered within the text. Sometimes, answers "are left to the reader's interpretation" (Miller, 2002, p. 130).

Teachers can help students in asking questions by: "(a) connecting knowledge of topic, plot, characters, or setting to personal experiences and their knowledge of the world and other texts, (b) bring background knowledge to their reading of a text, (c) make connections between and among texts they have read, seeing similarities and differences" (Fountas & Pinnell, 2001, p. 317).

It can also be helpful for readers to share their questions with other readers. Students might find that others have the same questions they do. By sharing questions and/or interpretations, readers can use one another as resources. Sharing questions allows students to think about what other students consider when they are reading and can also lead to discussions about the text (Miller, 2002).

Using strategies shows increased interest and engagement among students while reading (Harvey & Goudvis, 2000). As students use the comprehension strategies in their own independent reading they begin to use the "language" of the strategies. A video developed by Harvey and Goudvis, titled *Strategy Instruction in Action,* shows students working together in literature circles. The video shows how the students use the different

comprehension strategies in their discussion of text. The discussions between the students become more and more involved with less and less teacher involvement as the school year progresses. Much the same can happen with the use of comprehension strategies in guided reading groups. Researchers refer to the number of words per thought as the T-unit. The T-unit is a "unit of analysis for assessing written and oral English, defining it as being any independent clause with all of its subordinates" (White, Scott. & Grant, 2000, p. 87). Teachers can use T-unit analysis for "assessment in written language of children, or it could be used to assess the textual material the children are obligated to read" (White et al., 2000, p. 88).

Data Collection and Results

With a group of third graders at an urban elementary school in Hamilton County, Tennessee, I focused on three reading comprehension strategies with students in guided reading groups. The three comprehension strategies focused on were (a) making predictions, (b) making connections, and (c) asking questions. Before I started working with the guided reading groups, I had started doing read alouds in class. During the read alouds, I modeled the three strategies. I would model with my own predictions, connections, and questions, or I would ask the students questions to prompt them for their predictions, connections, and questions.

Students are placed in groups based on their reading level. Teachers use Rigby leveled reading books for guided reading groups. Each student has the same text. The teacher chooses a focus for each meeting. It sometimes takes more than 1 day to complete a lesson on a particular text. Teachers were given lesson plans for the different

level ranges to use for guided reading groups. The lesson plan helps the teacher plan for the focus area(s) and prepares the students before the actual reading occurs.

There are about four students per group, with the exception of one group only having one child. The focus group had one female and four male African-American children involved. The child who works individually is language impaired. Of the five reading groups in the class, I worked with one group of four, 5 days each week and with an individual, two times each week. These five students were the lowest readers in the class. Some of the students had fluency problems in their reading causing their instructional level to drop down.

In the guided reading groups, students were introduced to the text by the teacher. The teacher would give a brief overview of what the text was about and would introduce any new vocabulary to students.

When the focus area was predictions, I marked my book with post-it notes to mark the pages where I wanted students to make a prediction. I would then give each student his/her own post-it notes to put on the selected pages so he/she could make his/her own predictions.

The strategy of asking questions was often used in conjunction with another strategy. During class read alouds, students asked questions while I was reading. First, we would read on to see if the answer was in the text. If we did not come upon the answer in that particular reading, we speculated if the question(s) was something that we thought (a) would be answered later in the text, (b) a peer could answer, or (c) something for which we would have to go to an outside source. During guided reading groups students typically asked their questions aloud while reading, and I would make note of it.

I would tell the students to first finish reading the text, then reread, and, finally, the group would discuss any remaining questions that were not answered by reading or finishing the text. On one occasion, we had to look for an answer from a different source. The students and I used the internet to research "echidna." Knowing this information helped the students in fully understanding the text.

Connections were focused on individually and in conjunction with other strategies. When we first started discussing the different types of connections, I modeled the strategy while reading Judy Blume's book, *Superfudge*, to the class. Since this book was about sibling relationships, things happened that reminded me of things that happened with my brother and I when we were younger. As we read, I shared my connections with the class and asked for some of their own connections. In the guided reading groups, I found that it did not take a lot of prompting to get students to begin to make connections. Some texts are better for connections, but the more connections were discussed, the more the students began to make their own connections without any prompting.

As students put the strategies to work in their reading, it became clear that the students were beginning to use the "language" of the strategies, as well. Students began to use more than one strategy at a time without prompting, which led me to see how much the students were really using the strategies. Students began to express their ideas more clearly and in a more concise manner. With time, students also began to rely on each other for answers and discussion.

During the course of the study, I kept each student's post-it notes. From the first post-its to the last, there was an increase in the amount of words that students used to

express their thoughts. T-unit analysis was done between the average numbers of words for each student on each post-it note. The number of post-it notes for each student depended on the length of the text and the type of strategy or strategies on which the text focused. I found averages of the number of words students put on post-it notes. For example, student c wrote 11 words on the first post-it note, 14 on the second, and 4 on the third. I then added the numbers together to get 29 words. I then took the average of the words to get 9.3 words per post-it note.

Unfortunately, the average for each student did not show the increase in words over the study time. I found that different types of texts lent themselves to different types of responses. Some students wrote more lengthy responses than others. With one particular text, it was very easy for students to give one word responses on the post-its (refer to Table 1, Table 2, Figure 1, and Figure 2 in Appendix A). As research said, it is best to focus on one strategy at a time. The study lasted for almost one month. In my own classroom, I would use at least one month for introducing and teaching each strategy. In order to get the study done and still be able to introduce all three strategies, the process was moved along a bit more quickly than how I would use the strategies in a classroom. There was also a discrepancy in the data with student e. I only worked with this student two times per week. Therefore, the overall data is not enough to amount to anything substantial (refer to Table 3 in Appendix A).

The use of the Major Point Interview for Readers (MPIR) was also used to examine T-units among participants. The MPIR was used once with each student towards the end of the study. I found that students were better able to communicate their predictions, connections, and questions when they didn't have to write the answers

themselves. Because the teacher administers the MPIR, the student only has to answer the questions and the teacher records the responses and scores the student based on his/her response. Students averaged scores of 3–5 on each section of the MPIR. This showed me that the students were becoming more vocal in their responses to texts. Based on the rubric for each score, responses show how much the student has to vocalize certain aspects of their response.

Conclusions and Recommendations

My own experience with using the comprehension strategies originally showed me how much they can help a veteran reader and led me to wonder what using the strategies could do for beginning and struggling readers. I saw by experience that using the strategies only enhances the reading experience. I saw students begin to use the strategies on their own so that they might become more successful readers. Of the five students I worked with, they all moved up at least two levels in their reading (refer to Table 4 and Figure 3 in Appendix A).

I do know that teaching the strategies is a continuous effort on the part of the teacher and the students. Making sure that ample time is given for full immersion of each strategy is key to the success of the students. It was very pressing to include the three strategies in the short teaching time frame that I was working with the students. I started with making predictions and spent a great deal of time focusing on that strategy with the students. Asking questions and making connections were also focused on, but not to the extent of making predictions. The students responded well to all three strategies and the lead teacher in the classroom was also using the strategies with the students.

Many educators are being swamped with the pressures of helping students become better readers. Many school systems are taking on the balanced literacy Approach to teaching reading. Guided reading groups is one element of balanced literacy that strongly lends itself to using the nine comprehension strategies to help readers. I found no research that using these strategies could in any way harm a reader's success.

Some professional organizations will not endorse specific reading programs over others. The National Education Association (NEA) does make the comparison of reading programs to a balanced diet and says, "Completeness in both diet and reading is achieved by providing diverse components in ratios that are not necessarily equal. In addition, the ratios might vary with individual needs and with development" (NEA, 2004). The NEA goes on to state that just as much depends on the teacher. Teachers must be willing to keep up by attending professional development opportunities and be willing to differentiate instruction for students (NEA, 2004).

I agree with some aspects of the NEA's statements. I think it is very important for teachers to remain "in the know" on the best practices in teaching children. Reading instruction has become quite controversial in the last several years. In order for students to become successful, it is important that teachers be familiar with various programs that can help students become more successful. Teachers must realize that different students learn in different ways; the same holds true for learning to read. A teacher who tries to address all learning needs of students is doing the best for each child. I think any additional training in the area of teaching reading would be beneficial for any teacher. As with many other teaching practices, I'm sure there are plenty of teachers who take a little of this and a little of that to help give their students the best opportunity for success. I

think it would be beneficial for teachers to have opportunities to attend workshops about the best ways to incorporate different strategies into existing practices.

There are different options for grant money in this area of study, specifically in reading. There are grants in the areas of professional development, early reading programs, and in the area of assessment. These are areas where comprehension strategies could fall into place so that more in-depth research can be done.

Technology could be used in some areas in the focus on comprehension strategies. There different types of programs that allow students to read and explore texts on CD-ROM. Teachers could also use technology in scoring and processing data in assessments for students.

References

Blume, J. (2003). *Superfudge.* New York, NY: Puffin Books

Fountas, I. C., & Pinnell, G. S. (2001). *Guiding readers and writers: Grades 3–6 – teaching comprehension, genre, and content literacy.* Portsmouth, NH: Heinemann.

Harvey, S., & Goudvis, A. (2000). *Strategies that work – teaching comprehension to enhance understanding.* Portland, ME: Stenhouse Publishers.

Keene, E. O., & Zimmermann, S. (1997). *Mosaic of thought – teaching comprehension in a reader's workshop.* Portsmouth, NH: Heinemann.

Miller, D. (2002). *Reading with meaning: Teaching comprehension in the primary grades.* Portland, ME: Stenhouse Publishers.

National Education Association. (2004). Retrieved December 2, 2004, from http://www.nea.org/reading/

White, A. H., Scott, P. L., & Grant, D. E. (2000). Structural analysis of basal readers using words per T-Unit and morphemes per T-Unit as the primary units of analysis. *The Volta Review*, *102*, 87-98. (ERIC Document Reproduction Service No. EJ643116)

Appendix A

Table 1
Group 1 Prediction Data

	Predictions 9/10/2004	**Predictions 9/13/2004**	**Predictions 9/15/2004**	**Predictions 9/23/2004**	**Predictions 9/29/2004**
Student a	6.3	6.3	11.3	1	4.75
Student b	11	14.6	10.6	2.4	11
Student c	13	19	10.3	9.1	11.3
Student d	6.6	6.6	11.3	1	5.75

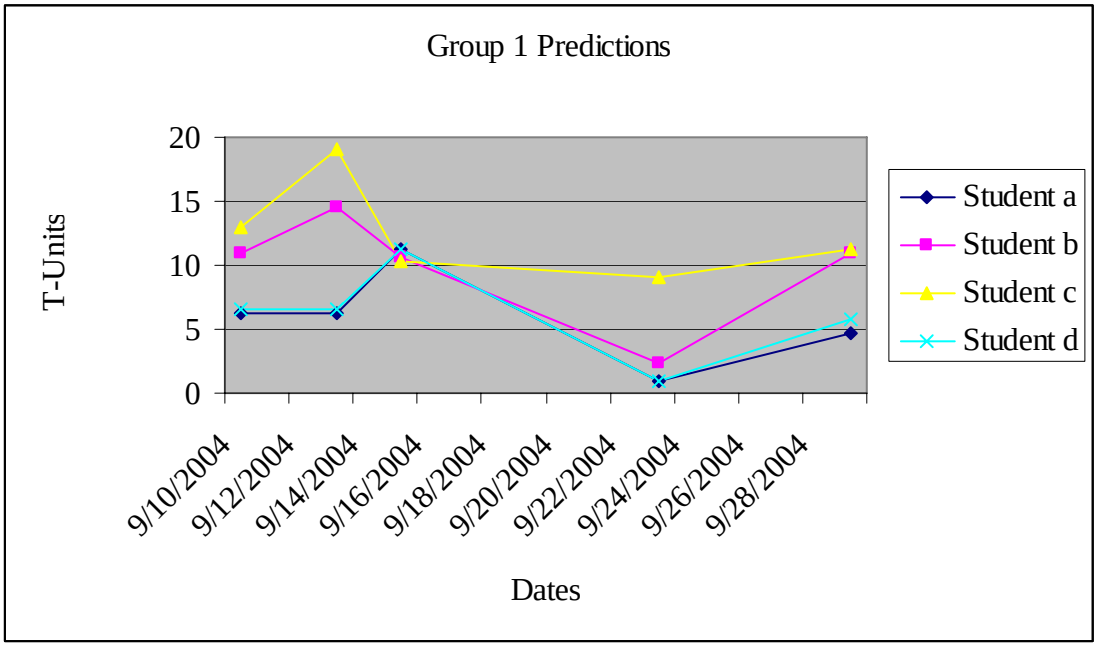

Figure 1. Group 1 prediction graph

Table 2

Group 1 Connections Data

	Connections 9/15/2004	**Connections 9/21/2004**
Student a	2	6
Student b	5.3	8
Student c	9	9.3
Student d	0	5.5

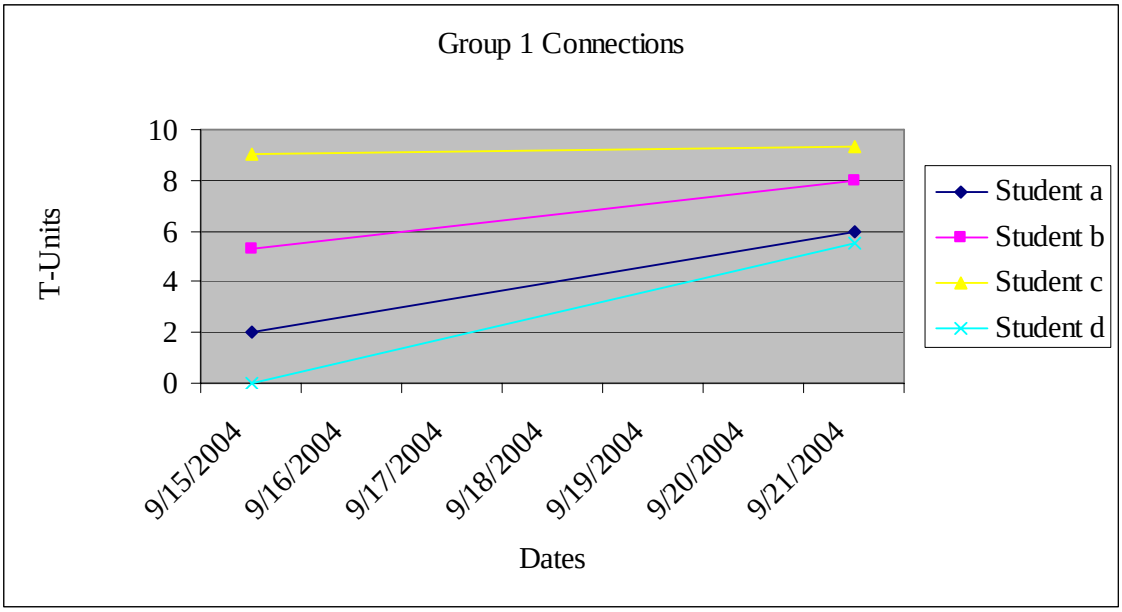

Figure 2. Group 1 connections graph

Table 3
Predictions Data for Student e

	Predictions 9/14/2004	Predictions 9/16/2004	Predictions 9/29/2004
Student e	5.6	7.3	5.4

Table 4
Reading Levels

	September	September	November	November
Student a	9	G	13	K
Student b	8	F	10	H
Student c	8	F	12	J
Student d	11	I	13	K
Student e	7	E	9	G

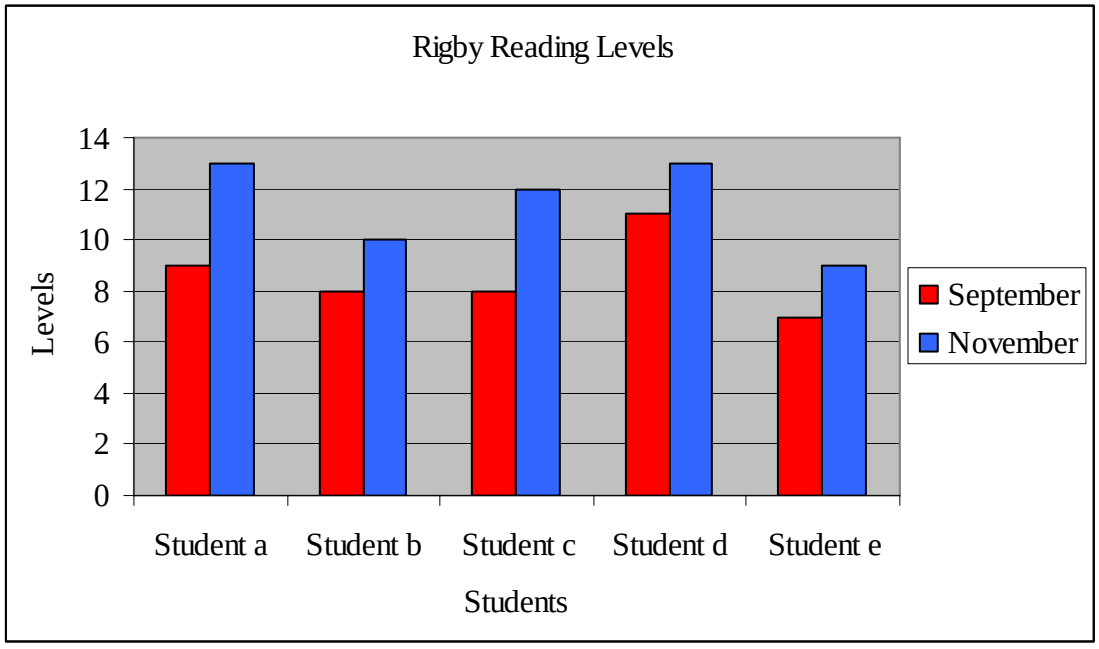

Figure 4. Rigby reading levels of all students.

