Crystal L. Palser

Professional Portfolio

Master's in Education, Educational Administration

Concordia University

December 2010

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Crystal L. Palser
2280 Lariat Loop
Gering, NE 69341
(308) 641-8929
cpalser@geringschools.net

Personal Information

Born: Scottsbluff, NE
Racial Ethnic Identification: White
Marital Status: Married

Education

Bachelor of Science, Business Administration, Endorsement: Secondary Education, University of Nebraska Wesleyan, August 2004 – December 2007

General Education Diploma, Scottsbluff High School, 2000-2004

Certification

Nebraska Initial Teacher Certificate, Secondary Education; Business

Experience

Educator, Gering Jr. High and High School, Gering, NE, 2008-present

- Maintain a positive and safe learning environment for students
- Travel to Jr. High and High Schools to teach assigned classes
- Communicate effectively with parents at parent teacher conferences
- Evaluate student progress through data collection processes
- Utilize a variety of learning strategies to meet the diverse learning styles
- Addressed the school improvement goal on math and reading skills
- Educate students in appropriate technology curriculum

Student Teacher, Lincoln East High School, Lincoln, NE, August 2007 - December 2007

- Maintained a positive learning environment for students
- Communicated effectively with parents at parent teacher conferences
- Evaluated student progress through data collection processes
- Planned and created daily lessons over a 13 week period
- Participated in two different Professional Learning Communities

- Utilized a variety of learning strategies to meet the diverse learning styles
- Addressed the school improvement goal on oral communication
- Assisted with Lincoln East's DECA chapter

Practicum/Field Experience, Lincoln Public Schools, 9-12 grades, Lincoln, NE, January 2005 - May 2007 (Lincoln: Southeast, East, High, & Northeast)
(Grades 9-12: Computer Applications, Internet Multimedia, Marketing, and Economics)

- Observed and assisted in the classroom over 100 hours
- Organized and taught lessons in Business and Computer classes
- Worked directly with students on assignments and activities
- Created learning activities for students in business and computers

Teaching Assistant, Instructional Technology EDUC 18, Nebraska Wesleyan University Education Department Lincoln, NE, March 2006 – May 2007

Website Developer, National Council on Economic Education, Lincoln, NE, May 2006- September 2007

Professional Development

Trained and participated in Professional Learning Communities
Met School Improvement Goals of incorporating math and reading into technology curriculum, grades 7 -12
Attended Nebraska Educators Technology Association Conference, 2006, 2007, 2008

Honors and Activities

Gering Education Association, member (2008-present)
Global Associate of Teachers of Economics, member (2006-present)
Ernest I. Bass & Eurice Miller Bass Scholarship (2006-2007)
Attracting Excellence to Teaching Scholarship (2006-2007)
Founders and Trustees Scholarships (2004-2007)
Nebraska United Methodist Scholarship (2004-2007)
Kappa Delta Pi Honorary, member (2006-2007)
Nebraska and National Education Association, member (2006-2007)
Collegiate Business Association NWU Chapter, member (2004-2006)
Heartland Big Brothers Big Sisters (2006-2007)
DECA Alumni Assistant (2007-2008)

References

Available upon request

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Objective To obtain a position as an educational administrator at any level

Education

Bachelor of Science, Business Administration, Endorsement: Secondary Education, University of Nebraska Wesleyan, August 2004 – December 2007

Certification

Nebraska Initial Teacher Certificate, Secondary 7-12, Business Education

Experience

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Teaching Assistant, Instructional Technology, Nebraska Wesleyan University Education Department Lincoln, NE; March 2006 – May 2007

Website Developer, National Council on Economic Education, Lincoln, NE; May 2006- September 2007

Professional Development

- Trained and participated in Professional Learning Communities
- Met School Improvement Goals of incorporating math and reading into technology curriculum, grades 7 -12
- Attended Nebraska Educators Technology Association Conference, 2006, 2007, & 2008
- Attended ISTE *(International Society for Technology in Education)* Conference, 2010

Honors and Activities

- Blue Cross Blue Shield Scholarship, Spring 2010
- Gering Education Association, member (2008-present)
- Global Associate of Teachers of Economics, member (2006-present)
- Ernest I. Bass & Eurice Miller Bass Scholarship (2006-2007)
- Attracting Excellence to Teaching Scholarship (2006-2007)
- Founders and Trustees Scholarships (2004-2007)
- Nebraska United Methodist Scholarship (2004-2007)
- Kappa Delta Pi Honorary, member (2006-2007)
- Nebraska and National Education Association, member (2006-2007)
- Collegiate Business Association NWU Chapter, member (2004-2006)
- Heartland Big Brothers Big Sisters (2006-2007)
- DECA Alumni Assistant (2007-2008)

References

Available upon request

Gering Junior High School

800 Q Street
Phone: (308) 436-3123
Gering, NE 69341
Fax: (308) 436-6010
Dora Olivares, Principal

All Gering Public School students will maximize their potential.