Does Teaching Reading Comprehension Strategies in the Classroom Affect Student Comprehension Levels?

Chris Lykins
EDUC 590
Fall 2004
Dr. Deborah A. McAllister

The Institutional Review Board of the University of Tennessee at Chattanooga (FWA00004149) has approved this research project 04-139.

Introduction to the Problem

With stagnating or sinking scores in core subjects such as science, mathematics, history, and geography on a national level, and flunked quizzes, unfinished homework, and low test scores on a local level, one might question what can be done to improve these dire educational circumstances. The answer lies not in teaching students to read, but in teaching students to read for comprehension. This cannot be achieved by focusing on remediation through phonics or whole-language instruction; it must be attained by focusing on engaging students in reading and teaching them to read as a successful reader reads.

Review of Literature

With the most recent statistics stating that less than 3% of Americans are illiterate (Central Intelligence Agency, 2004, ¶3), one might argue there is not a need for additional intervention for reading in the classroom. In fact, in a recent national assessment, eighth-grade reading scores were raised significantly over past years (Grigg, Daane, Jin, & Campbell, 2003, ¶7). So what is the problem? Why is there such a commotion over reading when it seems to be improving? Consider this: The United States' current high school dropout rate is nearly 11% (Kaufman, & Alt, 2004, p. 28). Does it seem problematic that nearly 3.9 million students will drop out of high school? The following results are reported in the National Assessment of Educational Progress:

- In geography, just 30% of eighth graders and 25% of seniors scored at the "proficient" level or above (Weiss, Lutkus, Hildebrant, & Johnson, 2002, ¶5).

- Science scores show no gains for eighth graders since 1996, while scores for high school seniors have dropped from 150 to 147 (O'Sullivan, Lauko, Grigg, Qian, & Zhang, 2003, ¶7).
- Mathematics scores show modest gains for both 8th and 12th graders over the past 10 years, but a recent dip among seniors (Braswell, Lutkus, Grigg, Santapau, Tay-Lim, & Johnson, 2001, ¶7).
- U.S. history assessment shows 17 percent of 8th-graders and 11% of 12th-graders performing at or above the "proficient" level—the level at which all students should perform (Lapp, Grigg, & Tay-Lim, 2002, ¶6).

These assessments reveal what most educators already know: there is a problem. Fortunately, there is a solution. This solution involves teaching students to read. Most secondary educators would argue that students should know how to read by the time they reach middle school. The problem with that is the purpose of reading in elementary is often-times limited to decoding and reading with fluency (Tovani, 2000, p. 20). Reading instruction should not end in elementary school. Reading instruction at the middle and high school levels should progress to include instruction on emphasizing meaning and ideas (Tovani, 2000, p. 20). Based on this line of thinking, a teacher could find himself teaching intermediate reading skills to students for the first time in 7th- through 12th-grade classrooms. Remediation of middle school and high school students in the areas of phonics or whole-language instruction does not teach students how to comprehend what they are reading; it simply teaches decoding.

Because decoding is not the ultimate goal in teaching a secondary student to read, other strategies must be used. While there are many plans to choose from, this study will

deal primarily with teaching students reading comprehension strategies that good readers use. Stephanie Harvey and Anne Goudvis (2000), in their work *Strategies that work: Teaching Comprehension to enhance understanding,* identify eight strategies that good readers implement. Good readers (a) make predictions; (b) make connections (text-to-self, text-to-text, and text-to-world); (c) ask questions (of themselves, the authors, and the text); (d) create visual images; (e) find important details; (f) draw inferences; (g) generalize/synthesize/find a theme; (h) and use fix-up strategies.

These eight skills cannot be taught in one sitting or in one semester. According to Ellin Keene and Susan Zimmerman (1997) in *Mosaic of thought: Teaching comprehension in a reader's workshop,* "Researchers recommend that each strategy be taught with singular focus, over a long period of time, to students from kindergarten through twelfth grade and beyond, and that teachers model and students practice the strategies with a variety of texts" (p. 21). Researchers also recommend that the teacher model the skill frequently and then gradually hand the responsibility of using the skill over to the student (Keene, & Zimmerman, 1997, p. 21).

Harvey Daniels and Steven Zemelman, authors of *Subjects matter: Every teacher's guide to content-area reading*, use scientific research to back up their claims that modeling these eight comprehension skills that effective readers use will help to teach reading comprehension to students. Daniels and Zemelman, in proving that "teachers must help students develop a repertoire of thinking strategies to handle challenging texts," (Daniels, 2004, p. 254) state:

> "[Teaching] strategies for comprehension…are central characteristics of the successful reading programs across the country evaluated by Davison and

> Koppenhaver (1993). They are the core of "reciprocal teaching," developed by Palincsar and Brown (1984). And their effect on students' understanding of material they read is confirmed by researchers again and again (Pressley et al. 1990; Dole et al. 1996; Pearson and Dole 1987; Perason and Fielding 1991; Rosenshine and Meister 1994; and Mastropieri and Scruggs 1997). Comprehension strategy instruction even increases students' willingness to study difficult material (Anderson 1992).

Experts agree and scientific research proves that teaching reading comprehension strategies in the classroom will help improve a student's ability to read for understanding and, thereby, increase their ability to master topics covered in core-subject classrooms. But does this actually work in the classroom?

In classrooms around the nation, teachers have asked the same question and have found promising results. In 1999, a fifth-grade classroom underwent a 1-year study in which the teacher modeled reading comprehension strategies. At the end of the study, the teacher found that the students were able to transfer the skills learned to other texts. The teacher also discovered that the students reported reading more and showed a greater appreciation for reading (Baumann, Hooten, & White, 1999).

Cris Tovani, author of *I read it, but I don't get it: Comprehension strategies for adolescent readers,* taught for 10 years in elementary school and then became a high school reading specialist and English teacher. Her book provides plans for class lessons built around the successes of her own reading workshops. Tovani uses the comprehension skills in her classroom to get struggling readers to connect, many for the first time since adolescence, to literature. Tovani teaches many reading workshops, in

addition to her regular classroom duties. Tovani concedes that it is easier in her reading workshops than in her literature classes to spend weeks on one strategy. However, Tovani does say that it is possible to have success in her literature classes using the same techniques around a more structured curriculum (Tovani, 2000, p. 109).

The research provided by the experts and the case studies in actual schools prove that this type of reading instruction can be successful. It has convinced me that reading comprehension strategies should be a part of every classroom. I am also convinced that reading comprehension strategies can be incorporated into any core classroom to help improve comprehension on specific content knowledge.

Data Collection and Results

A pre-test (see Appendix A) was given to a class of 18 seventh-grade students to measure whether students were independent, instructional, or frustrated readers prior to the intervention. The researcher used Taylor's cloze readability test which defines readers in the following ways: (a) an independent reader as one who can read without the assistance of others as is reflected in a score of 57% or higher, (b) an instructional reader as one who can read well with occasional assistance as is reflected in a score of 44-56%, (c) and a frustrated reader as one who cannot read without the assistance of others as is reflected in a score of below 44% (Taylor, 1953, p. 415-433). The class was given a brief essay of approximately 300 words in which every fifth word was deleted. The students were given as long as necessary to supply the exact word for each of the 50 missing words.

Over a 2-week period, the researcher supplied the class with additional instruction on specific reading-comprehension strategies: prediction and text-to-self connections, as

well as think alouds. The prediction and text-to-self connections were taught using a variety of magazine articles reproduced for the students on an overhead machine. In the first week, the researcher would show students how he would use prediction to try to determine what was coming next in the article using the article's title and keywords. In the second week, the researcher modeled text-to-self connections by using articles and texts to which he could relate personally. The researcher demonstrated the think alouds as he read the book, *The Giver,* by Lois Lowry, aloud with the students by stopping to ensure that students were aware of his thinking strategies at key points in the book.

After the 2 weeks passed, the class was given a second cloze readability test (see Appendix A). This test differed from the first test in content and difficulty. It matched the first test in approximate length and number of words to be filled in by students.

Before the intervention, the class consisted of 3 independent readers with a mean score of 69% and a median score of 66%, 9 instructional readers with a mean score of 48% and a median score of 46%, and 6 frustrated readers with a mean score of 28% and a median score of 32%. After the intervention, the class consisted of 2 independent readers with a mean score of 62% and a median score of 62%, 3 instructional readers with a mean score of 49% and a median score of 48%, and 13 frustrated readers with a mean score of 28% and a median score of 32%. A comparison of the class before and after the intervention shows a decrease in independent readers by 1, a decrease in instructional readers by 6, and an increase in frustrated readers by 7 (see Figure 1). The independent readers' average score dropped by seven percentage points, the instructional readers' average score increased by one percentage point, and the frustrated readers' maintained a consistent average score.

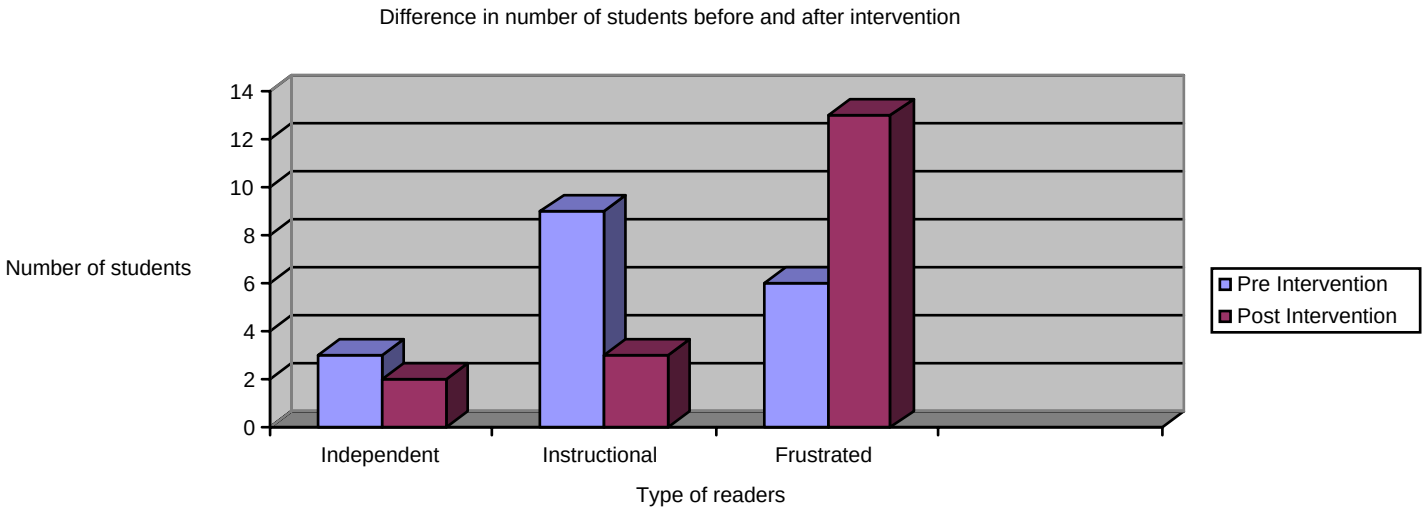

Figure 1

Conclusions and Recommendations

The test results seem to indicate that the introduction of reading comprehension strategies into the classroom seems to have a negative effect on the comprehension of the students. In actuality, the results are inconclusive for the following reasons: only two strategies were introduced to the students, each strategy was covered for only 1 week, and the post-test was much more difficult than the pre-test because the post-test used too many technical terms. In many instances, the students used synonyms but missed the exact word, which was necessary in order to maintain the reliability of the test.

The observation of the students as they progressed through the book, *The Giver*, indicated they were able to interact more strongly with the text than at the beginning of the book. Students were able to make more personal connections with the text. Students also attempted to make predictions, as the novel progressed.

Educators and researchers in the field have research to prove that the best way to help a student to improve reading skills is to model what good readers do. Researchers agree that this cannot be completed in a 2-week session but must take place over a long

period of time to have a lasting effect. Educators in the field of English understand that strong reading comprehension skills will help to improve student performance, not only in English, but also across the curriculum. The National Council of Teachers of English supports the following reading initiative: a reading initiative [which] is a long-term professional development program that brings teachers, administrators, and trained literacy leaders together to engage in a study of the theory, knowledge base, and best practices of teaching reading. The program's goal is to increase teachers' knowledge and repertoire of instructional practices, to increase their effectiveness with all students, and to increase student achievement–with the added goal of creating a nation-wide network of skilled literacy professionals. (NCTE, 2004, ¶1).

For professional development, teachers should read the book, Subjects matter: Every teacher's guide to content-area reading, by Harvey Daniels and Steven Zemelman, and Chris Tovani's book, I read it, but I don't get it: Comprehension strategies for adolescent readers. Both books are easy to read and full of wonderful information about including reading comprehension strategies into the everyday classroom and in different contents. A seminar by local experts in the field could be offered for teacher in-service.

The Carnegie Corporation of New York and the Bill and Melinda Gates Foundation have set aside a grant of $8 million dollars to help Chattanooga boost its high schools. Although the grant is given to address several issues, one of main components the grant hopes to address is literacy. The grant is to be matched by local funds, as well (Carnegie Corporation of New York, 2001, ¶2).

Technology would serve a limited role in this area of concentration. The main source of instruction is print media, although the Internet can be used to find a variety of texts for students to read. The teacher may use PowerPoint to model strategies on articles.

Appendix A

Pre-Test

Directions: First, read over the entire passage. Second, go back and fill in each blank with the word that you think was deleted. If you have a problem filling in a word, skip it and complete the rest of the passage; then return to the blank for another try.

You may not realize how often you use persuasion. Think about it. Have __1__ ever tried to convince __2__ parents to increase your __3__? Have you ever tried __4__ get a friend to __5__ out for a team? __6__ you ever tried to __7__ someone to go to __8__ movie with you? All __9__ situations involve persuasion. And __10__ think—the more persuasive __11__ are, the better your __12__ of having things go __13__ way.

In this chapter, __14__ get to practice your __15__ of persuasion. You'll be __16__ about an issue, a __17__ or idea that people __18__ different opinions about.

Finding __19__ Issue That Matters. It's __20__ to choose an issue __21__ matters to you. It __22__ also be one that __23__ around you think is __24__. Why try to convince __25__ of something that neither __26__ nor they have an __27__ in? Look for things that are happening in your __28__ or neighborhood that you __29__ strongly about. For example, __30__ your school setting up __31__ new dress code? Should __32__ community build a hockey __33__? Does air pollution upset __34__? Is there too much __35__ in movies? Any one __36__ these topics would be __37__ good issue for persuasive __38__. Just be sure it __39__ matters to you.

Identifying __40__ Opinion. Your opinion is __41__ you believe. It isn't __42__ that can be proven __43__, For example, it's your __44__ that Nolan Ryan is __45__ greatest baseball pitcher of __46__ time. You believe it, __47__ others may disagree. A __48__, on the other hand, __49__ be proven true. It's __50__ fact that Nolan Ryan pitched seven no-hit games. No one can deny it. As the famous baseball manager Casey Stengel used to say, "You could look it up" (Kinneavy, & Warriner, 1998, p. 247)

Pre-Test Answer Key

1. you
2. your
3. allowance
4. to
5. try
6. have
7. persuade
8. a
9. these
10. just
11. you
12. chances
13. your
14. you'll
15. powers
16. writing
17. topic
18. have
19. an
20. important
21. that
22. should
23. people
24. important
25. people
26. you
27. interest
28. that
29. school
30. is
31. a
32. your
33. rink
34. you
35. violence
36. of
37. a
38. writing
39. really
40. your
41. something
42. something
43. true
44. opinion
45. the
46. all
47. but
48. fact
49. can
50. a

Appendix B: Post-Test

Directions: First, read over the entire passage. Second, go back and fill in each blank with the word that you think was deleted. If you have a problem filling in a word, skip it and complete the rest of the passage; then return to the blank for another try.

Your pages can start to look pretty cluttered when you revise your writing by hand. You'll need to cross __1__ words and sentences you __2__ to delete, write down __3__ you want to squeeze __4__, and draw lines or __5__ next to parts you __6__ to move. Even if __7__ careful, you could end __8__ with a jumbled, hard-__9__ -read mess.

If you __10__ on a computer, though, __11__ can avoid this clutter. __12__ let you experiment with __13__ or moving words and __14__, without any scratching out __15__ erasing. For example, you __16__ make use of your __17__ -processing program's Cut and __18__ command to find the __19__ place for a sentence __20__ your draft. If you __21__ your mind, you don't __22__ to do any retyping—__23__ move the sentence back.

__24__ and Replace are two __25__ word-processing commands that __26__ save you a lot __27__ time. If, for example, __28__ discover you've misspelled a __29__ that shows up ten __30__ in your draft, you __31__ only to type the __32__ spelling once, and the __33__ will automatically change all __34__ misspellings in your draft __35__ the same time.

Many __36__ -processing programs also contain __37__ you can use to __38__ synonyms. You just highlight __39__ word in your draft, __40__ the Thesaurus command, go __41__ a list of suggested __42__, and make a selection.

__43__ an assignment you've started, __44__ retype it using a __45__. Then, use a word-__46__ program to make your __47__. If you don't have __48__ to a computer, interview __49__ who do and ask __50__ to explain how computers can make revision easier. Report back to the class with what they tell you (Kinneavy, & Warriner, 1998 p. 57).

Post Test Answer Key

1. out
2. want
3. things
4. in
5. arrows
6. want
7. you’re
8. up
9. to
10. revise
11. you
12. Computers
13. deleting
14. sentences
15. or
16. can
17. word
18. Paste
19. best
20. in
21. change
22. need
23. just
24. Find
25. more
26. can
27. of
28. you
29. name
30. times
31. need
32. new
33. computer
34. ten
35. at
36. word
37. thesauruses
38. find
39. a
40. select
41. through
42. replacements
43. Take
44. and
45. computer
46. processing
47. changes
48. access
49. people
50. them

References

Baumann, J., Hooten, H., & White, P. (1999). Teaching comprehension through literature: A teacher-research project to develop fifth graders' reading strategies and motivation. *Reading teacher, 53*(1), 38-51.

Braswell, B., Lutkus, A., Grigg, W., Santapau, S., Tay-Lim, B., & Johnson, M. (2001). *The nation's report card: Mathematics 2000.* Retrieved November 29, 2004, from http://nces.ed.gov/nationsreportcard/pubs/main2000/2001517.asp

Carnegie Corporation of New York. (2001). *Corporation news.* Retrieved December 3, 2004, from http://www.carnegie.org/sub/news/sns.html

Central Intelligence Agency. (2004). *The world factbook.* Retrieved December 3, 2004, from http://www.cia.gov/cia/publications/factbook/geos/us.html

Daniels, H., & Zemelman, S. (2004). *Subjects matter: Every teacher's guide to content-area reading.* Portsmouth, NH: Heinemann.

Grigg, W., Daane, M., Jin, Y., & Campbell, J. (2003). *The nation's report card: Reading 2002.* Retrieved November 29, 2004, from http://nces.ed.gov/nationsreportcard/pubs/main2002/2003521.asp

Harvey, S., & Goudvis, A. (2000). *Strategies that work: Teaching comprehension to enhance understanding.* York, Ma: Stenhouse Publishers.

Kaufman, P., & Alt, M. (2004). *Dropout rates in the United States: 2001*. Retrieved November 29, 2004, from http://nces.ed.gov/pubs2005/2005046.pdf

Keene, E., & Zimmermann, S. (1997). *Mosaic of thought: Teaching comprehension in a reader's workshop.* Portsmouth, NH: Heinemann.

Kinneavy, J., & Warriner, J. (1998). *Elements of writing.* Austin, TX: Holt, Rinehart & Winston.

Lapp, M., Grigg, W., & Tay-Lim, B. (2002). *The nation's report card: History 2001*. Retrieved November 29, 2004, from http://nces.ed.gov/nationsreportcard/pubs/main2001/2002483.asp

National Council of Teachers of English. (2004). *Reading initiative*. Retrieved December 3, 2004, from http://www.ncte.org/profdev/onsite/readinit

O'Sullivan, C., Lauko, M., Grigg, W., Qian, J., & Zhang, J. (2003). *The nation's report card: Science 2000.* Retrieved November 29, 2004, from http://nces.ed.gov/nationsreportcard/pubs/main2000/2003453.asp

Taylor, W. (1953). Cloze procedure: A new tool for measuring readability. *Journalism Quarterly, 30*, 415-433.

Tovani, C. (2000). *I read it, but I don't get it: Comprehension strategies for adolescent readers.* Portland, Ma: Stenhouse Publishers.

Weiss, A., Lutkus, A., Hildebrant, B., & Johnson, M. (2002). *The nation's report card: Geography 2001*. Retrieved November 29, 2004, from http://nces.ed.gov/nationsreportcard/pubs/main2001/2002484.asp

How Student Ownership Affects Middle School Discipline

Jason Lyles

The University of Tennessee at Chattanooga

The Institutional Review Board of the University of Tennessee at Chattanooga (FWA00004149) has approved this research project 04-132.

Introduction and Review of Literature

As the year begins in a middle school classroom, the typical teacher reads and explains the classroom rules and expectations to the new students. Over the next few days, the teacher then enforces these rules and procedures by reminding the students and leading by example. The teacher also plans clearly defined, structured activities that decrease disorderly behavior (Gottfredson, Gottfredson, & Hybl, 1993). However, in middle school, discipline problems will inevitably arise. Therefore, middle school teachers are constantly seeking new ideas and management systems to improve classroom behavior and to decrease discipline problems.

Most schools have a discipline policy that is vague and open for interpretation. There are school rules, often called building rules, that apply to all students. In addition to the school rules, each teacher has class rules that must be followed for the classroom to be successful. These are usually a few general rules, such as "be courteous to others," from which more specific meanings can be derived. However, even if a teacher drills these rules into the minds of the students, many class disruptions and behavior problems may still occur. Yet there are ways to minimize the damage.

Before the school year begins, the teacher must first understand the needs of the middle grades students and understand possible reasons for misbehavior. Glasser (1996) reports that student behavior is motivated by four basic needs: belonging, freedom, power, and fun. For students to be successful behaviorally and academically, these needs must be met. When they are not, the typical adolescent is more likely to misbehave to seek attention, avoid failure, seek power, or seek revenge (Shockley & Sevier, 1991). To prevent misbehaviors proactively, the teacher has to design instructional strategies that allow middle school students to feel involved, and feel successful and empowered to learn. Ozvold (1996) saw improved behavior after having

the students fill out surveys to determine what punishments and rewards were appropriate for the class, and after holding monthly class meetings with the students to discuss the management of the classroom. Also, Bayer (1984) and Ozvold (1996) had students write reactions to class activities in their journals. With this level of involvement and empowerment, the students were less likely to act out.

One way that a teacher can minimize student misbehaviors is to increase student ownership of the classroom and its activities. Ownership, as it is used here, is a level of involvement and responsibility the student feels toward all occurrences in the classroom. The student has ownership of class successes and failures, compliances and disruptions, and rewards and punishments. Educational theorist Thomas Gordon maintains that, although the teacher ultimately has the responsibility for the classroom, the student actually "owns" many of the problems that occur within it and has the responsibility for change (Bucher & Manning, 2000). This concept also applies to the class rules. Hindle (1994) suggests the teacher should always refer to class rules as "our" rules, not "my" rules. Students should also be reminded that their behavior is their choice; they own the decision to break the rules (Hindle, 1994). Student ownership can also be increased by involving students in the reasoning, creation, and enforcement of positive rules. Bicard (2000) states that student participation in rule setting has been demonstrated to be effective for increased compliance. In a case study by Helmus (1982), students wrote a class constitution of rules that was ratified by all the class members. Classroom behavior steadily improved throughout the year because of increased ownership. Ozvold (1996) also found decreased behavior problems due to student involvement in making class rules. How can the students argue about rules *they* created?

Student ownership can also be increased through extensive discussions about the reasoning and values behind rules. Gibbs (2000) concludes that the values underlying any discipline program must be explored for it to be successful. By discussing reasoning behind rules, students are assisted in establishing their own self-control. Gibbs states that three commonly accepted values behind rules are respect, responsibility, and empathy. By modeling, promoting, and connecting these values to classroom rules, student ownership is increased. Also, discussing the specifics of rules can increase compliance. Ownership is achieved in these discussions by having students create scenarios and examples that further explain and demonstrate the rules. Shockley and Sevier (1991) suggest using an overhead T-chart to solicit student responses on what the rule "looks like" and "sounds like." Another suggestion is to have students identify logical consequences for the breaking of specific rules. Once again, ownership is increased by involving students and teaching them responsibility.

Students are not likely to misbehave in a class if it is important to them. The teacher's job is to increase student ownership and make the class important. By using a prescribed discipline program that involves students, uses their feedback, and allows them to make connections between rules, values, and logical reasoning, student ownership of the classroom can be increased. Consequently, decreased misbehaviors and increased responsibility can be achieved.

Problem Statement

I have just completed my second year of teaching this past May. I was hired at the last minute 2 years ago on a provisional certificate to teach life science at the same middle school in north Georgia I attended in my youth. During my first school year, I thought I would engage and fascinate my students with labs, activities, projects, and other various teaching techniques that I

implemented in my lessons. I was wrong. The primary reasons for my failure were classroom management and discipline problems. My second year was significantly more successful, yet I feel I must constantly strive for better management methods. Now, as I am beginning my third year at the same school, I have a strong desire to correct and not repeat my previous teaching errors. Therefore, I am interested in classroom techniques and methods for reducing these behavior problems in a middle school setting.

When I began researching for this project, I wanted to know what student discipline systems were the most effective for middle school classrooms. I wanted to find cases of success and determine what method of rules, rewards, and consequences worked the best. I researched phrases such as classroom management, classroom techniques, discipline, and middle school. I found a wealth of material and, eventually, narrowed my search to find research and case studies that focused on success.

As I read the articles I had identified as most important to me, I found verbiage about rules and consequences, structure and choice – the same run-of-the-mill literature I had seen before, when I started to identify an underlying theme of what I call "ownership." This simply means that, for a student to have appropriate behavior and follow the rules in class, the rules (and class activities) must have some meaning that really hits home with the student to give him or her personal responsibility and efficacy. I first came onto the idea in an article titled, *From Chaos to Constitution*, in which a social studies teacher had his students make a class constitution of rules that must be followed. The teacher states that the students could not be angry with him, because he was enforcing their own rules (Helmus, 1982). The teacher stated that student behavior steadily improved by following the class constitution.

As I read through more of the literature, I found more instances of increasing ownership, mostly to do with values and involvement of students in decisions. By discussing the class rules and the values behind them, the students learn what the rules mean to them. Time and again, the values of respect, responsibility, and empathy (often called caring) appear in the literature. One author concludes that how these values underlie a school discipline program must be explored and discussed with the students to be effective (Gibbs, 2000). More specifically, this type of discussion about classroom rules can increase ownership and efficacy.

In addition to values increasing ownership, I found other behavior modification practices that increase student ownership of rules and activities. Some of these include calling and writing rules as "our rules" not "my [the teacher's] rules" (Hindle, 1994), and using reaction journals for students to write about rules and classroom issues to show importance and worth (Bayer, 1984). I also found many other instances where teachers involved students in meetings to give input on classroom management decisions. Reminding students that the decision to break rules is their choice increases ownership and responsibility, also. All of these activities and practices involved the students and enhanced their perception of the value of the rules and activities. In essence, the students gained more ownership of what went on in *their* classroom.

In conclusion, in my research I found a number of management systems to decrease behavior problems, but the underlying factor has to do with the meaning, importance, and worth of the system to the student. Therefore, my hypothesis is this: If student ownership of classroom rules and activities is increased through value discussions and other techniques, student behavior problems will decrease.

Data Collection and Results

The sample of people involved in this study will consist of approximately 100 seventh-grade students at a middle school in Murray County, Georgia. The students will be predominantly white, of low socioeconomic status, and have a rural upbringing. Approximately five to six percent will be Hispanic or another minority. The students will be grouped together as a team under four academic area teachers, including me. The school day consists of seven periods in which the students rotate classes and teachers: five academic subjects (including reading) and two electives. The team in this study will be divided into four classes rotating between the four teachers, and an additional group for reading, which will be a different grouping of the same students. The reading classes are grouped by ability level, whereas the other rotating classes are a mix of skill levels. These four classes should essentially be equal. No sampling method will be used to measure the students; they will be studied as a whole. This study should mainly be of interest to other county educators, as well as all middle school teachers, particularly those in rural, poverty-stricken districts.

Measurement

As this study pertains to classroom management and discipline, particularly the prevention of behavior problems, the measured data will be the relative number of classroom disruptions. Assuming that any middle school classroom will occasionally have misbehaviors, only significant disruptions will be counted. Classroom disruptions are defined as any misbehavior that interferes with the running of the classroom and causes the teacher to stop teaching and deal with the problem. It is a broad term that can include many behaviors, yet it is easily recognizable. The school policy is to refer a student to the office for classroom disruption after a warning and after other steps have been taken to correct the problem (revoking privileges,

parent call, and parent conference). All of these occurrences will be documented and used for data in the study as total number of classroom disruptions for each class.

Procedure

This study will be done with two of my four science classes. The other two classes will serve as a control group. These four groups represent a mix of ability levels and should be on equal ground, since our team leader tries to heterogeneously distribute our students according to past academic level and behavior problems. I will measure the number of classroom disruptions of each group over a 12-week period at the beginning of the school year. The information will be recorded on log sheets that I will keep in my room.

At the beginning of the school year, I will facilitate class discussions of values and how our rules will support these values. The values discussed will be responsibility, respect, and empathy, based on the Gibbs (2000) model.

From the beginning of the school year, special emphasis will be placed on ownership of the class. The class and rules will be stated as "ours [the students']," not "mine [the teacher's]." To also increase ownership in the class, the students will write journal entries that are reactions to how well the class is being run, how fairly the discipline is being managed, and how well the rules are being enforced. I will read these entries and write short responses to them to let the students know their voice is being heard. In addition, I will hold monthly class meetings, similar to the work of Ozvold (1996), to hear concerns and vote on changes to classroom management, as necessary.

The control group will be given the usual school and team rules and consequences at the beginning of the year. These rules will be taught over the first 2 weeks of the school year. Although discussions of values and reasoning behind the rules will take place during this period,

no journal entries will be written nor will monthly meetings be held. These times will be used for reviewing academic concepts in the control group classes.

Analysis

Analysis of the data will simply be a comparison of number of classroom disruptions between the experimental group and the control group. My hypothesis is that the experimental group will have fewer disruptions due to the increased student ownership of the classroom and rules. Due to the processes outlined above, the experimental group of students should learn to better manage their own behavior. I will summarize the data in a bar graph comparing the four classes and give reasons for possible anomalies.

Results

The results of this study were very pleasing. For the control classes, only one office referral was made for classroom disruption. In the experimental classes, no office referrals were made for classroom disruptions. Some students received referrals for behavior in the halls and in elective classes, and were assigned in-school suspension. However, behavior in the classroom has been exemplary.

Due to the minimal data collected, I have excluded the aforementioned graph from my analysis.

Discussion

I expected to see an improvement in behavior during the course of this study, however I did not expect the results to be so dramatic. During my last 2 years of teaching, I had already written several office referrals during the fall months. To have so few in the first quarter of this year was truly a relief.

The students seemed to respond well to the idea of the class belonging to them, and participation was high in the discussions of respect and responsibility. In addition to overall conduct being nonproblematic, the students had good ideas for improving the procedures and situations of the class. For example, the students pointed out students that cannot behave properly while seated together. The students also designed better procedures for handing in homework and ideas for class rewards. The study has been a good illustration of how middle school students can improve classes, because they have had so much experience with different teachers' methods over the years.

Conclusions and Recommendations

Classroom management and student behavior are both challenging areas for the middle school teacher. Every class has a different group of children with different personalities and group dynamics. Based on the results I obtained from this study, one cannot conclude whether the ownership model described above improved student behavior, or if the improvement was due to my increased management experience, which has improved from my first 2 years of classroom teaching.

Regardless of what caused the improvement, I am very pleased with the results, and I have shown that combining the ownership model with classroom management skills can result in improved student behavior. The ownership model is a good tool for teachers to utilize and modify for any class, and I believe that it can improve the conduct of students in any classroom.

My recommendation is that any teacher who needs to improve the behavior of students in the classroom should consider this model. I believe teaching students about respect, responsibility, and ownership can make any classroom more successful. Of course, as stated earlier, every group of students is different. The model can always be modified for age

appropriateness and student background. The model can also be used, in part, according to instructor needs. It is a useful way to encourage students to think about why they attend class and to show them that how much they achieve from a class is their choice.

References

Bayer, A. S. (1984). The positive view of discipline: How three teachers do it. *Principal, 63*(4), 44-46.

Bicard, D. F. (2000). Using classroom rules to construct behavior. *Middle School Journal, 31*(5), 37-45.

Bucher, K. T., & Manning, M. L. (2002). Exploring the foundations of middle school classroom management. *Childhood Education, 78*(2), 84-90.

Gibbs, J. L. (2000). Value-based discipline in a fifth grade classroom. *Middle School Journal, 31*(5), 46-50.

Glasser, W. (1996). Then and now: The theory of choice. *Learning, 25*(3), 20-22.

Gottfredson, D. C., Gottfredson G. D., & Hybl, L. G. (1993). Managing adolescent behavior: A multiyear, multischool study. *American Education Research Journal, 30*(1), 179-215.

Helmus, T. M. (1982). From chaos to constitution. *Social Education, 46*(3), 213-214.

Hindle, D. R. (1994). Coping proactively with middle years students. *Middle School Journal, 25*(3), 31-34.

Ozvold, L. A. (1996). Does teacher demeanor affect the behavior of students? *Teaching and Change, 3*(2), 159-172.