October 21, 2011

To whom it may concern,

I have supervised Crystal Palser for the last two and a half years while she has been employed as a business teacher for Gering Public Schools. Crystal splits her time between the Junior High School and the Freshman Academy. I have evaluated her performance during this time and can speak to her ability to perform master's level work.

Working for two different buildings has shown that Crystal is very organized and able to adapt to changing working conditions. She is always punctual and completes her duties in an exemplary fashion. Crystal is able to handle her workload without losing her enthusiasm for teaching and for her students.

Crystal's dedication to her profession is evident in her high expectations for her students and in the positive relationships she has developed with them. She is in complete control of her classroom and rarely refers her students to the office. Crystal is able to manage her classroom with her ability to relate to her students and provide meaningful lessons that engage them.

Crystal is a leader in our building who is willing to perform any duty asked of her. She has taken on extra duties which include coaching volleyball and sponsoring our Drug-free student organization. Crystal also supports our students by attending their activities, thereby cementing her positive relationships with them. She maintains a professional working relationship with our staff members, as well.

Crystal has the potential to become an exceptional administrator. She is in education for the right reasons and truly cares about her students and in providing a high standard of learning. Crystal has the organizational skills and the intellect to successfully complete your program. I would recommend her acceptance into your administration program without hesitation. Please feel free to contact me if I can answer and further question about Crystal's capabilities. Thank you for your time.

Sincerely,

Dora Olivares

Dora Olivares
Principal

Philosophy of Education Statement

My philosophy of education is inspired by Bill Beattie's quote, "The aim of education should be to teach us rather how to think, than what to think - rather to improve our minds, so as to enable us to think for ourselves, than to load the memory with thoughts of other men." I believe that each child is a unique individual who needs a safe, caring, and inspiring environment in which to grow and mature emotionally, physically, intellectually, and socially. My goal as an educator is to help students reach their maximum potential.

My role as a teacher is to guide and advise students in learning by introducing questions and ideas and allow them to exercise their own mind. My job is to make a connection between the real world and the concepts I teach to students so they can take what they learn and apply it to their daily lives. My goal is to set students up for success and prepare them for their future. As a community member an educator should be involved and seen as a positive figure in my community. I believe that teachers should be involved in the community. If I push the importance to my students of being involved and being a good citizen then I need to be involved myself.

In my classroom I incorporate a mixture of modeling, explaining, and demonstrating skills and concepts to my students. I incorporate my sense of humor into every lesson of every day. Humor is something that I know can get a students attention and get them 'hooked' into learning. Respect for my students comes easily to me and value students respect of me. The relationships I create with my students is what gets me out of bed every morning to come to school. The students keep me coming back for more and teach me something new everyday. They inspire me to be a better person and teacher.

Every classroom contains a unique group of students who are all different in their own way. Students differ in race, social status, ethnicity, ability but most of all each student has their own learning style. As an educator and learner, I, have my own learning styles that I prefer. My goal is to teach my curriculum is a way that involves students and captivates attention to allow the relevance of the concept to be applied to their lives. In my curriculum, I integrate a mixture of activities, group discussions, media clips, internet activities and sites, software, and hands-on projects. Every student needs something to live for and take pride in their education. Students are self-discovers of their own education and should have the opportunity to explore every day at school. I believe that every student has the potential, if mentored, to develop into an intelligent person who can act and perform as a positive and productive member of society.

I believe that teaching should not be just a job but a lifestyle. I want to motivate and inspire my students to become great individuals. My goal is to always teach with a purpose and become a better teacher every day. This quote by William Arthur Ward is a reminder of the kind of teacher I want to be, "The mediocre teacher tells. The good teacher explains. The superior teacher demonstrates. The great teacher inspires."

Promoting the Success of Every Learner

How does society define student success? Most would define student success as the ability of a student to support themselves in society at the completion of the educational process. However, there are so many different interpretations to the definition. As an instructional leader, how can one ensure the success of all students for which they are responsible?

An instructional leader's role is to make the school building and the people in it run as one. They are the leaders within an educational establishment who provide guidance to teachers, students, staff and members of the general community. A principal must be seen, heard, and known by all students, staff, and parents. Students need to feel comfortable enough to approach their principal with their problems or simply just to say hello. An instructional leader must know what they stand for and how they can be an active role in every student's success. They hold the power of controlling the environment and culture of the school. The school environment should be welcoming and positive and one the students want to come to ever day. However, the principal cannot do it all alone; he or she must rely on the teachers for help.

"Teachers make the difference. Consequently, school principals can affect student success by helping teacher be the best they can be." (Robbins & Alvy p. 89). An instructional leader's priority should be to provide students with quality and well-trained teachers. Teachers have direct interaction with students therefore they are the ones who can make the largest impact. A principal can provide opportunities for teachers to attend professional development workshops and trainings that will make them grow. "Teachers have the right to grow." (Robbins & Alvy p. 89). "Instructional leadership is a moral responsibility, where leaders are unwaveringly committed to student success and teacher growth." (Robbins & Alvy, p. 88). So their job is to be a teacher to the teachers in their buildings and help them grow as a professional as well. Unfortunately, the teachers do not hold all the power to ensure success of every student. The instructional leader must then set up programs that fill in the gaps the teacher cannot reach.

For example, programs like student assistance teams, special education, tutoring, mentoring and study halls.

Parents can help the instructional leader to ensure the success of their child. "The research on successful schools and individual student success often cite parent involvement as a major contributing factor." (Robbins & Alvy, p. 239). An instructional leader must get parents and the community involved in the school in different ways. Robbins and Alvy suggest six different ways to get parents involved in the education of their child by: parenting, communicating, volunteering, learning at home, decision making, collaborating with the community. (Robbins & Alvy, p. 241) All ways which seem relatively simple and easy to carry out. Realistically the suggestions can be rather difficult because most parents by the time their child is in secondary school are set in their ways but are ones that are crucial to help ensure students success.

In closing, the instructional leader must also provide and oversee a positive, safe and effective school environment. Every student should feel safe at school and be a place where they want to be. This final quote by Ricard DuFour summarizes the role of an instructional leader ensure student success to every student in which they are responsible. "Principals must live with paradox: They must have a sense of urgency about improving their schools, balanced by the patience to sustain them for the long haul. They must focus on the future, but remain grounded in today. They must see the big picture, while maintaining a close focus on details. They must be strong leaders who give away power to others."

Professional Development Plan

- Gain skills, knowledges and attitudes to be a successful steward of vision, mission, and culture; instructional leader; organizational manager; community leader and collaborator; ethical leader, and advocate of public policy.
- Learn how to use readings, ideas, theories, research findings, and skills learned and apply to realistic situations in the classroom and administration
- Understand local policies and procedures that affect teachers and educational leaders throughout the school system
- Develop and acquire decision-making, leadership, management, and analytical skills

EDUC 581-582 PRACTICUM EXPERIENCE LOG

Crystal Palser Secondary

					Standards							E S Both
ID #	Dates	Experience	Hrs	Total Hours	S. 1	S. 2	S. 3	S. 4	S.5	S. 6	S.7	Cert. Lev
1	Nov 16-30 & Dec 12, 2009	Canned Food Drive	8	8				X		X		S
2	Nov 18 & Dec 16 2009	Dept. Meeting	8	16	X	X	X					S
3	11/15/2009	VB Banquet	3	19						X	X	S
4	1/10-1/17/2010	Neighborhood Watch Program	8	27							X	S
5	11/9-11/13 & 12/14-12/18 2009	Positive Behavior Support Team Poster Contest	8	35	X		X					S
6	1/14, 1/19, 1/21, 1	Volleyball Intramurals	8	43			X	X		X		S
7	12/4, 1/18, 1/22, 2/1 2/4, 2/5	IEP Meetings	6	49		X		X				S
8	2/3/2010	CPR First Aid Training	4	53			X					S
9	2/4 & 2/8/2010	Pre Ob, Eval, & Post Evaluation Meetings	4	57		X						S
10	1/13, 1/20, 2/3, 2/24	Staff Meetings	8	65		X	X		X			S
11	1/25, 2/1, 2/8, 2/9, 2010	Reviewing & Calculating Data from H.S & Jr. H.S. Down Lists	8	73	X	X			X			S
12	2/15/2010	Impact Teaching Workshop	7	80								S
13	2/17/2010	Review Crisis Procedures	1	81		X	X					S
14	2/18/2010	Substitute Teacher Guidelines	2	83		X	X					S
15	2/22 & 2/23 2010	Reviewed & Updated Business Dept. Budgets	4	87				X		X		S
16	2/25/2010	Lincoln Heights Book Fair	4	91				X		X		Both