Shockley, R., & Sevier, L. (1991). Behavior management in the classroom: Guidelines for maintaining control. *Schools in the Middle, 1*(12), 14-18.

Other Literature Read

Chase, K. (1999). Beyond this point. *Educational Leadership, 56*(8), 70-71.

Self-Evaluation of the Writing Process and the Use of Pre-test and Post-test Evaluation

Lee Ann Olskey

The University of Tennessee at Chattanooga

EDUC 590

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The Institutional Review Board of the University of Tennessee at Chattanooga (FWA00004149) has approved this research project 04-151.

Introduction

Combining the use of pre-test and post-test comparative data with student self-evaluation can allow students to feel in charge of their own education. Providing the realization that an individual student can be in charge of their own education is a job that educators should take seriously. My rationale for choosing this topic is based upon the fact that I believe that the individual should be in charge of their own learning process by assuming responsibility. By having students assess their own work and reflect upon it, we, as educators, would be supplying them with the tools to begin setting their own educational goals. Involving students in the assessment and evaluation process is an essential part of a balanced assessment.

From using self-evaluation as a learning tool, students are able to examine their work and think about what they do well and in which areas they still have weaknesses. As with any type of positive change, students that begin to use self-assessment are able to become more conscious learners. They are able to apply knowledge to foreign concepts and they begin to exercise higher-order thinking skills from Bloom's Taxonomy. Researching self-evaluation and applying it to analyzing pre-test and post-test information will help the educator to engage in self-evaluation of their own methodology. Methods of evaluation are an ongoing source of conversation within the field of education.

Review of Literature

English composition is a subject that is taught across the board. Without good composition skills, it is difficult for any student to write a clear and coherent essay in another subject. There is always a need for improvement in the area of composition, as many of us have heard before, "writing is always a work in progress." Requiring students to use self-assessment as a tool to aid in the improvement of their composition skills can prove to be a positive choice

by increasing student motivation and self-efficacy (Yancey, 1998). Using pre-test and post-test data coupled with student self-evaluation techniques can also help educators to self-evaluate their own methods.

A comparative study between the initial results of a pre-test and the end results of a similar post-test can gauge how much a student improves from instruction. This type of self-evaluation used by the educator could prompt several ideas regarding the use of assessment tools and in which the presentation of the material could be modified to produce better results. Comparing the data that the pre-test and post-test show, as opposed to the student's self-evaluation, will allow the educator to map out how much effort was put in to a specific assignment or how much material the student absorbed. Self-evaluation for the student and the educator is a cooperative effort (Bruce, 2001).

Choosing a method of evaluation for a lesson, unit, or concept depends on the long-term goal of the educator. Deciding on the correct method of evaluation of student performance is a difficult task (Yancey, 1992). This problem arises due to the fact that you never can be sure that your mode of evaluation will best display the learned knowledge of the majority of your students. By using criterion-referenced tests to function as a pre-test and post-test, teamed with the student self-evaluation process, data can be collected from the students that will properly reference the possible improvements. A pre-test and post-test evaluation is one of the most popular designs that can be used to compare improvements based on instruction. This type of information can be graphed and charted, allowing the educator to arrive at conclusions about his or her own work (Oakes & Feldman, 2001). In a handbook focusing on evaluation, we learn that there are a number of ways to use pre-test and post-test evaluations. Using a before and after

study with the same subjects is one method that will allow educators to compare information that could possibly be absorbed from participation in a unit (Hernandez, 1996).

Determining how important student self-assessment is can prove to be difficult, as well. In Kathleen Blake Yancey's article on reflection, self-assessment, and learning (1998), she discusses the fact that, if we do not ask our students to assess their own work, a process based on internal factors and criteria, then they will be dependent on external rewards. This oversight will result in students who are unable to consider their own performances and students who do not know where to begin to improve their composition skills. Yancey suggests requiring self-assessment as a regular part of the curriculum. However, it is necessary to give the students a set of guidelines to follow when preparing a self-assessment. A rubric or a set of standards must be agreed upon before a student can properly participate in self-assessment (Bruce, 1999). It is this type of student-to-teacher involvement that allows students to begin to take responsibility for their own education.

Data Collection and Results

A portion of my data was collected the first day I began teaching a unit entitled, "Writing Descriptive Paragraphs." I explained to the students that I wanted to see how much they knew about the material we were about to learn. I explained the data collection phase to the students and I administered the pre-test without allowing the students to use help or resource materials. The pre-test was small, consisting of only four questions and a writing prompt (see Appendix A). The questions were chosen to allow the researcher to easily determine the amount of background knowledge that the students possessed. At the end of the unit, I again administered the same test to the students, only terming it, this time, as a post-test instead of a pre-test. The students were not allowed to use any outside materials to aid them in answering this set of questions, as well.

The pre-test results were kept from the students as to ensure that there would be no interference in the results of the study.

The pre-test score proved that a majority of the students possessed some type of background knowledge pertaining to the composition of descriptive paragraphs. The pre-test data showed that 8% of the 50 students scored in the A range, 28% fell into the B category, and 36% scored a C. Those students that scored a D made up 14% of the class population, while an equal 14% scored an F. Figures 1 and 2 represent this data. The mean score on the pre-test was 74.2, showing that the majority of the students represented the C category (see Table 1). This showed me that the students, as a whole, possessed some type of knowledge concerning the composition of descriptive paragraphs. I would use this information to focus on concepts that would cover basic needs, as well as help the students to achieve a higher level of composition than I had expected. This information that was gathered from the pre-test showed me that we could go in a more creative direction with my unit, as opposed to sticking strictly to the fundamentals.

The data collected after the administering and evaluation of the post-test showed some improvement. An overwhelming 58% scored an A on the post-test. Of the 50 students who participated in the study, 22% scored a B, 12% scored a C, and 8% scored a D on the post-test. There were no scores of F on the post-test. The mean score of the students for the post-test was 87.68. The mean improvement of the class was 13.38. One student showed a negative score in the improvement category of a -4.

I also used a self-assessment rating sheet to collect data from the students (see Appendix B). I found one specific question from the ranking sheet to be the most useful in my research. Question number one on the self-assessment rating sheet asks the students to compare the

composition, or writing prompt, from their pre-test to that on their post-test and rate how much they feel that their writing improved. Of the 50 students that participated in the study, 18 chose a 4 on the rating scale, representing a 40% improvement. A group of 13 students rated themselves with a 5, representing a 50% improvement. Only five students chose 10 on the rating scale, representing a 100% improvement. Results are presented in Figure 3. I chose to use this self-assessment tool to see if I could understand how the students felt about the instruction from the unit. From the self-assessment data, I can conclude that 100% of the students felt as if they had improved from the instruction. I can also see that, out of the class, 44% of the students felt as if they had improved by 50% or greater in the area of composition.

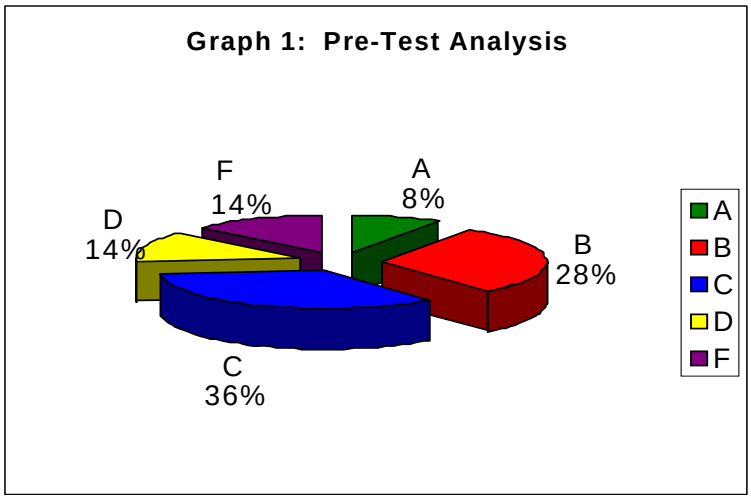

Figure 1. Pre-test analysis.

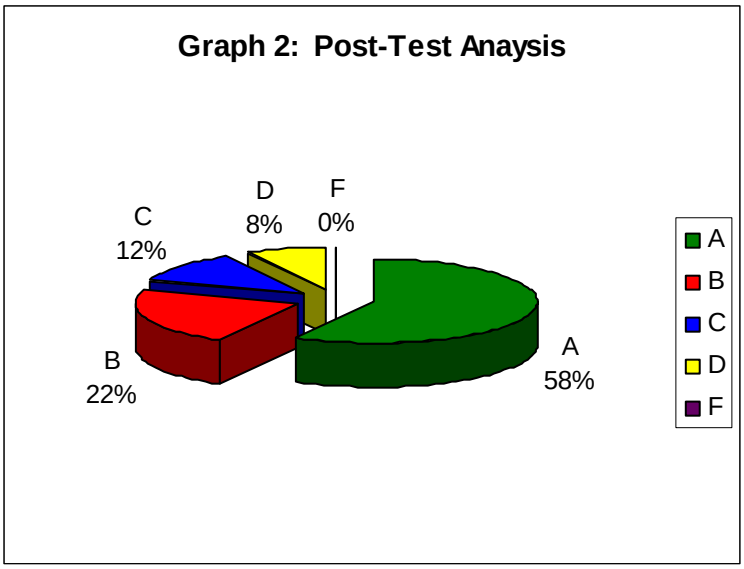

Figure 2. Post-test analysis.

Table 1 - Writing Paragraphs Pre/Post Test Evaluation

STUDENT	PRE-TEST	POST-TEST	IMPROVEMENT
1	72	92	20
2	68	78	10
3	74	84	10
4	92	100	8
5	74	92	18
6	86	92	6
7	88	100	12
8	82	92	10
9	58	92	34
10	78	92	14
11	82	96	12
12	50	84	34
13	74	86	12
14	78	88	10
15	70	82	12
16	64	76	12
17	90	98	8
18	92	98	6
19	86	92	6
20	78	86	8
21	86	94	8
22	68	64	-4
23	86	94	8
24	56	66	10
25	90	98	8
26	82	92	10
27	74	96	22
28	72	84	12
29	40	64	24
30	54	78	22
31	76	90	14
32	66	78	12
33	60	76	16
34	76	92	16
35	72	86	14
36	88	98	10
37	72	92	20
38	68	84	16
39	88	94	6
40	40	62	22
41	82	94	12
42	74	88	14
43	78	94	16
44	66	94	28
45	84	92	8
46	56	72	16
47	88	92	4
48	76	92	16
49	82	98	14
50	74	86	12
Average	74.2	87.68	13.38

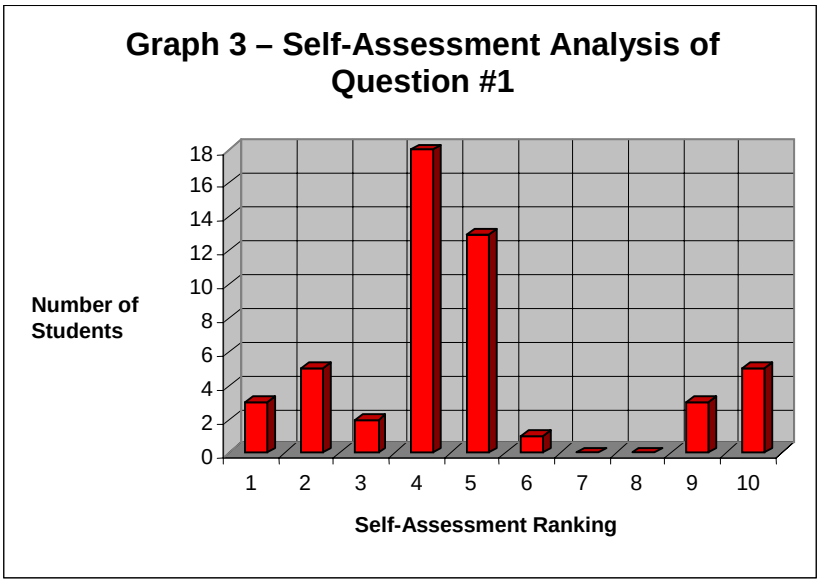

Figure 3. Analysis of self-assessment question1.

Conclusions and Recommendations

The evaluation of this material has shown me that the use of a pre-test can help the educator in modifying lessons plans and units. Using post-test data in comparison to pre-test data also allows the educator to self-assess the quality of lessons by assessing what type of improvements the students may show. This study has shown that self-assessment can aid the student, as well as the educator.

Although the research did not show a remarkable improvement in the students' scoring, it did show a noticeable improvement. In comparison to the pre-test and post-test analysis, the self-assessment analysis rendered results of students' self-improvement. While the two are different sets of data, they still correlate to some degree. Composition is a skill that is of great importance in seventh grade Language Arts testing in the Tennessee Comprehension Assessment Program (TCAP). The upgrade in the mean score representing improvement showed that the

students' composition skills had developed from the instruction. Although there was a positive and noticeable improvement, with more experience and research, better results can be obtained.

The National Council of Teachers of English (NCTE) has put together a helpful brochure that includes research on many different facets of English such as literacy skills and composition. In this brochure, NCTE supports research regarding student self-assessment and reflection. NCTE holds the opinion that better methods of evaluation could improve the work of students. NCTE (n. d.)offers several awards and grants that offer money for research purposes or professional development (www.ncte.org). The National Endowment for Humanities (n. d.) offers grant money to support projects that improve specific areas of education that can be used as national models (www.fedgrants.gov). There are also many different technological resources that can be used to aid educators in evaluation and assessment purposes such as Plato computer programs that are geared to aid students in preparation for TCAP tests, Gateway tests, and end of course tests.

Bibliography

Bruce, L. B. (2001, September). Student self-assessment: Making standards come alive [Electronic version]. *Classroom Leadership, 5*(1), 1-6. Retrieved November 15, 2004, from http://www.ascd.org/

Hernandez, O. (2000). Evaluation. In W. B. Stapp (Ed.), *Handbook for International Practitioners* (pp. 61-65). Washington, DC: Academy for Educational Development.

National Endowment for Humanities. (n. d.). Retrieved November 18, 2004, from http://www.fedgrants.gov/

National Council of Teachers of English (n.d.). Retrieved November 18, 2004, from http://www.ncte.org/

Oakes, J. M., & Feldman, H. A. (2001). Statistical power for nonequivalent pretest-posttest designs. *Evaluation Review, 25*(1), 3-28.

Yancey, K. B. (1992). *Portfolios in the writing classroom.* Urbana, IL: National Council for Teachers of English.

Yancey K. B. (1998, September-October). Getting beyond exhaustion: Reflection, self-assessment, and learning. *The Clearing House, 7*(1), 13-15.

Appendix A: Pre-test and Post-test

DIRECTIONS: Read each story, and circle the letter of the correct answer. Then, write supporting details on the answer lines.

Many people collect seashells. People in many part of the world have used shells for money. Some shells are used for decoration. Some animals are fed ground-up shells, and sometimes ground shells are added to soil to improve its quality.

1. This story is mainly about_____.
- **a.** using shells for game markers
- **b.** the many uses of seashells
- **c.** feeding animals ground shells
- **d.** how shells can ruin soil quality

2. What details support this main idea?

_____
_____
_____

The whale is often mistaken for a fish instead of a mammal. The whale breathes air, has hair on parts of its body, and is warm-blooded. Baby whales, called claves, get milk form their mother's body. These are all characteristics of mammals.

3. This story is mainly about_____.
- **a.** baby whales called calves
- **b.** whales being mammals
- **c.** habits of the blue whale
- **d.** the whale's blood

4. What details support this main idea?

_____
_____
_____

5. Would it not be great if you could build your own best friend? Let's say you could somehow "create" a best buddy. Define in a single paragraph what a perfect friend means to you.

Appendix B: Self-assessment

SELF-ASSESSMENT

DIRECTIONS: Read each question carefully and answer it as honestly as possible. Use the 1-10 rating scale to assess your own work and experiences. In some cases you will use the rating scale as if it were representing percentages, in some cases it will apply to numerical grades and some will be to what extent do you agree or disagree. You can decide on an individual basis which method to choose.

1. Compare your composition from your pre-test to that on your post-test. To what extent, if any, do you feel that your writing style improved?

   0 1 2 3 4 5 6 7 8 9 10

2. Reflect upon the planning process you chose to use for the composition section of the post-test. To what extent, if any, did you feel more prepared to write the descriptive paragraph on your post-test?

   0 1 2 3 4 5 6 7 8 9 10

3. Compare your composition from your pre-test to that on your post-test. To what extent, if any, do you believe that using the five sentence structure for composing a paragraph aids in the writing process?

   0 1 2 3 4 5 6 7 8 9 10

4. Reflect upon the group decisions that formed the rubric for grading descriptive paragraphs. To what extent, if any, do you feel that being aware of the grading process helped you to write better?

   0 1 2 3 4 5 6 7 8 9 10

5. To what extent, if any, did you utilize the correction systems to earn full credit?

   0 1 2 3 4 5 6 7 8 9 10

6. Consider what you believe your grade for this unit would have been like it the corrections system was not being utilized. To what extent, if any, do you believe that the corrections system allowed you to earn a better grade than normal?

0 1 2 3 4 5 6 7 8 9 10

7. Reflect upon receiving a graded descriptive paragraph back. To what extent, if any, do you believe that your grade was correct according to the rubric the class designed as a group?