17	2/8-2/11 & 2/15-2/18 2010	Spinning Class at the Scottsbluff YMCA	8	99				X		X	X	S
18	2/18/2010	Supervise Jr. High Bball Games	3	102			X	X		X		S
19	2/8 - 2/12/2010	Bus Duty	4	106		X	X					S
20	Every Friday	Staff Gatherings	8	114		X					X	S
21	2/24/2010	Accreditation Staff Meeting	3	117	X	X	X					S
22	3/4/2010	Class Cover	1	118		X	X					S
23	3/9/2010	Manifest Destination Meeting	1	119				X	X	X		S
24	3/8/2010	Lincoln Replacement Meeting	2	121	X	X				X		S
25	3/18/2010	Track Parent Meeting	1	122				X		X		S
26	3/22 & 3/24/2010	7th and 8th Track Sign-ups	2	124	X		X					S
27	3/23/2010	Individual Student Meetings	4	128		X		X	X			S
28	3/24	Parent-Teacher Conferences	4	132		X		X				S
29	3/22	Reviewing Grades & Printing Reports	2	134			X		X			S
30	3/21	Writing Educational Philosophy	3	137	X	X						S
31	3/24	Mock Tornado Drill	1	138		X	X					S
32	2/23-4/27/2010	YMCA Volleyball Leauge	8	146							X	S
33	3/31	Scheduling Staff Meeting	2	148	X	X	X					S
34	4/1 & 4/3/2010	Easter Egg Hunt	5	153			X	X			X	S
35	4/8/2010	NESA Testing	5	158	X	X	X					S
36	4/9/2010	Quiz Bowl	4	162			X	X	X			S
37	4/9/2010	Senior Service & Picnic	4	166				X		X	X	S
38	4/14-4/15/2010	College Guest Speaker	3	169	X			X		X		S
39	4/14/2010	Budget Meeting	3	172		X	X					S
40	4/13-4/14/2010	Individual stuent track misbehavior	4	176		X			X			S
41	4/15/2010	Musical Tickets	3	179		X		X				S

42	4/13 & 4/17/2010	Supervise Track Meet	8	187			X		X			S
43	4/21/2010	7th Grade College Visit (WNCC)	6	193		X	X	X				S
44	4/22/2010	Summer VB Meeting	1	194				X		X	X	S
45	4/28/2010	8th Grade Career Fair (UW)	8	202		X	X					S
46	4/22, 4/29, 5/3/2010	Review Behavior Forms	4	206			X		X			S
47	3/29-5/8/2010	Coach Junior High Track	8	214		X	X	X				S
48	5/7/2010	Classroom Speaker Lt. Col. Scott Warner	3	217				X		X		S
49	4/29/2010	ISTE Registration Meeting	1	218	X		X					S
50	4/7, 4/13, 4/20. 5/4	JH Track Event Entries Meetings	8	226		X	X		X			S
51	5/5/2010	Staff Meeting & Small Group Disc (Dress Code & Cell Phone Policies)	3	229	X	X			X			S
52	5/7/2010	09-10 Goal Review & Reflection *(self-work & part with Administrator)*	2	231	X	X	X					S
53	5/16/2010	Graduation Receptions	4	235				X		X	X	S
54	5/11 & 5/13/2010	Curriculum Meeting for Personal Finance Class	3	238	X	X			X			S
55	5/10 & 5/12/2010	Reviewing Textbooks & Online Materials (PF)	3	241		X	X					S
56	5/18 - 5/20/2010	Detention Duty	2	243			X		X			S
57	5/25/2010	7th & 8th Grade Awards Ceremony	3	246	X	X			X			S
58	5/25/2010	JH Barbeque for last day of school	1	247				X		X		S
59	5/17-5/25/2010	Writing Curriculum for Personal Finance class	8	255	X	X	X					S
60	5/22/2010	Graduation Ceremony	2	257		X		X		X		S
61	5/26/2010	Staff Golf Tournament	4	261		X					X	S

Mentor's Signature

Concordia University, Nebraska

Student's Name Crystal Palser **Evaluator (Name and position)** Dora Olivares, Principal

Cooperating School(s) Gering Public Schools **Address** 800 O Street Gering, NE 69341

Evaluator's Directions: Please use the following to reflect your assessment of the candidate's potential in regard to educational administration. Additional comments for each item are encouraged.

5 = Superior 4 + Above Average 3 = Average 2 = Below Average 1 = Weak N = No basis for an assessment

1. Relationship with professional peers (LD5,LD8,LD9,LD10) — 5 (4) 3 2 1 N
   Comments:

2. Relationship with parents/students (LD5,LD8,LD10) — (5) 4 3 2 1 N
   Comments: Has positive relationships with students.

3. Skill in oral communication (LD2, LD8) — (5) 4 3 2 1 N
   Comments:

4. Skill in written communication (LD2, LD8) — 5 (4) 3 2 1 N
   Comments:

5. Ability to make professional judgments (LD1) — 5 (4) 3 2 1 N
   Comments:

6. Leadership ability (LD1, LD2, LD3, LD4, LD5, LD6, LD7 LD, 8 LD9, LD10) — 5 (4) 3 2 1 N
   Comments: Has potential to develop into a superior leader.

7. Ability to assume and to carry out responsibility (LD4) — (5) 4 3 2 1 N
   Comments:

8. Time management ability (T1) — (5) 4 3 2 1 N
   Comments: Juggles school, coaching and home well.

9. Stress management (LR8) — 5 (4) 3 2 1 N
   Comments:

10. Visual professional image (LD10, LR1) — 5 (4) 3 2 1 N
    Comments:

11. Dependability & commitment to service (LD10,LR1) — (5) 4 3 2 1 N
    Comments: She will perform any duty asked of her to the best of her ability

Dora Olivares
Evaluator

10/18/11
Date

Computer-Based vs. Paper-Based Assessments: Do Computers Make a Difference?

A Research Project Presented to Concordia University

Crystal Palser

Bernard Tonjes, Ph.D., Project Advisor

September 29, 2011

ABSTRACT

This experiment compares high school students test scores on computer-based and paper based assessments in a computer technology course. The dependent variable of the study is the students test scores and the independent variable is the method of assessment, computer or paper-pencil. This study utilized a quasi-experiment design. Four unit exams were used to compare two sections of high school students test scores on computer based and paper based assessments. A t test was used to compare the averages of both methods of assessments of each unit test for both sections. The level of significance used is $p > 0.5$. The studies hypothesis is that there is not a statistically significant difference between the testing methods.

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CHAPTER 1: INTRODUCTION

Information Technology in the 21st century is rapidly growing and changing the way business is done across the world as well as the way teaching and learning is occurring (Koppel & Hollister, 2003). Today's teachers are being mandated the curriculum they will teach their classes along with the methods and techniques they will use to instruct their students. This educational reform is not only effecting the classroom instruction, it's also changing the way we assess our students using technology. "The integration of technology into the classroom is now affordable and realistic for most educational institutions. One of the latest technological advances that has potential to impact education is online testing" (Alexander, Bartlett, Truell, & Ouwenga, 2001).

The use of computers to assess students is growing rapidly because there are many advantages over traditional paper and pencil tests. Some of these include flexibility with time and place to test students, immediate results to students and teacher, and reliability with the grading of the tests for all students (Kearney, Fletcher, & Bartlett, 2002). On the other hand, paper and pencil assessments still hold their ground with the fact that they are what has existed in the history of education and has been a successful method of assessing students' knowledge. Technology has changed the classroom environment is many ways and it is important to ensure these changes are positive and are in the best interest of all students.

Purpose Statement

The purpose of my study was to determine which assessment method provided the students in my Information Technology Applications (IT Apps) course with the most success: computer-based or paper-based assessments. The Information Technology Applications that I taught focused on MS Office Word, Excel, Access, and

PowerPoint which each software program is broken down into units based on skills and concepts. Last year, at the end of each unit I assessed my students' learning and knowledge of all 4 programs with computer-based tests. I taught the same lessons to all three sections and then used the mean of the classes the students were doing poor on all exams. I did an investigation to determine what was causing these low test scores which included my teaching methods and strategies, test questions, student abilities, etc. I made several changes to all of these areas and students continued to do poorly on the end of unit computer-based exams. I had an epiphany or "ah ha" moment that raised the thought of if it could be the assessment method.

"In some testing applications, computer-based test (CBT) delivery is gaining popularity over the traditional paper-pencil test (PPT) delivery due to the several potential advantages that it offers, such as immediate scoring and reporting of results, more flexible test scheduling, the opportunity to include innovation item formats that are made possible by the use of technology, and reduced costs of test production, administration, and scoring (Pearson, 2009, p.1)." This statement was very helpful to me in finding a purpose of my study because CBTs are easy for me to use and save me a large amount of time. Unfortunately, after my experiences with last years students I was unsure if computer-based tests were the best method of assessing my students.

Research Question

Were high school students' test scores higher based on completing a computer-based (CBT) or paper-based assessment (PPT) in my Information Technology Applications class?

Hypothesis

The test scores from a computer-based and paper-based assessment will not create a statically significant difference.

Definition of Terms

The following terms and definitions will be used throughout this study:

Computer-based Assessment: Also known as Computer-Based Testing, CBT, online assessment, or e-assessments which are assessments that are administered by using a computer and results can be accurately scored and recorded (Anakwe, 2008).

Paper-based Assessment: Also known as Paper and Pencil Test, PPT, or traditional assessments which are assessments that are administered by giving a paper and students use a writing utensil to complete the test (Koppel and Hollister, 2003).

Assumptions, Limitations, Delimitations

A few boundaries were placed on this study to help construct it to work in my classroom at Gering High School. This study made a broad assumption that higher test scores indicated that a student learned more which created them to be more successful. The limitations of this study are stated in Chapter 5 of the study. The first delimitation of my study is that I only used Gering High School students that were enrolled in my IT Apps course. I had no control over which students were enrolled in each section of my classes. There were two sections of the class which will be composed of a total of approximately 51 students. The final boundary that I set on the study was that the tests I chose were over the Excel project of my IT Apps curriculum only. I chose Excel because it is the first project that I taught in the class.

Summary & Closing

It is known that technology is affects the way teachers educate students in the classroom. Alexander et al. (2001) described how the existence of computer in instruction increased the amount to be learned in a shorter time period and has improved student attitudes toward school. There was a need to find out which method of assessment was more successful for Gering High School students. Even though most Gering High School students have the ability and skills to complete a CBT it was unknown to which would produce higher test scores. The research question I asked to determine the study was: Would high school students' test scores higher based on completing a computer-based (CBT) or paper-based assessment (PPT) in my Information Technology Applications class? My hypothesis for this study is that the test scores from a computer-based and paper-based assessment will not create a statically significant difference. Even though CBTs were most convenient to me I needed to determine which was the most effective for students in my IT Apps class.