0 1 2 3 4 5 6 7 8 9 10

8. Using 10 as 100, 7 as 70 and so forth, read your descriptive paragraph from the pre-test and assign it a grade according to your own standards.

0 1 2 3 4 5 6 7 8 9 10

9. Using 10 as 100, 7 as 70 and so forth, read your descriptive paragraph for the post-test and assign it a grade according to your own standards.

0 1 2 3 4 5 6 7 8 9 10

10. To what extent, if any, do you believe that the peer proofreading and tutoring helped your writing process?

0 1 2 3 4 5 6 7 8 9 10

Inclusion in the Science Classroom:

A Review of Literature

Bonnie Roberts
EDUC 590
Fall 2004

Introduction

As a requirement of my graduate course work, two summers ago, I took a course dealing with diversity in the classroom. To emphasize the rising number of diverse learners and to convey the varying degrees of diversity, the professor provided the class with the following statistics (source unknown): for the 1997-98 school year, the total number of students with disabilities was 5,903,609 (12.8%) out of approximately 80 million total students; 95% of these students with disabilities were served in school settings, with approximately 50% served in regular classroom settings. Some of the degrees of diversity included but were not limited to special needs such as LD (learning disabled), HI (hearing impaired), SED (seriously emotionally disturbed), and VI (visually impaired). This may sound incredibly naïve, but in my pursuit to obtain teaching credentials, I had not considered the impact or the presence that certain students would have in my future classroom. From my own middle and high school perspective, I experienced little diversity and had a preconceived notion that special education students could be overtly identified and, when included in general classroom settings, it would be for classes such as art, music, or physical education. It has become a grave concern that, not only should I strive to be an effective educator for the students *not* identified with special needs, but that I maintain the same effectiveness in working with students who *have* been identified as having special needs. I am very much interested in the tools and procedures that I can implement in my future classroom in order to enable a wide range of students to achieve academic success.

What We Know

As educators, we know that the inclusion of students identified with special needs into the least restrictive classroom is the mandated approach the government would have us employ. It is beneficial for special needs students to be included in general education classrooms, other than

sheltered in secluded, special education classes, so as to broaden their school experience and prepare them for entering the world without modifications. Another benefit to be gained by the inclusion mandate is that to society—the diversity and culture to be gained from including students from all learning levels will only help us grow as individuals and as a society.

A preliminary search of several databases using the keywords “inclusion” and “science classroom” provided an adequate list of references, ranging from books to journal articles. The literature reviewed for this inquiry includes various topics from specific research projects using preservice and inservice teachers to articles providing empirical data supporting teaching theories to teaching strategies. An underlying theme common to all the literature is the need for collaboration between the general classroom teacher and the special education teacher and the need for a more encompassing support network.

Rationale

I conducted interviews with both special education and general education teachers at a middle school in Marion County (TN). I was invited to talk with any and all of the science teachers and welcomed to do observations. From the interviews, it appears that the special education teachers and science teachers are working collaboratively to serve the needs of the students identified with special needs. There are several strategies and modifications made, on an individual basis, for each student. The strategy that I found most interesting was that of peer tutoring. As an example, the school operates on a “block schedule.” The block scheduling affords the opportunity for students to be divided into small groups, and the students, as a group, review and learn the prescribed vocabulary words for a unit or chapter. This implementation is currently being used in the middle school’s science and social studies classes.

Problem Statement

Inclusion in the science classroom contains many facets. There are a variety of possibilities for researching this particular topic. Legal implications alone fill volumes of literature. Also, another very broad aspect that could be considered is the efficacy of professional collaboration in serving students identified with special needs. In order to narrow this voluminous area of research into a more manageable research enquiry, my goal is to determine if students who have been identified with special needs at a Hamilton County (TN) middle school can attain academic achievement, comparable to their peers, in the science classroom through the use of peer tutoring.

Review of Literature

When the *Education of All Handicapped Children Act,* PL 94-142, now known as IDEA, was enacted in 1975, public education was forever changed. The law specifically provides that students with disabilities must be educated in the "least restrictive environment." For a child to qualify for special education services under IDEA, two separate criteria must be met. First, the child must have a disabling condition, and, second, the child must, because of that disability, need special education and related services. Children who are mentally handicapped, hearing impaired, deaf, speech or language impaired, visually impaired, seriously emotionally disturbed, orthopedically impaired, health impaired in other ways, deaf-blind, multi-handicapped, or with traumatic brain injury, autism, or specific learning disabilities, qualify for special education services (Conn, 2001).

Impact on General Education Teachers

Many secondary science teachers feel overwhelmed by directives to adapt curriculum and instruction for students with special needs. Science teachers often have little background or training in dealing with students with disabilities and may feel resentful if they perceive a few

special needs students to be monopolizing the attention and energy they should be spending on the "normal" students in their classes (Conn, 2001). The task facing nearly every general education teacher today is how to incorporate, as seamlessly as possible, learning strategies so all students can thrive. In order to make inclusion effective and beneficial to students, Kumar (2002) asserts that the following issues must be addressed: sufficient training in special education, adequate preparation and planning time, smaller classes, qualified support staff, necessary curriculum resources, adaptive technologies, academic freedom to make instructional decisions, research-based information, and support from parents and administrators.

Strategies

In the 1960s and early 1980s, reports focused on methods for enhancing learning from science textbooks (Scruggs, Mastropieri, and Boon, 1998). In the later 1980s and early 1990s, researchers again began looking at more constructivist science learning practices focused on students with disabilities (Scruggs et al., 1998). There are many evolving methods for including students with special needs in today's science classroom. A very promising strategy for the inclusive classroom is peer tutoring. Grouping or pairing students of mixed abilities, coupled with high expectations, can improve a student's academic achievement and help the student to develop greater self-confidence, more cross-cultural understanding, and enhanced social skills (Jarrett, 1999). A peer tutoring model at Juniper Gardens Children's Project in Kansas City has done longitudinal studies which followed students from kindergarten through grade 12. Not only did students perform better on standardized tests, but, by 7th grade, fewer students required special education services, and by 12th grade, fewer of the students involved in peer tutoring had dropped out of high school. Peer tutoring increased the student's learning opportunities and provided immediate feedback (Haskell, 2000).

Virtually all contemporary educational reform documents call for the teaching of science to be inquiry-based under the assumption that, as students engage in inquiry activity, they acquire the knowledge, skills, and habits of mind that will enable them to come to deep understanding of the big ideas in science and to become adept with the process of engaging in scientific reasoning (Palincsar, Collins, Marano, & Magnusson, 2000). In a study using GIsML (Guided Inquiry supporting Multiple Literacies) instruction, Palincsar et al. were able to determine that a fourth grader, who was identified as "profoundly learning disabled" and who was reading on a first grade level, had the cognitive capacity to process the hands-on science activities done in class. The fourth grader, and many students like him, lack the reading and writing skills necessary to explain what their minds have processed. It should be noted that this study was not representative of a typical classroom, however, because the researcher had assistants and notetakers for the children with special needs. What a single teacher may perceive as negative outbursts and unruly behavior, a researcher with a supportive staff may view as frustration and lack of social skills by the special needs student.

Team teaching is another powerful tool in integrating students with special needs into a general science class. With meticulous planning and the same expectations for all students, general education teachers and special education teachers have shown that both students with learning disabilities, and those without, benefit from the heterogeneous mixture of students (*Toward inclusive classrooms,* 1995).

Whether team teaching, using inquiry-based curriculum, or peer tutoring, some of the essential ingredients for successful incorporation into the science classroom are (a) adequate preparation; (b) the modification of lesson format, instruction, and materials; and (c) maintaining high expectations for all students (Ormsbee & Finson, 2000). Ormsbee and Finson related a

practical example of retooling a basic and well-known science experiment into a project modified to ensure that learners had access to all levels of instruction. The retooling was not especially difficult or financially draining and could be done when first planning a lesson and preparing materials.

Cawley, Hayden, Cade, and Baker-Kroczynski (2002) describe a school-based project designed to close the gap between research and practice by having project staff and teachers work together in the design and implementation of a science project designed to include junior high school students with severe emotional disturbances or learning disabilities into the general education science classroom. The outcomes of the project indicated that there were no behavioral difficulties, and academic performances by the special needs students were comparable to the general education students.

A state-funded project at Southeastern Louisiana University offered coursework and direct classroom assistance to general educators attempting to include students with disabilities for mathematics and science instruction. The project was effective in dispensing information to general educators in curricular accommodations, behavior management techniques, and collaboration skills (Coombs-Richardson, Al-Juraid, & Stuker, 2000).

References

Cawley, J., Hayden, S., Cade, E., & Baker-Kroczynski, S. (2002). Including students with disabilities into the general education science classroom. *Exceptional Children, 68*(4), 423-435. (ERIC Document Reproduction Service No. 2002-15212-001).

Conn, K. (2001). Supporting special students. *Science Teacher, 68*(3), 32-35. (ERIC Document Reproduction Service No. EJ625500)

Coombs-Richardson, R., Al-Juraid, S. E., & Stuker, J. D. (2000). *Supporting general educators' inclusive practices in mathematics and science education*. Presentation from the International Consortium for Research in Science and Mathematics Education, Costa Rica, February 4-8, 2000. (ERIC Document Reproduction Service No. ED449609)

Haskell, D. H. (2000). Building bridges between science and special education: Inclusion in the Science Classroom. *Electronic Journal of Science Education, 4*(3) March 2000. (ERIC Document Reproduction Service No. EJ651179)

Jarrett, D. (1999). *The inclusive classroom: Mathematics and science instruction for students with learning disabilities.* It's Just Good Teaching. (Contract/Grant Numbers: RJ96006501). Department of Education. (ERIC Document Reproduction Service No. ED433647)

Kumar, D. D. (2002). Inclusion policy and science teaching: A view from the USA. *School-Science-Review, 83*(305), 107-12. (ERIC Document Reproduction Service No. EJ652805)

McGinnis, J. R. (2002). Preparing prospective teachers to teach students with developmental delays in science: A moral perspective. Maryland Univ., College Park. Dept of Curriculum and Instruction. (ERIC Document Reproduction Service No. ED463969)

Ormsbee, C. K., & Finson, K. D. (2000). Modifying science activities and materials to enhance instruction for students with learning and behavioral problems. *Intervention in School and Clinic, 36*(1), 10-21. (ERIC Document Reproduction Service No. EJ613032)

Palincsar, A. S., Collins, K. M., Marano, N. L. and Magnusson, S. J. (2000). Investigating the engagement and learning of students with learning disabilities in guided inquiry science teaching. *Language, Speech, and Hearing Services in Schools, 31*(3), 240-251. (ERIC Document Reproduction Service No. 2001-14711-003)

Scruggs, T. E., Mastropieri, M. A., & Boon, R. (1998). Science education for students with disabilities: A review of recent research. *Studies in Science Education, 32*, 21-44. (ERIC Document Reproduction Service No. EJ584560)

Toward inclusive classrooms. (1995). *TEACHING Exceptional Children*, *27*, 72-74. (ERIC Document Reproduction Service No. EJ503050)

Year-Round Education: A Review of Literature

Presented to the
Faculty of
The University of Tennessee at Chattanooga

Merritt R. Rogers

Introduction

Year after year, schools across the United States of America seek out new ideas to achieve excellence in education. Many educational systems set aside calendar days and funds to establish new reform efforts. The reforms mostly are concerned with test scores, higher-levels of communication, safety, and attendance rates. However, one issue that is often overlooked that may correct all of these concerns is the reorganization of the school calendar. Year-round calendars have been created and tested as one way for improving the issues of student and teacher burn-out, attendance rates, test scores, and reducing the loss of learning. While many areas of the nation maintain a traditional, 9-month educational calendar, others are reorganizing the calendar to create 12-month schedules.

A year-round school calendar is the reorganization of the traditional 9-month calendar. Generally, children in both year-round and traditional calendars attend school the same number of days, which is approximately 180 days. The traditional calendar begins the school year in August and ends in May, with 10 to 12 weeks of summer vacation. The restructured, year-round schedule begins in August and ends in July, with a summer vacation of no longer than 8 weeks. The year-round educational calendar is distinguished by the length and scheduling of the learning and vacation periods (Kneese, 2000).

Traditional scheduling of educational systems was originally established to coordinate with the American farming community. The system was instituted when the United States of America based its economy mainly on agriculture. During this era of American history, children were needed to labor in the fields in late spring and summer to plant and harvest crops (Simpson, 2001). School took a distant second place to the survival of the entire family. Education was not considered to be the top priority. So, if the school desired for students to attend class, they had to

base the calendar around the farming schedules (Gregory, 1994). At this time in American history, 85 percent of the U.S. schools were in rural areas. Thus, urban area schools chose to implement the same 9-month schedule. Currently, approximately only three percent of the United States population participates in the agricultural part of the economy. Since the decline and disappearance of the agricultural community, it would appear that this traditional educational schedule has outlived its purpose and usefulness.

A student can become just as tired and frustrated as teachers. Teachers become exhausted from tirelessly pushing ahead, and students become worn out from being pushed. In today's world of teaching, there are more curriculum objectives and skills that must be taught. Teachers often have so much information to teach that they do not have time for the students to practice what they have learned.

In the traditional, 9-month calendar, vacations are few and far between. Also, the breaks are not necessarily scheduled when the students or teachers need some refreshing time off. With these feelings of exhaustion, fatigue, and frustration come high absentee rates and low motivation for students and teachers, and long-term retention diminishes. Students and teachers often just need a day or so away from school to recollect their thoughts and actions. The more days that are missed, the easier they are to take and more desirable they can become.

The pros and cons of year-round schooling schedules have been analyzed and researched. The research shows that more pros than cons exist in year round schools. Attendance rates, motivation, and test scores have been shown to improve through the use of this calendar.

The majority of our country continues to educate children on the antiquated school calendar, which was implemented over 100 years ago. A reform method that has been created, tested, and assessed in hopes of restoring an effective schedule is year- round schooling.

Educational leaders attempt to maintain high levels of student and teacher morale, motivation, and attendance, but this is often a hard task to accomplish. With the traditional 9-month calendar, scheduled vacations or breaks are few and far between. Students and teachers experience mental and physical fatigue and anxiety. These distressing feelings can reduce the performance and attitudes of students and teachers. Lower rates of attendance and retention of knowledge from both groups occur due to the infrequent vacations during the traditional 9-month calendar (Simpson, 2001).

Year-round education is a reform method of the future. Many educational systems across the United States of America have already adopted this updated calendar. It has been estimated that more than 1.3 million children in the United States attend a year- round school. Approximately 1,600 public schools and 15 private schools participate in year-round schooling. This is an idea that former U.S. Secretary of Education, Lamar Alexander, looked at positively. “I like the idea of changing the school year,” he said. “It’s one of those obvious parts of American education that obviously needs to change but won’t happen; and whenever that happens you look for wisdom among the people because it is often there.” It’s also one very important way to get students up to world standard, he said (Bencivenga, 1991, p. 1).

Currently, other systems are assessing the research data, and are thinking of going the route of a 12-month calendar. It is important for everyone involved with the world of education to be informed of these educational changes, along with their positive and negative impacts.

The purpose of this study is to determine the effects of implementing a year-round education program in a given rural county. Research based on the history, pros and cons, and effects of year-round schools will be reviewed. The significant importance of this study is to determine if the alternative calendar of year-round schooling brings about changes in a small,

rural school. Attendance of students and teachers is vital to an educational system. If either group is repeatedly absent, learning does not and cannot take place. When students or teachers burn out, quality learning is also affected. Without the proper time to gather thoughts and to collect or organize information, a person can become mentally drained. Time and again, this transpires within students and teachers that attend traditional 9-month schools. Lower attendance rates are proof of these circumstances.

The numerous breaks or vacations of the reorganized year-round schooling calendar allow students and teachers time to energize mind and body. During these intersessions, stress, fatigue, and weariness are reported to diminish. Both groups return to school, after the break, recharged and revitalized.

Definition of Terms

Traditional school calendar-	A calendar with 180 days where students attend school with no breaks between the 6- or 9-week grading period, with the exception of the traditional holiday breaks. The calendar begins in August and ends in May.
Year-round school calendar-	A reorganized school year that is intended to provide continuous learning by reducing the length of the long summer vacation. Shorter and more frequent breaks span a 12-month period.
Track-	An organized sequence of school and vacation days that an educational system has chosen to follow for the school year.

Single Track-	A year-round educational schedule in which all students and teachers follow the same calendar.
Multi-Track-	A year-round education schedule in which students and teachers are divided into groups and assigned to one of several tracks with staggered instructional blocks and vacation periods.
Intersession-	Designated days or breaks in which students and teachers are not attending school.
45-15 and 45-10 Single Track-	An alternative schedule in which the school year is divided into four, 9-week terms with a 3-week intersession between each 9-week grading period.
60-20 and 60-15-	An alternative schedule in which the school year is divided into three, 60-day sessions with three, 20-day intersession periods. This schedule can be carried to use either the single-track or multi-track system.
Concept 6-	An alternative schedule school year is divided into six terms of approximately 43 days each. Students and teachers attend two consecutive sessions and then have one session off, for a total of 172 instructional days**.**

Review of Literature

It is a common saying that absence makes the heart grow fonder. Time given away from anything in life often does the mind and body good. A person's mind and body can only tolerate

so much of any one element before it shuts down. Everyone needs time to relax and process knowledge and information that is occurring in their lives. This is most certainly true for students and teachers. So, why do most schools still operate on the traditional 9-month calendar when there is the alternative of year-round schooling?

The traditional educational calendar was established over 100 years ago, and supporters of year-round schooling believe that it is a time for a change in the world of education. Few families in the United States currently rely on agriculture as their chief source of income. However, the ones that still do, no longer need their children to spend as many hours assisting in the fields. Technology has improved farming and ranching. It has made agriculture much easier and faster, and fewer people are now needed to do the work (Gregory, 1994).

Year-round education (YRE) is a model that reorganized the traditional school year or calendar to provide more on-going learning by changing the long summer vacation into shorter, more frequent vacations (Kneese, 2000). Students on a year-round schedule attend the same number of days as students who are on a 9-month schedule of 180 days. These days are just arranged differently (Weaver, 1992).

A year-round school is normally established as single-track or multiple-track schedules. Of the year round schools of the United States of America, 59 percent are on single-tracks, and 41 percent are on multi-tracks. Single-track calendars consist of unified attendance of all teachers and students, and multi-track calendars have staggered attendance programs. Some multi-tracks use a combination of the two schedules. The major difference between the two is the single-track programs allow for the entire student population and faculty to follow the same school calendar. The multi-track programs permit for the division of students and teachers into groups. These groups can be assigned to one of several tracks with staggered instructional blocks and vacation

periods (Palmer & Bemis, 2002). This allows a school to enroll more students than the school building was intended to house. A school in a building built for 750 students can enroll as many as 1,000 students on a four-track schedule (Weaver, 1992).

The 60-20 calendar is another option for year-round schooling. The school year is divided into three, 60-day sessions with three, 20-day vacation periods. A variation on this schedule is the 60-15, which allocates for an additional 3- to 4-week universal vacation. These calendars represent 37.1 percent of year-round schools (Palmer & Bemis, 2002).

The 45-15 and 45-10 account for the largest percentage of all year-round schedules. The percentage is 39.6. The 45-10 program offers 45 days of instruction followed by 15 days of vacation. The correlated 45-10 program creates an additional 4-week, shared vacation for all faculty members and students. Either of these calendars can be employed as a single-track or multi-track schedule (Palmer & Bemis, 2002).

The school year is divided into six terms in the Concept 6 program. Each term is approximately 43 days. Faculty and students go to school for two consecutive sessions and then have one session off for a total of 172 instructional days. From 1997 to 1998, this type of calendar was characterized by 8.3 percent of the year round school programs (Palmer & Bemis, 2002).

History of Year Round School

In the United States, the first year-round school was opened in 1904, in Bluffton, Indiana. The purpose of opening this type of school was to increase the building's capacity and student achievement (Glines, 1995). The calendar was arranged into four quarters and Indiana became known as the forerunner of modern year-round education.

From 1910 to 1938, a variety of forms of year-round and extended calendars began to appear. They were used to increase space, improve the quality of education, provide a setting in which European immigrant children could learn English, and offer 12-month access to vocational training. Texas, New Jersey, North Dakota, Nebraska, Tennessee, and Pennsylvania were states that participated in this educational reform effort.

During World War II, year-round education came to an end. During this time, national uniformity was considered essential to the war effort. This also supplied summer workers for the farms and factories.

Year-round education was beginning to be discussed in Minneapolis, Los Angeles, Michigan, and New York from 1946 to 1967. However, it was not implemented. Reconstructing America, and the Korean and Vietnam wars were primarily the issues of concern.

In 1968, Hayward, California put into practice an official 50-15 year-round school. The program was established at Park Elementary School. It later became a 45-15 plan, but continues to be the longest running year-round educational program in the U.S.

Francis Howell School District, in St. Charles, Missouri, pioneered the first multiple-track calendar in the country. It was a calendar in which school was attended for 9 weeks, followed by 3 weeks of intersession, which now is commonly known as the 45-15 schedule. In that same year, 1969, Wilson Campus School, at Mankato State University in Mankato, Minnesota, executed the personalized, continuous-year, 12-month calendar.

From the 1970's to the 1980's, several schools across the United States successfully established and implemented multi-track schedules. Studies, proposal plans, and execution projects for year-round schooling continued. By 1990, 859 schools, and 733,660 students in 152 districts and 22 states were participating in some form of year-round education.

All the while, interest in year-round education still increased across the nation. A consistent growth pattern was maintained from 1993 to 1998, and, in 1999, the number of students enrolled in a year-round school surpassed the two million mark. From 2000 to 2002, Mississippi, South Dakota, the District of Columbia, and North Dakota all added year-round schools to their educational program. Year-round education is now in its fifth consecutive year (National Association for Year Round Education, 2002).

As more and more school systems make the change to the alternative calendar of year-round schooling and others consider the conversion, there is a big question: What are the advantages and disadvantages of these programs? Are they worth the time and expense?

Some of the perceived advantages of year-round schooling programs are improved student achievement, improved teacher and student attendance, reduction in discipline problems, reduction in teacher stress, and increased availability of enrichment opportunities during intersessions. Some benefits that can only be accredited to multi-track programs are ease in overcrowding, opportunities for teachers to work year-round, and better use of facilities (Brekke, 1992; Stenvall, 1997). Many of the perceived disadvantages include increased administrator burn-out, scheduling conflicts between family vacations and school/community activities, difficulty in arranging daycare, having siblings on different attendance schedules, difficulty in scheduling teacher in-service days, and increased costs of operation. Multi-track plans may require additional operating costs, lack sufficient time for maintenance, be inconvenient for teachers, lead to overworked clerical staff, increase difficulties in communicating with staff or parents, and result in a student missing school events scheduled at off-track times (Stevall, 1997; Worthen & Zsiray, 1994).

Student and teacher attendance is another professed advantage of year-round schooling. “Schools that have gone to a year-round calendar notice higher attendance rates among both teachers and students because of more frequent vacation,” says Mr. Ballinger the executive director of the Nation Association for Year Round Education (Bencivenga, 1992, p. 9). The more frequent breaks help teachers and students to pay attention and maintain higher levels of motivation. Just when everyone is getting restless, it is time for a break. After every vacation, the students and teachers return to school rested, refreshed, and ready to learn and teach again (Wolf, 1997). Absenteeism is greatly reduced due to these frequent scheduled breaks (Palar, 1996).

A study conducted in 1996, by Prohm and Baenen, found improved attendance rates in all studies of year-round schools. They found, on average, that students enrolled in year-round schools had two fewer unexcused absences and 1.1 fewer excused absences than students attending traditional schools (Prohm & Baenen, 1996). Research reports that teachers were absent considerably less in year-round schools (Brekke, 1986). Validated results indicate that year-round calendars decrease teacher absences considerably (Worthen & Zsiray, 1994). Five out of six studies regarding teacher attendance showed evidence of a decrease in teacher absenteeism in year-round schools, ranging from 1 to 3 days (Palmer & Bemis, 2002).

Another primary educational advantage of year-round education is that the calendar fosters continuous student learning. Students tend to forget much of what they learned in school while on the long summer break (Weaver, 1992). Studies illustrate that, when the majority of American children return to school in the fall, they have forgotten most of the skills previous learned in the spring (Simpson, 2001). This is especially true of disadvantaged students (Weaver, 1992). Teachers are often required to use 4 to 6 weeks of instructional time of the new school year to reteach the last semester’s lessons. Year-round education minimizes the ‘summer

setback' and teachers can introduce new materials at the beginning of the new semester (Simpson, 2001). Less information is forgotten over the shortened vacations. Thus, teachers need to spend little to no time reviewing information (Weaver, 1992).

With the advantages of year-round education, there also comes disadvantages. The largest impact of this alternative schedule is the impact on the family. The school calendar often has an adverse impact on family vacations and childcare. Three studies regarding these areas and year-round education arrived at the conclusion that these arrangements were not as difficult to make as the parents surveyed thought. The vacation planning was complicated by the extended calendar, while one-half stated that it made vacations much easier to plan (Glass, 1992).

Administrative burn-out is another primary disadvantage and concern of year- round schooling. It is assumed that the principal of a year-round school deals with more situations at the most difficult times of the year. The principal may experience more stress and burn-out (French, 1992). However, researchers have administered the Maslach Burn-out Inventory to 69 year-round school principals and 70 traditional school principals. They reported no noteworthy differentiation in the emotional exhaustion, depersonalization, or personal accomplishments between the two groups (Palmer & Bemis, 2002).

The scheduling of professional development sessions for teachers is also a perceived disadvantage of the year-round calendar. Findings of a study related to this topic stated that teachers found it challenging to attend professional conferences, staff development activities, and college courses. This was more difficult than they had anticipated. However, another study compared traditional calendar teachers with teachers on a year-round calendar. This particular study established no major variations between the two groups of teachers regarding the ease of attending these activities (Palmer & Bemis, 2002).

The number of year-round educational systems in the United States has significantly increased over the past decade. Commonly, the more experience teachers, principals, students, and parents have with year-round education, the more they tend to like it. However, the process of changing the school calendar from the traditional schedule to the year-round schedule can be stressful. Often, time to adapt is needed (Kneese, 2000).

Most adversaries of year-round schooling are simply opposed to breaking with tradition. Others point to the more substantive drawbacks (Gale Encyclopedia, 1998). However, society has changed and few Americans today can enjoy the lazy, leisure days of summer. The public education system needs to isolate and accept this transformation. The changes should be reacted to in a dynamic manner. Schools dedicated to improvement need to make considerable changes, not just cosmetic ones (Barber, 1996).

Although much has been written about year-round education, most of the research to date has been incomplete or poorly designed, leaving educators at a loss for solid data upon which to draw conclusions. A more comprehensive review of year-round models and their impacts, and implications for public policy are needed to properly inform society (Palmer & Bemis, 2002).

References

Barber, R. (1996, October). Year-round schooling really works. *Education Digest, 62*(2), 31-33.

Bencivenga, J. (1991, September 9). Year round schooling catches on. *The Christian Science Monitor*, pp. 9-11.

Brekke, N. (1986). *Year-round education and academic achievement in the Oxnard School District*. Oxnard, CA: Oxnard School District. (Eric Document Reproduction Service No. ED272974)

Brekke, N. (1992). Year round schools: An efficient and effective use of resources. *Journal of Research and Development in Education, 29* (2), 60-72.

French, D. (1992). *California administrative burnout and year round schools*. Paper presented at the Annual Meeting of the National Association for Year Round Education. San Francisco, CA, February 1992. (ERIC Document Reproduction Service No. ED347660)

Gale Encyclopedia of Childhood and Adolescence (2002). Year-round school. *18,* 211-213. Chicago, IL: Gale Encyclopedia.

Glass, G. (1991). *Policy considerations in conversion to year-round schools.* Tempe: Arizona State University, Tempe College of Education, and Education Policy Studies Laboratory.

Glines, D. (1995). *Year-round education: History, philosophy, and future*. San Diego, CA: National Association for Year-Round Education.

Gregory, C. (1994, August 1). Education: Everyone into the school. *Time*, p. 48.

Kneese, C. (2000). The impact of year-round school on student learning: A study of six elementary schools. *ERS Spectrum, 11*(1), 1-11.

National Association for Year Round Education. (2002, February 15). Retrieved December 13, 2004, from http://www.NAYRE.org

Palar, B. (1996, May). A change of schedule. *Better Homes and Gardens*, 108-112.

Palmer, E., & Bemis, A. (2002). *Alternative calendars: Extended learning and year round programs*. Crookston, MN: University of Minnesota, College of Education and Human Development.

Prohm, B., & Baenen, N. (1996). Are year round multi-track elementary schools effective? An analysis of school in Wake County, North Carolina. *ERE Spectrum, 14*(3), pp. 42-47.

Simpson, C. (2001, June 11). Making the grade: U.S. should move to year-round school. *The New York Times*, pp. B6.

Stenvall, M. (1997). *A checklist for success*. San Diego, CA: National Association for Year Round Education.

Weaver, T. (1992). *Year round education*. San Diego, CA: California State Department of Education. (ERIC Document Reproduction Service No. ED342107)

Wolf, M. (1996, August 2). Year-round schools bring higher scores. *Des Moines Register*, pp. 1-2A.

Worthen, B. R., & Zsiray, S. W. (1994). *What twenty years of educational studies reveal about year-round education*. Chapel Hill, NC: North Carolina Educational Policy Research Center. (ERIC Document Reproduction Service No. ED373413)

Teaching Spelling Using Balanced Literacy: A Review of Literature

Donna Scagnegatti

December 3, 2004

EDUC 590

Culminating Experience

Dr. McAllister

Introduction

I have chosen the topic of “skills-based instruction” vs. “whole-language instruction” for this paper. The reason I chose this topic is because it has greatly affected my life as a future teacher. I have taken two classes regarding teaching strategies and each class was rich with helpful balanced literacy instruction strategies. I was very excited to try out these new and exciting teaching techniques during my student teaching experience. As an education student, I have visited numerous schools to observe and learn how teachers instruct their students. During this time, I noticed that all of the teachers I observed used skills-based instruction as their preferred method of teaching. This type of instruction goes against everything that I have learned as a student who wants to become a teacher. This issue was brought up by another student in one of my classes and it was explained that we are going to be a new breed of teachers who may experience a lack of support upon entering the schools. I soon realized that I would probably face a similar situation when I got my first teaching job, so I wanted to learn all I possibly could about both teaching techniques in order to better prepare myself. I must admit that I prefer teaching using the balanced literacy approach because it is more interesting and the students seem to enjoy it more that the skills-based approach.

This topic is not only one that interests me, but it is also a topic that has caused much debate in all of the school systems in the United States and abroad. There is a political and educational battle going on regarding which strategies are to be used in the schools. The “No Child Left Behind Act” holds schools accountable for teaching students how to read. Students are tested in reading from the third grade through the eighth grade and the schools that do not show sufficient progress are subject to corrective action (“U.S. Department, 2004a). This is why states and school systems are desperately trying to implement effective teaching practices.

Review of Literature

"The whole-language approach is based on the theory that students learn to read and write best by reading and writing" (Morrow & Strickland, 2000, p. 6). This theory is based on the assumption that if students read or listen to good literature they can derive the meaning of words from the text instead of memorizing a list of vocabulary words. Students can rehearse, relate and talk about words as a means of acquiring a new vocabulary (Nichols & Rupley, 2004, p. 57). The whole-language approach gives students insight into the big picture and demonstrates the importance of reading and writing by using real world experiences. For example, students may read or listen to a book about a restaurant and then, as a group, help to create a menu for their own restaurant. "Children will learn to read and write naturally if they are exposed to quality print and given the chance to write in meaningful situations" (Wharton-McDonald, Pressley, & Hampston, 1998, p. 102).

In France, Pasa conducted a study where he found students who were taught using the whole-language approach ended the school year more successfully than students who were taught using skills-based instruction (Eakle & Garber, 2004, p. 233).

The skills-based approach to reading is centered around phonics which is "a way of teaching reading and spelling that stresses symbol-sound relationships" (Yopp & Yopp, 2000, p. 131). There is no relationship between reading and writing when using this approach. The students learn to read by sounding out the individual words in the decodable text. In order to be able to read successfully, the students must be good at sounding out the individual letters in the words. Writing is taught as a totally separate subject and is not used in conjunction with reading as in the whole-language approach.

"Research shows that you can teach some of the children some of the time with one program, but you can't teach all of the children all of the time with the same program" (Spiegel, 1998, p. 115). Every child is different and learns in a different way, so what is the best way to teach reading to students? "A Balanced Literacy program which allows each teacher to select what is right for each child and each task and to change the emphasis easily" (Spiegel, 1998, p. 116). "A balanced literacy approach is flexible, and that flexibility empowers teachers to tailor what they do for each child each day" (Spiegel, 1998, p. 116).

According to Spiegel (1998, p. 117) a good balanced literacy program has the following characteristics:

- Is built on research.
- Views teachers as informed decision makers and therefore is flexible.
- Is built on a comprehensive view of literacy.

  Literacy involves both reading and writing. Reading is not just word identification, but word identification is part of reading. Readers must be able to take different stances in reading: aesthetic and efferent. Writers must be able to express meaningful ideas clearly. Writing is not just grammar, spelling, and punctuation, but those are all part of effective writing. A comprehensive program develops lifelong readers and writers. (Spiegel, 1998, p. 117)

Balanced literacy approaches view reading and writing as equally important and they are taught together, not as two separate subjects. A balanced literacy Framework consists of five elements of reading: (a) reading aloud; (b) shared reading; (c) guided reading; (d) independent reading; (e) word analysis; and four elements of writing: (a) shared writing, (b) interactive writing, (c) guided

writing or writing workshop, and (d) independent writing (S. Sandefur, personal communications, May 7, 2003).

Using balanced literacy enables children to learn by using many techniques because children learn in many different ways. Research backs up the balanced literacy approach and common sense enables me to understand this is the most effective way to teach children how to read and write. It embraces the skills-based approach to reading and at the same time incorporates the whole-language approach to learning.

Table 1 contains the results of the students' pre-test scores.

Table 1

Pre-Test Results

One student did not spell any of the words correctly.
Two students spelled one word correctly.
Two students spelled two words correctly.
Two students spelled three words correctly.
One student spelled four words correctly.
Three students spelled five words correctly.
Five students spelled six words correctly.
Three students spelled seven words correctly.