CHAPTER 2: REVIEW OF LITERATURE

There are numerous studies that have previously been performed and reported that I used to help begin my study. The issue studied will determine if students' test scores after taking a computer based assessment (CBT) were statistically different then taking a paper based assessment (PPT). This study was interesting to me in the fact that it was a problem that arose in my classroom last year. I have done research that supported my study and guided me through the experiment process. The research articles I found helped me prove that it was a problem worth pursuing, as I found many similar studies. Many of the articles had the same question as I had which was: Were high school students test scores higher based on completing a computer-based (CBT) or paper-based assessment (PPT) in my Information Technology Applications class? My hypothesis was: The test scores from a computer-based and paper-based assessment will not create a statically significant difference. The following literature review was organized by research article. Each paragraph summarizes the reason for the study, what study was done, and the results of the study and are listed in the order of relevance the article had to my study.

The article, "Computer-Based Assessment: Its Use and Effects on Student Learning" written by Judith Kearney, Margaret Fletcher and Brendan Bartlett in 2002 from Griffith University was a study that was done to see how technology effected student learning. As online education courses increase there is a need to determine its impact on student learning outcomes. In 2002, Griffith University incorporated computer-based assessment into their education programs to measure and promote student understanding of the course curriculum. Students used online discussion

boards, surveys, quizzes, and tests to determine their learning outcomes. The study analyzed over 300 students and showed that learning had occurred and allowed the university to look at how students were using CBT and technology to engage in learning (Kearney, Fletcher, & Bartlett, 2002). The article stated the advantages of CBT are the following: "immediacy of feedback to students and staff; repeatability of tests consisting of randomly-generated test items; reliability and equity of computer-marked assessment; flexibility in terms of time and place of assessment; and responsibility for own learning and test taking" (Kearney et al., 2002). Many of these are reasons as to why I have chose to use CBT in my classroom and this article provided me with support for my hypothesis.

Robert Reardon and Teri Loughead did a similar assessment study and wrote the article "A Comparison of Paper-and-Pencil and Computer Versions of the Self-Directed Search" in 1988. This article is a bit outdated; however, it provided me with a good example study that was done in comparing the results of a personality test of CBT and PPT formats. This study was done using a test called the Self-Directed Search (SDS) which in 1986 a computerized version was created but Reardon and Loughead wanted to prove the equivalence of the method to the original paper-pencil test. The study tested 62 randomly selected undergraduate students which were assigned to take the paper or computer version of the SDS. The result from the experiment which was unique to this study was the difference in time it took the students to take each method of assessment. Students who took the computer based assessments completed the SDS faster than the students who took the test on paper.

On the other hand, the studies stats showed that there was not a statically significant in the method of SDS test (Reardon & Loughead, 1988).

An article by Walter Vispoel in 2000 reported a study comparing computer based and paper based tests of self-concept. The following quote from Vispoel's article gives reason as to why computer based assessments are being used more in today's educational settings.

> Vispoel's (2000) study stated the following:
>
> Part of the appeal of computerized measures in producing immediate score reports and interpretations; in reducing costs for test production, administration, and scoring; in increasing test security; in yielding greater uniformity in test administration conditions; in motivating respondents; and in providing greater flexibility in changing test items and scoring algorithms when measures are revised and renormed (p. 130).

Vispoel studied the results comparing a computerized and paper based SDQ-III test to a multidimensional self-concept inventory that was developed to reflect recent views about the structure of self-concept (Vispoel, 2000). The results of the study showed a statistically significant difference between the two methods of assessing self-concept.

"Speed and Performance Differences Among Computer-Based and Paper-Pencil Test" Shawn Bodmann, University of Wisconsin and Daniel Robinson, University of Texas was written in 2004. This article compared the differences between computer based and paper based tests and how the future of education is moving toward

technology and the use of computers for testing. In this study an experiment was done to find the differences between the scores and completion times of a CBT and PPT. The study was performed on 55 students in college psychology course which was divided in half where one group took the same test on the computer and the other on paper. Then for another test the groups took the opposite method of assessment and the results were compiled. The study used ANOVA to come to the conclusion that there was no statistically significant difference between the CBT and PPT. On the other hand, there was a statistically significant difference in the time it took the students to complete each method of assessment (Bodmann & Robinson, 2004).

Bridget Anakwe (2008) from Delaware State University wrote the article completed an experiment on comparing testing methods in an accounting course. Anakwe researched and performed an experiment on the difference between a computer and paper test in an accounting course. The study compared not only the student performance on the different assessments but the gender and grade level of the students as well. The results of Anakwe's (2008) reported that there was not a statistically significant difference how the students performed on the two methods of assessment. The study also found that there was not a correlation between the test scores and the class or gender of the students (Anakwe, 2008).

Roy Clariana and Patricia Wallace wrote an article in 2002 that reports on a similar study as mine that was done at the undergraduate level at Pennsylvania State University. The article makes this statement, "In the literature, there is mounting empirical evidence that identical paper-based and computer-based tests will not obtain the same results which is refereed as the test mode effect" (Clariana &

Wallace, 2002, p. 593). However, the article made a point that instructional design dogma assured educators that the results of both methods should produce the same results if the content and thinking activities are the same (Clariana & Wallace, 2002). This study was done by testing a random sample of 100 undergraduate business students that were assigned to take either the computerized or paper-based version of the same test. The results of the experiment were that the test scores from the CBT group were higher than the group that took PPTs (Clariana & Wallace, 2002). Again, the discussion goes into detail of the factors that may have contributed to the results, for example, computer familiarity, content familiarity, competitiveness, and gender (Clariana & Wallace, 2002).

In 2009, Pearson issued an article in their November bulletin titled, "Computer-Based & Paper-Pencil Test Comparability Studies". The article is a summary of studies that have been done on researching the difference between computer and paper based assessments. The article makes a general statement about the overall comparability studies that have been performed.

> Although the majority of recent comparability studies have indicated that CPT and PPT are comparable across delivery medium, the results are not unanimous. The inconsistency in the findings is not surprising, given that these comparability studies involve a wide range of variations in content areas, participants, data collection designs, and item formats (Pearson, 2009, p. 2).

Pearson explained how many factors go into the results of the studies, for example, computer familiarity, type of question, anxiety of using a computer,

demographics, etc. Pearson (2009) supported my study and the use of CBTs in my classroom by discussing how CBTs and PPTs were comparable and in the increase of technology over time will decrease computer unfamiliarity and accessibility to computer making CBTs a good method of assessment to use (p. 4). This article provided hope in the fact that students got used to using computers enough that it does not make a difference whether they took a test on computer or paper.

Derek Stephens, 2001, from the United Kingdom (UK), did a similar study which was not performed in the United States but it is very useful study. This study was almost identical to my study the only difference being that I used high school students and Stephens used undergraduate college students. Derek Stephens performed a study in a computer science college course in the UK comparing 46 students' performance of a computer assessment using testing software and a paper-pencil test. The results of the study indicated that students did just as well on the CBT as they did on the PPT. Stephens explains how students could have benefited from test preparation, experience with the computer software, and computer anxiety. The study considers the factors of gender, computer anxiety, test questions, and benefits to the staff and students which relate to my study but not directly. The study ends with stating, "It can be concluded that computer-based testing can replace paper and pencil testing of students without affecting grades" (Stephens, 2001, p. 273).

"Comparison of Live Versus Paper-based Assessments in Computer Application Courses" written by Nicole Koppel and Kimberly Hollister both of Montclair State University in 2003 summarizes the effectiveness of computer-based tests in a computer application course. Koppel and Hollister researched the impact of student

performance on a computer test versus a traditional paper test. This study was unique to any others that I found because they not only compared the test scores of the different methods of assessment but did interviews with staff and had students take questionnaires on their perceptions and experiences with both methods of assessment. The questionnaire and interviews proved to Koppel and Hollister that students and staff benefited from the computer based assessment method. However, the study did not use statistics to compare the student performance on the CBT or PPT. The article describes how students demonstrated a higher level of performance on the PPTs when compared to the CBT results. "As technology is becoming the norm for delivery of courses, computer based assessment will become the norm for delivery of testing" (Koppel and Hollister, 2003, p. 47).

An article that directly related to my teaching situation and study is by Melody Alexander, James Bartlett, Allen Truell, and Karen Ouwenga, 2001. This study supports my reasoning as to why I chose my study.

> With high demands on curriculum coverage within the classroom, career and technical education teachers are in need of efficient method to conduct assessment activities without lessening their impact or purpose. Test administration is one type of activity that can be proctored. The integration of technology into the classroom is not affordable and realistic for most educational institutions. One of the latest technological advances that has potential to impact education is online testing (Alexander et al., 2001, p. 69).

This study used a quasi-experiment using time and assessment method as the dependent variables and the test score as the independent variable. The study also looked at the age, class level, and gender of student which comparing the scores of the testing methods. The study used two undergraduate business technology courses composed of 79 students. Each class used the same materials, received the same class instruction, and took the same test. One class took the computer based version while the other took the paper based and the process was flipped for the next section test. After looking at the results from both classes of each format the conclusion was made that there was no significant difference between the scores of online and paper based tests. However, the time for students to complete the two methods showed a statistically significant difference. (Alexander et al, 2001).