Table 2 houses the results of the students' post-test scores.

Table 2

Post-Test Scores

Two students did not spell any words correctly.
Two students spelled six words correctly.
Two students spelled seven words correctly.
One student spelled eight words correctly.
Four students spelled nine words correctly.
Eight students spelled all 10 words correctly.

Figure 1 reveals the mean, median, mode and range of pre-and post-tests.

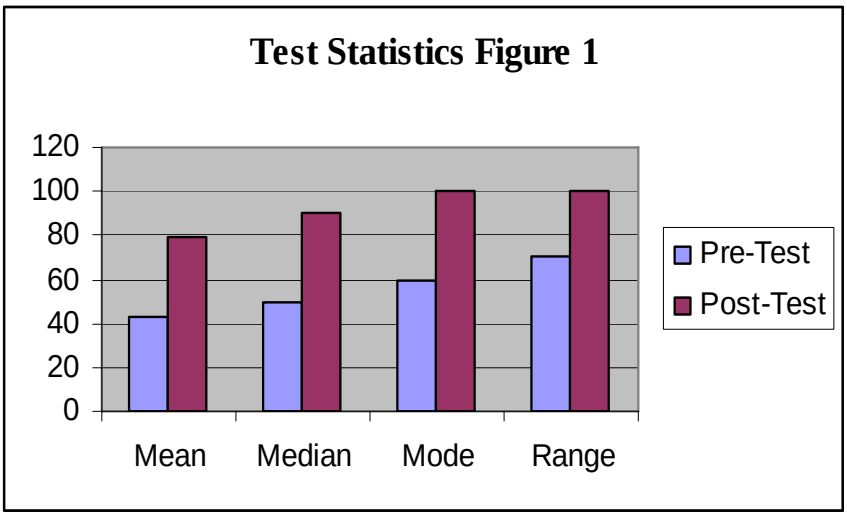

Figure 1. Test statistics.

The case study indicates that using balanced literacy to teach spelling words is an effective teaching method. The students appeared to enjoy reading and writing stories containing their spelling words. I felt that, because I was using different teaching methods, I was better able

to reach all of the students in a manner in which they learn best. The increase in the post-test scores was dramatic and it was exciting to see the results. The study was very short because it was conducted in just 4 days. The students will continue to be tested on their spelling words throughout the school year. Their teacher uses different skill practices to help them learn the words. It is true that the increase in the test scores could be contributed to the fact that the students studied very hard in a variety of ways.

Conclusions and Recommendations

According to the National Education Association, "there is no one way to teach reading that is effective for all students. The teacher is the key to successful reading. Teachers should receive a sound preservice education as well as ongoing professional development in order to implement complete reading programs that address the full spectrum of reading skills and diverse student needs. Teachers should be supported by parents and communities that value and promote reading, and policies that adequate resources and allow them to use their expertise "National Education Association, 2002 p. 2.

I definitely believe that it is beneficial for teachers to receive training in balanced literacy. Knowledge is power, and the more knowledge we have as teachers, the more we are able to effectively teach students. Many teachers who may have not been in school for many years may not be familiar with balanced literacy and its practices. Out of all the research that I have found, there is one common thread that continues to be agreed upon and that is that all students learn differently. In order to reach students in the manner that they learn best, teachers must use multiple teaching strategies and balanced literacy offers numerous teaching techniques.

According to the U.S. Department of Education Web site, there is currently a grant entitled Early Childhood Educator Professional Development 84.349A (U.S. Department of

Education, 2004b, p. 1). " The purpose for this grant is to provide high-quality professional development programs to improve the knowledge and skills of early childhood educators and caregivers who work in early childhood programs located in high-poverty communities and who serve primarily children from low-income families in order to promote school readiness and better learning outcomes for these children"(U.S. Department of Education, 2004b, p. 2). According to the Web site, "these professional development programs must primarily provide research-based training that will improve early childhood pedagogy and will further children's language and literacy skills to prevent them from encountering reading difficulties when they enter school"(U.S. Department of Education, 2004b, p. 1). The deadline for the grant application is 04/15/05 and it offers $2,000,000-$3,000,000 for 2 years or $1,000,000-$1,500,000 for one year (U.S. Department of Education, 2004b, p. 1).

Technology can absolutely be utilized with balanced literacy practices. Software companies are producing software targeted to balanced literacy programs. Software companies such as IntelliTools have developed educational software which use balanced literacy to teach reading. The program includes books, phonic games and word recognition activities (Irons, 2002, p. 1). Keyboards give students the ability to independently write and create many different formats in print, such as menus, lists, recipes, memos, etc. Some students enjoy working on a keyboard and therefore produce better work than if they had written it on paper. Most classrooms contain one or more computers and children are learning to use them at very young ages. Software companies are competing to manufacture a product that will be purchased and endorsed by school systems. Technology and balanced literacy go hand-in-hand to successfully teach children.

References

Eakle, A. J., & Garber, A. M. (2004). International reports on literacy research. *Reading Research Quarterly*, *39*, 230-233.

Irons, P. (2004). *Balanced literacy wins a Tibbetts award*. Retrieved December 1, 2004, from http://www.intellitools.com

Morrow, L. M., & Strickland, D. S. (2000). Beginning reading and writing: perspectives on instruction. In A. Morrow, L.M., & Strickland, D.S.(Eds.), *Beginning reading and writing* (pp.3-21). New York: Teachers College Press.

National Education Association. (2002). *Reading*. Retrieved December 1, 2004, from http://www.nea.org/reading/

Nichols, W. D., & Rupley, W. H. (1999). Matching instructional design with vocabulary instruction. *Reading Horizons*, *45*, 55-71.

Spiegel, D. L. (1998). Silver bullets, babies, and bath water: Literature response groups in a balanced literacy program. *The Reading Teacher*, *52*, 114-123.

U.S. Department of Education. (2004b). Forecast of funding opportunities under the Department of Education discretionary grant programs for fiscal year 2005. Retrieved December 2, 2004, from http://web99.ed.gov/

U.S. Department of Education. (2004a). Executive summary of the no child left behind act of 2001. Retrieved November 28, 2004, from http://www.ed.gov/nclb/overview/intro/execsumm.html

Wharton-McDonald, R., Pressley, M., & Hampston, J. M. (1998). Literacy instruction in nine first-grade classrooms: Teacher characteristics and student achievement. *The Elementary School Journal*, *99*, 101-124.

Yopp, H.K. & Yopp, R.H. (2000). Supporting phonemic awareness development in the classroom. *The Reading Teacher*, 54, 130-143.

Daily Quizzes and the Effectiveness on Knowledge Retention

Joanne P. Woodcook
Education 590
Professor: Dr. D. McAllister

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The Institutional Review Board of the University of Tennessee at Chattanooga (FWA00004149) has approved this research project 04-145.

Introduction

The main objective of this study is to determine whether or not daily quizzes on unit information, in addition to regular instruction in the classroom, positively affect learners' achievement. This study was conducted using groups of sixth-grade, middle school students, in Chattanooga, Tennessee, as comparatives.

The content material covered was about World War I and World War II. The unit was used to create a setting for the novel, *Number the Stars*, by Lois Lowry. The intention of this unit was to ensure that students had a firm grasp on the situation in Europe during the early to mid-1900s, and how people were influenced by the world wars. The underlying goal was that students would better comprehend the story of a little girl dealing with the Holocaust.

The research entailed the use of two groups: (a) the experimental group, which received instruction in addition to daily quizzes based on the previous day's materials; and (b) the control group, which did not receive daily quizzes, only instruction. The two groups were assessed for material learned prior to and after the instructional unit using both a pre-assessment and post-assessment. See Appendix A for the pre- and post-assessment.

The use of a pre-assessment determined the learners' knowledge about the unit material on World War I and World War II, prior to classroom instruction in reading strategies, while the post-assessment determined if students acquired further knowledge after the instructional unit. The comparative method showed whether or not the use of daily quizzes in the classroom affected student learning. Data was gathered for each group and the groups were compared against one another. Anonymity of student names and test performance were respected, as data was converted to group scores. There were no risks to participants in this study.

As a middle school educator, I am interested in the amount of knowledge that students have upon entering a new unit, and how much of the knowledge taught is retained. Being able to design effective lesson plans that help students to retain the materials taught is a topic discussed among today's field of education professionals. With respect to daily quizzes, there are very few comparative studies using experimental and control groups, particularly at the middle school level.

Review of Literature

The world of education has been a base of continuously changing concepts, theories, terminologies, and instructional methods for decades. As the federal government now involves itself in the education system, once a world run by state and local governments, teachers continue to search for the most successful means by which our children should be taught. President George W. Bush has based his No Child Left Behind educational reform on the notion that too many children in the United States are isolated by low expectations, self-doubt, and illiteracy. Furthermore, President Bush has commented that, in a world that is constantly changing, raising its expectations of complex skills in the workforce, children are being left behind (The White House, n.d.).

Whether the best way or not, to help children face the increasingly difficult challenges beyond the school's doors, is by implementing standardized tests, still remains to be proven. What isn't left unclear, however, is the necessity of helping children retain the knowledge that they do gain at school.

Hirsch, in his book, *The Schools We Need and Why We Don't Have Them*, utilizes little restraint when he questions the notion that "our students' ignorance is a condition created by 'the larger culture' rather than a condition created by schooling itself" (Hirsch, 1996, p. 56). Since the

1920s and 1930s, the United States has struggled with the foundation of its educational system; whether it is about teaching the child or teaching the subject, something is lacking because students continue to struggle. Methods like rote memorization, repetition, and daily quizzes have tortured the hearts of those holding down the progressive platform. However, while many believe these methods to be the best way to bore a child and turn them against learning, others believe strongly that they help student retain the information throughout his or her years educationally and, even further, into the work force.

The mind and its ability to grasp new information is the bottom line when it comes to academic success. Studies have shown us what the human brain looks like, how it works, and the best ways to maximize one's memory, more specifically long-term memory. The long-term memory, a relatively permanent and unlimited type of memory, increases and improves with age during middle and late childhood (Santrock, 1995).

With respect to utilizing the knowledge that one gains and retains outside of the schools doors, long-term memory is essential. Long-term memory is the storehouse for the child's accumulating body of information and skills; thus, it provides the knowledge base from which the child can draw as the child encounters, interprets, and responds to new experiences. Hence, as this knowledge base grows, then, the child can interpret new experiences with increasing complexity and respond to them with increasing effectiveness (McDevitt & Ormrod, 2002).

Two aspects of memory related to improvement in long-term memory are control processes and learner characteristics. Control processes, or strategies, such as rehearsal, organization, and imagery, are among the important influences that are responsible for improved long-term memory. Long-term memory, therefore, depends on the learning activities individuals engage in when learning and remembering information (Santrock, 1995).

Literature in support of daily quizzes ranges in support from areas such as rote memorization to rehearsal, and further toward the basic need for repetition and reinforcement of specific terms, ideas, and concepts. While there are supporters in favor of daily quizzes and concepts like those mentioned above, there are also those on the other end of the spectrum who feel strongly that there is no place for this type of instruction in the education system. The following will outline both sides of this concept: daily quizzes, and other methods utilized in the daily repetition of specific classroom information.

Rote learning is basic memorization. Its practice dates back to the dated tradition of requiring whole classes to recite in unison set answers to set questions, with this reciting taking place whether or not the students knew or understood what that reciting meant. In today's education world, many view rote learning as a means of spewing out words without understanding the meaning or of learning detached facts. Many believe that this type of learning breeds passive behavior, preventing students from becoming independent-minded citizens later in life (Hirsch, 1996).

Rote memorization can be used in the curriculum for certain types of information, mainly, information that has little inherent meaning to the student. For example, rote memorization of foreign language vocabulary and history facts is effective. Students can later make connections to the memorized information. Studies also show that rote memorization is remembered for a longer amount of time. Even though rote memorization is not helpful in understanding specific concepts in depth, there are many times when it is needed, for example, when specific terms and facts are important for a person to know about a specific topic (Hirsch, 1996).

There is no doubt that many are disenchanted with the idea of memorizing vast amounts of information, information that would be later required of them to perform a specific task or to pass a test. Rote memorization may seem like a very mechanical form of education, and as unpleasant as it might be, it is a necessary form of intellectual training. “This kind of training, when rigorous, can shape a core mental skill that enhances personal knowledge and scholarship, and instills an attitude of professional discipline and integrity” (Louisiana Tech University, n.d.).

Rote memorization is seen as effective in the sense that having material memorized frees up the brain to do other mental tasks. If a math equation or function is known from rote memory, then one need not spend time thinking about that aspect of a given problem; if the context is known from memory, then one can actually focus on the relevant particulars at hand (EBTX, n.d.).

In a time when learning is geared more toward pleasing a child and focusing on what they are interested in learning, rote memorization seems utterly harsh. It is a traditional method that progressive educator’s believe bores students, and, furthermore, turns them into submissive dependents. Furthermore, it can foster a hate for learning and suppress individuality and creativity. But, as Hirsch claims, “one thing the traditional method of teaching did accomplish was to cause children to actually learn the subjects they were being directly taught and drilled in and then rigorously tested on” (Hirsch, 1996, p. 50-51). And, moreover, indirection doesn’t guarantee success, nor does lively classroom activity; in fact, little evidence shows that antitraditional methods actually work (Hirsch, 1996).

Refuting the position held by Hirsch himself, his book also presented the belief that too much value has been put on the value of recall and rote learning at the expense of understanding and reflection. “A daring teacher will occasionally ask pupils to learn poems or songs by heart,

or even state capitals and foreign vocabulary words, but such practices are frowned upon" (Hirsch, 1996, p. 49).

Rehearsal, a control process that improves memory, attempts to aid learning and remembering information by repeating it over and over; it is another highly-debated area in education. A form of daily quizzing in the classroom, information is repeated over and over after it is presented. Researchers have found that children's 'spontaneous' use of rehearsal increases between 5 and 10 years of age. Organizing the information, like a phone number, then repeating it several times, has proven to be effective (Santrock, 1995).

In a period spanning from the 1960s to the 1980s, a study at Stanford University, headed by Gage and his colleagues, found that effective teachers do use review and repetition (cited in Leming, Ellington, & Porter, 2003). Determining a teacher as either effective or not depended on whether the students had good or poor academic outcomes. Another similar study, by Rosenshine and Stevens (1986), determined that effective teachers not only present new material in small steps, but they then have students practice after each step, thus, rehearsal (cited in Leming, Ellington, & Porter, 2003).

The review and repetition of information academically has a range of support. While some find extensive review and repetition to be tiresome for students, others view it as a necessity for the successful retention of knowledge. What exactly does it mean to review? The following are examples of the definitions given online by www.dictionary.com for the word "review": to look over, study, or examine again, to go over or restudy material, and to consider retrospectively; look back on (Dictionary.com, 2004).

The review and repetition of information has been proven by scientists as a necessity to forge new neural pathways in our brains. "Learning involves effort, whether through

unconscious play or conscious diligence. There is no way around repeated effort, though it need not be in the least unpleasant. Nothing can be reliably stored for recall without repetition" (Hirsch, 1996, p. 223).

We learn best when facts are embedded in natural, spatial memory, a type of learning that requires reviewing the information. Positive feedback often provides encouragement for students when daily quizzes, extensive review, and repetition of information is utilized in the classroom. The use of feedback adds a positive twist on an often tiresome, boring type of traditional instruction (Funderstanding—Brain-based learning, retrieved November 19, 2004).

Mastery learning, based on Bloom's Learning for Mastery model, is predominantly a teacher-paced instructional approach to education. Mastery learning, according to Funderstanding, suggests that all children can learn when presented with the appropriate learning conditions in the classroom. While making use of this instructional method, teachers are able to provide not only frequent, but also specific, feedback. This is accomplished using diagnostic, formative tests, in addition to correcting inaccuracies students make along the way (Funderstanding—Mastery learning, retrieved November 19, 2004).

A study by Brophy and colleagues (1973-1979) found that some teachers got consistently good results when approaches employed were more concerned with the student's self-esteem, and when materials were not just new and exciting but challenging. Brophy and colleagues found that these effective teachers were more likely to teach skills to the point of over learning; this suggests intense review and repetition of information. In addition, the results of the study outlined the importance in providing immediate feedback. The use of daily quizzes, frequent review, and repetition all provide immediate feedback (cited in Leming, Ellington & Porter, 2003).

In order to improve the outcome of student assessment, reducing student anxiety is essential. The National Middle School Association (NMSA) produced an article entitled *Tests, Quizzes and Assessment of Student Learning*. In this article, one of the ways to reduce student anxiety was to schedule review sessions in which students could quiz each other, in groups or with the teacher, on the important terms and topics. In these review sessions, the student would be able to receive immediate feedback and, thus, gain confidence in his or her knowledge about the materials studied. The opinion held by the NMSA is that, the more prepared students are, and the better they feel about themselves going into an assessment situation, the more successful they will be (NMSA, n.d.).

Literature, either in support of, or in opposition to, the use of daily quizzes as an instructional method, is based upon the following main ideas: rote learning/memorization, rehearsal, review and repetition, immediate feedback for students, and reduction of student anxiety. Many supporters of daily quizzes and concepts, like those mentioned above, believe that they can be utilized in a pleasant and beneficial manner, yielding positive results in student assessment and the retention of knowledge. Those in opposition to the use of such educational practices feel that they take away from the growth of independent learning and actually bring about a dislike for education, boring the students.

Data Collection and Results

Data was collected by administering the pre-assessment prior to the unit on World War I and World War II. The pre-assessment consisted of 15 questions worth a total of 100 points. The student was required to complete this task by himself or herself, without any outside assistance. The students had little to no prior knowledge of the subject matter.

Between the administrations of the pre-assessment and post-assessment, the control group, referred to as core class number one, received only instruction, while the experimental group, referred to as core class number two, received daily quizzes in addition to instruction based on the previous day's materials (see Appendix B for quizzes.)

The first core class' scores on the pre-assessment indicated that some prior knowledge did exist, however, this knowledge varied from student to student. (See Table 1 for the first core class' results.) On the pre-assessment, the mean score for the first core class was 62.85. This class also had a median score of 58, and a mode of 58. Although this class did not receive daily quizzes, they did receive regular classroom instruction which attempted to provide the students with a more solid foundation of knowledge about World War I and World War II.

Table 1 *First Core Class (No Daily Quizzes)*

Student	Pre-Test Score %	Post-Test Score %
A	58	92
B	50	67
C	50	58
D	83	100
E	92	100
F	58	83
G	33	67
H	83	92
I	67	75
J	42	33
K	67	92
L	58	83
M	75	75
N	75	83
O	83	100
P	75	92
Q	58	67
R	58	67
S	42	50
T	50	58
Total=20		
	1,257	1,534
Mean:	62.85	76.7
Median:	58	79
Mode:	58	92

Table 2 indicates that the second core class, the experimental group, also had some prior knowledge about the content material before the onset of the unit. On the pre-assessment, the second core class had an overall mean score of 63.7. This class also had a median score of 67, and a mode of 67. In addition to the regular classroom instruction explained below, the second core class also took daily quizzes to review the material covered in the previous day's lesson.

Table 2 *Second Core Class (Daily Quizzes)*

Student	Pre-Test Score %	Post-Test Score %
A	75	75
B	83	92
C	58	100
D	67	83
E	58	67
F	67	92
G	33	83
H	67	75
I	58	100
J	25	100
K	67	100
L	67	92
M	75	100
N	17	100
O	92	92
P	92	100
Q	83	100
Total=17	1,084	1,551
Mean:	63.76	91.24
Median:	67	92
Mode:	67	100

Table 2

These daily quizzes were made up of multiple choice and matching questions with anywhere from three to nine questions per quiz. The students were required to take the daily

quizzes at the beginning of every class during the unit. These quizzes were to be completed individually, without any outside help. After collecting the quizzes, the correct answers would be discussed orally; repetition and extensive review of the materials, often in a rote manner, was utilized. If a high number of students missed a specific question, it was often repeated on the following day's quiz to reinforce its importance.

Both the first core class, the control group, and the second core class, the experimental group, classes, with the exception of the daily quiz, were given the same instruction in order to help the students develop a more solid foundation of knowledge about World War I and World War II. All students were taught key vocabulary terms, took extensive notes about both wars from an overhead projection presentation, and, additionally, were given copies of the classroom lectures. Students also worked with maps of Europe to develop a visual understanding of each involved country's location, and to deepen understandings of battles. Students were also required to sequence important events during both World War I and World War II. Finally, the students were held responsible for being able to categorize the countries into different powers that separated and allied the countries during each war.

When the unit material was completed, both the first core class and the second core class took the post-assessment. This was the exact same test as the pre-assessment, consisting of 15 questions, totaling 100 points.

The first core class, the control group, which had been exposed to only the regular classroom instruction made an overall average improvement of 13.9%. Overall, the class had a mean score of 76.7 on the post-assessment, with a median score of 79 and a mode of 92. Figure 1 shows that three individuals were able to attain perfect scores on the post-assessment, however many still struggled with below-passing grades.

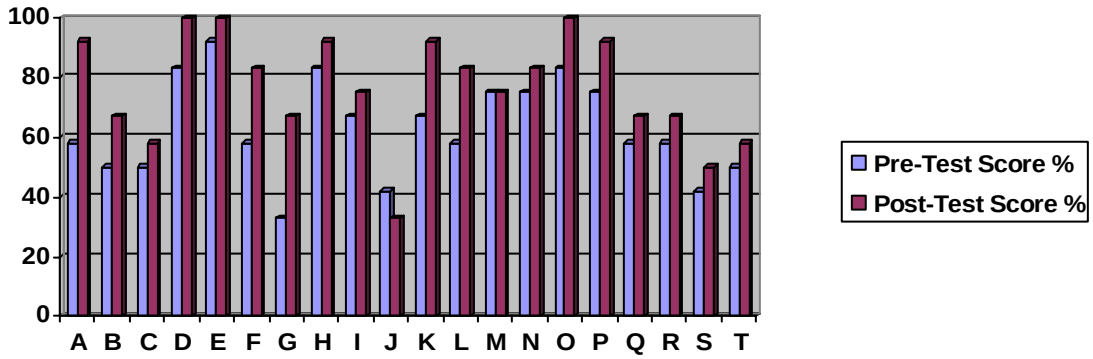

Figure 1. Core class pre- and post-test individual results comparison.

The second core class, the experimental group, was exposed to not just regular classroom instruction but also the use of daily quizzes, with the intention of review and repetition of materials studied. This class had an overall improved average of 27.5%. The second core class had an overall mean score of 91.2, with a median score of 92 and a mode of 100. Figure 2 shows that eight students were able to attain perfect scores on the post-assessment, with every single student achieving an improved score.

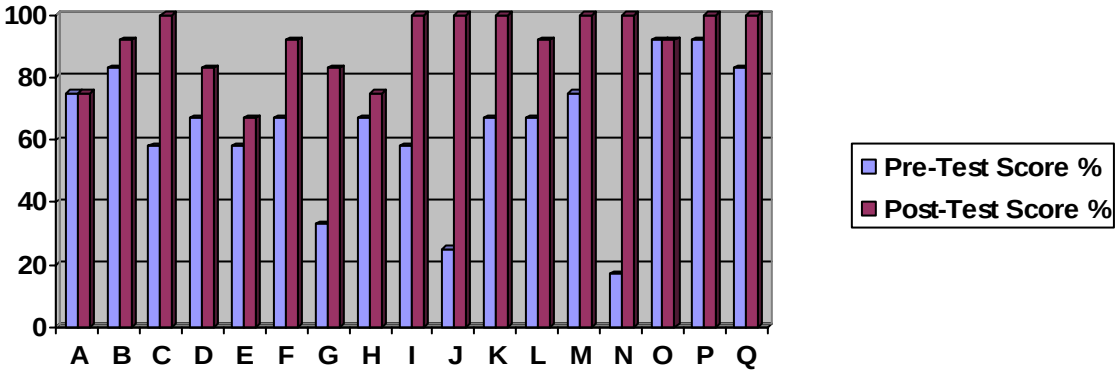

Figure 2. Second core class pre- and post-test individual results comparison.

Conclusions and Recommendations

The evaluation of the effectiveness of daily quizzes on knowledge retention showed a significantly higher level of success from the pre-assessment to the post-assessment when the use of daily quizzes and review was employed in the classroom. Although it was limited, all students demonstrated prior knowledge about the World War I and World War II content material prior to instruction. Both classes were given the same type of classroom instruction during the unit. However, the second core class was expected to complete daily quizzes on the previous day's materials and then review those responses. When the unit was completed, the students in the group that took part in the daily quizzes and quick review sessions were able to improve scores by a substantial margin over the other class.

This study shows that, even though many frown upon the use of repetition and daily quizzes, often referring to them negatively as rote learning and boring, there is still something to be said about their effectiveness. Daily quizzes are great for both the teacher and the student. They make students accountable for daily work and being in class; they also create more opportunities for the teacher to work directly with the students with almost immediate feedback.

Our nation currently finds itself battling over what extent to which our students and teachers should be held accountable and how these levels of accountability should be measured. Professional organizations tug back and forth on the issue of how to best help our children grow into well-rounded citizens who will be successful one day in the workforce. A great deal of time is spent on what classroom size is best, having up-to-date materials and textbooks and having qualified teachers.

As professional educators, the bottom line is that we need to teach our children, using what materials we have, making use of methods of instruction that have been confirmed to work in helping students retain the information they learn, so they can leave the schools with a solid

foundation of academic knowledge. There is no doubt, that in a nation riddled with standardized tests, the expectations for both the teachers and students do need to be made clear. What exactly is supposed to be taught and what are the children expected to know?

Despite these important issues, as far as professional development is concerned, if we set the expectations high, then find ways to help the students reach those levels, such as constant review, repetition, and rehearsal, there is not a doubt, in my mind, that academic success can be met. This, of course, must include flexibility to meet all students' needs and a higher level of time commitment on the part of the teacher.

Technology could play in integral role in the incorporation of daily quizzes into regular classroom instruction. Students could be held accountable for daily quizzes taken on the computer, based upon materials currently being studied in the classroom. Computer quizzes are fabulous in that they provide instant feedback. In addition, the teacher would know quickly, thanks to certain computer programs, which areas are causing the most problems for students, indicated by incorrect quiz answers. This would also save the teacher from manually grading each and every paper, and then looking for the trouble spots. Technology could assume a very time-consuming and positive role in this area.

The National Education Association (NEA) believes that all those involved in education should be held to high standards. However, they also feel that schools, employees, parents, and policymakers should all share the accountability. In the end, though, the ultimate goal, says the NEA, is helping the child. The NEA believes that, in order for students to have a balanced, positive learning experience, the teachers need both time and resources, and a clear set of expectations (National Education Association, 2002-2004).

The United States Department of Education has monetary grants available through the Office of the Elementary and Secondary Education (OESE). A grant that would be fitting to this study would fall under the heading, "Academic Improvement." The OESE has a Comprehensive School Reform Program which offers financial support to teachers, schools, and academic agencies that implement comprehensive school reforms based upon scientifically-based research and effective practices so that all children can meet challenging state academic content and achievement standards (U.S. Department of Education, n.d.).

Teachers should also contact local school district administrators, principals, and professional organizations about grant money.

References

Dictionary.com (2004). *Dictionary*. Retrieved November 19, 2004 , from http://www.dictionary.com/

EBTX. (n.d.). *On the value of rote memorization*. Retrieved November 19, 2004, from http://www.ebtx.com/math/rotemem.htm

Funderstanding. (n.d.). *Brain-based learning*. Retrieved November 19, 2004, from http://www.funderstanding.com/brain_based_learning.cfm

Funderstanding. (n.d.). *Mastery learning*. Retrieved November 19, 2004, from http://www.funderstanding.com/mastery_learning.cfm

Hirsch, E. D. (1996). *The schools we need and why we don't have them*. New York: First Anchor Books.

Leming, J., Ellington, L., & Porter, K. (2003). *Where did social studies go wrong?* Washington, DC: The Thomas B. Fordham Foundation.

Louisiana Tech University. (n.d.). *A word on memorization*. Retrieved November 19, 2004, from http://www.latech.edu/~wtwillou/A211memorization_f03.htm

McDevitt, T. M., & Ormrod, J. E. (2002). *Child development and education.* Upper Saddle River, NJ: Merrill Prentice Hall.

National Education Association. (2002-2004). *Accountability and testing*. Retrieved November 19, 2004, http://www.nea.org/

National Middle School Association. (n.d.). *Tests, quizzes and assessment of student learning.* Retrieved November 15, 2004, from http://www.nmsa.org/

Santrock, J. W. (1995*). Life-span development* (5th ed.) Madison, WI: Brown & Benchmark Publishers.

The White House. (n.d). *No child left behind*. Retrieved November 15, 2004, from http://www.whitehouse.gov/infocus/education/

U.S. Department of Education. (n.d.). *Grants and contracts*. Retrieved November 15, 2004, from http://www.ed.gov/

Appendix A: Pre-Assessment and Post-Assessment

Name:_____
Homeroom:_____

World War I & World War II
Pre-Assessment and Post-Assessment

Word Bank

Treaty of Versailles	**League of Nations**	**Great Depression**
trench warfare	**revolutions**	**assassinated**
scored earth	**armistice**	**Concentration camps**

1. World War I (WWI) started when Archduke Franz Ferdinand heir to the throne of Austria-Hungry was _____ by a terrorist.

2._____ was when each side would dig trenches with barbed wire around them and have to cross open land to try to harm the other side.

3. The _____ was formed so that countries could come together to talk over their problems.

4. _____ was signed to end WWI—it put most of the blame on Germany.

5. The _____ was a world wide slowdown in business and many people suffered.

6. _____were where Germans kept those they thought were enemies, namely Jews, during WWII.

True or False

____ 7. WWI took place from 1914-1918

____ 8. After WWI Germany and Russia lost land as reparations for war.

____ 9. The United States joined the League of Nations after WWI.

____ 10. The Nazi Party in Germany was led by Adolph Hitler

____ 11. The United States was a member of the Axis Powers.

____ 12. The Japanese bombed Pearl Harbor in Hawaii, which prompted the United States to enter WWII.

____ 13. The Nazis in Germany killed over 6 million people in concentration camps.

____ 14. The United Nations was formed after WWII to prevent the war and to help poor countries.

____ 15. After WWII the Germans were able to keep and control their own land.

Appendix B: Daily Quizzes

Name:_____

Homeroom:_____

Daily Quiz One

____ 1. WWI started when Archduke Franz Ferdinand heir to the throne of which country was assassinated?

a) Germany
b) Austria-Hungry
c) Serbia
d) France

_____ 2. WWI took place from:

a) 1945-1950
b) 1814-1818
c) 1914-1918
d) 1927-1930

_____ 3. True or False: The United States was a member of the Allied Powers.

Name:_____

Homeroom:_____

Daily Quiz Two

____ 1. During WWI the fighting took place on two fronts: the Western and the Eastern. The Western Front, where most of the fighting took place was located:

a) zone between Spain and France
b) Russia
c) zone between Russia and Germany
d) zone between France and Germany

_____ 2. What treaty was signed to put an end to WWI?

a) League of Nations
b) Treaty of Versailles
c) Treaty of World Peace
d) The 14 Point Plan

_____ 3. True or False: At the end of WWI 17 million civilians had died.

_____ 4. True or False: The United States was never a member of the League of Nations.

Name:_____
Homeroom:_____

Daily Quiz Three

____ 1. The United States entered WWI in 1917 after what happened?
- **a) a German submarine sank a ship full of American civilians**
- **b) Russian pilots bombed American soil**
- **c) a bomb hit Pearl Harbor**
- **d) a British submarine sank a ship full of American civilians**

____ 2. During WWI the fighting took place on two fronts: the Western and the Eastern. The Western Front, where most of the fighting took place was located where?
- **a) zone between Russia and Germany**
- **b) zone between France and Germany**
- **c) Russia**
- **d) zone between Spain and France**

____ 3. True or False: The Treaty of Versailles put most of the blame for WWI on Germany.

____ 4. True or False: The Treaty of Versailles forced Germany and Russia to give up land as reparations for war.

____ 5. True or False: During the Great Depression one in four Americans and British people lost their jobs.

Name:_____

Homeroom:_____

Daily Quiz Four

____ 1. During the time of the Great Depression the Prime Minister of England was:

a) Vladimir Lenin

b) Joseph Stalin

c) Sir Winston Churchill

d) Archduke Franz Ferdinand

____ 2. The Soviet Union (Union of Soviet Republics) was formed in what year?

a) 1914

b) 1817

c) 1922

___ 3. In 1933 who promised to change things in Germany for the German people?

a) Franklin D. Roosevelt

b) Adolph Hitler

c) Mussolini

d) Vladimir Stalin

___ 4. True or False: Hitler blamed many of Germany's problems on the Jews.

___ 5. True or False: Hitler set up a secret police to punish anyone who disagreed with him.

Name:_____
Homeroom:_____

WWI & WWII Daily Quiz Five

1. **During WWII the Axis Powers included which of the following countries?**
   a) **United States, Great Britain, France and Soviet Union**
   b) **Soviet Union, Germany, Italy and Japan**
   c) **France, Germany and Italy**
   d) **Germany, Italy and Japan**

2. **In 1941 Hitler, in search of resources ignored a treaty signed with which country?**
   a) **Italy**
   b) **France**
   c) **Soviet Union**
   d) **Japan**

3. **When exactly was D-Day, when the Allied troops arrived on the beaches of Normandy, France to fight in mass battles with millions of soldiers?**
   a) **June 6, 1914**
   b) **June 16, 1940**
   c) **June 6, 1944**
   d) **June 16, 1954**

True or False

____ 4. A blitzkrieg was a method of lightning war used by Germans in WWII.

____ 5. The Soviets used scorched-earth policy (burning their own cities etc.) to defend themselves against Hitler's troops.

____ 6. Hitler killed himself and the Germans surrendered after getting trapped between the Soviets on the Eastern front and the Allies on the Western front.

____ 7. After the Germans surrendered so did the Japanese soldiers without a fight.

____ 8. By the end of WWII more than 6 million Jews (1.5 million of them children under the age of six) had been killed by the Nazis.

____ 9. In making the peace, Germany was divided into four zones each occupied by a major power: U.S., England, France and the Soviet Union.