The articles cited have all reassured my reasoning for testing my research question: Were high school students test scores higher based on completing a computer-based (CBT) or paper-based assessment (PPT) in my Information Technology Applications class? Many of the studies' results showed that there were no significant difference in the test scores of a CBT and PPT. Therefore, my hypothesis was: The test scores from a computer-based and paper-based assessment will not create a statically significant difference. The literature provided me with many factors that affected the results of my study. It was evident that I have chose a solid research project since many people had the same question and used this information to help me perform my study.

CHAPTER 3: METHODOLOGY

Technology is prevalent in schools today and affects the way teachers assess and instruct their students. The problem that I researched was to determine if computer based assessments (CBT) were effective in adequately assessing students or if traditional paper-based assessments (PPT) were the best method to use. The research question for this project was the following: Were high school students' test scores higher based on completing a computer-based (CBT) or paper-based assessment (PPT) in my Information Technology Applications class? My hypothesis for this study was that the test scores from a computer-based and paper-based assessment will not create a statically significant difference.

Research Design

The research design that I chose for the research project was a quasi-experiment design. The textbook, Educational Research, defined experimental research as, "Research in which at least one independent variable is manipulated, other relevant variables are controlled, and the effect on one or more dependent variables is observed." (Gay, Mills, and Airasian, 2006, p. 597). Therefore, a quasi-experiment held the same definition of experimental research except the researcher was not able to control both variables. Gay, Mills, and Airasian (2006) helped support my decision to use a quasi experiment by saying, "When random sample is not possible, a researcher still may choose from a number of quasi-experimental designs that provide adequate control of sources of invalidity." (Gay, Mills, Airasian, 2006, p. 257). I chose this design because I used my classroom students who were enrolled in my Information Technology Applications (IT Apps) course and had no control over the

students in the course; therefore, there was a threat of validity. I chose to ignore this threat of validity because I was only interested in the students who were enrolled in the class it was not important how they were enrolled.

Participants/Subjects

The sample used in this study was a convenience sample because I used the students that were enrolled in my IT Apps high school class. Gay, Mills, & Ariasian (2006, p. 596) define convenience sampling as the process of using a sample from whoever happens to be available. The students signed up for the class for various reasons; however, IT Apps is not a graduation requirement, many just took as an elective class and others took it because they wanted to learn more about computers. The students enrolled in IT Apps were mostly sophomores including a few juniors and seniors.

The students enrolled had wide range of skills and knowledge of computers and technology. Most all of the students were able to login and complete a computer-based assessment which is a substantial reason as to why I chose this sample. I did not have to get permission to use this sample from the high school principal. However, I did contact the high school principal via e-mail and explained the study. The principal responded to my e-mail and gave me permission to complete the study. (Appendix A)

The number of participants used in my sample was 51 students total which were divided between two sections of IT Apps. One section of IT Apps consisted of 26 students where the other was 25 students.

The only information I obtained from the samples were their test scores on the

unit assessments. I used the students' identification numbers to keep the students test scores confidential so their names were not exposed. The students' grades were recorded in Infinite Campus, an online grade book, where they were protected with my personal login and password. I also copied the students test scores into an Excel spreadsheet which helped me carry out the statistics I needed to determine the results of the study. In this study I did not release the identity of any individual students.

Instrumentation

The research question for this study was: Were high school students' test scores higher based on completing a computer-based (CBT) or paper-based assessment (PPT) in my Information Technology Applications class? I used a quasi-experiment to carry out the study. Therefore, I must describe the dependent and independent variables of the study. The independent variable for this study was the computer-based and paper-pencil methods of assessing the students. The dependent variables of the study were the test scores that the students earned from the method of testing. The students test scores were dependent on the method of assessment they completed to take the unit tests.

Data Collection Procedures

I started the study by getting to know my convenience sample at the start of the school year and began to get a feel for the students' knowledge and skill levels in using computers. I did this by having conversations and would spend time working with students to analyze their performance in using a computer. I also observed students work on their in-class tasks and got a feel for their individual ability levels. I

felt the better I knew my convenience sample impacted the results of the study in many ways. I was able to tell if a student had a bad test day, did not take their time or worked to full potential. However, I had two different sections of students and had to make sure that I got to know both groups of students. However, both sections had a similar mix of students and I found it easy to get to know the students.

I began teaching the curriculum for IT Apps using Excel in lectures and demonstrations. At the end of project one the students took a test to assess their learning objectives of the project. Class 1 took the project 1 test on the computer using software called ExamView while class 2 took the exact same test on paper using a writing utensil. Each individual student's test score was recorded into an Excel spreadsheet that I kept for the duration of this study. This step was repeated three more times although the method of assessment changed to the opposite method in the each project exams. Use the chart below to get a better understanding of how I set up the assessment methods for each class.

Sample	**Project 1**	**Project 2**	**Project 3**	**Project 4**
Class 1	Computer-based	Paper-pencil	Computer-based	Paper-Pencil
Class 2	Paper-pencil	Computer-based	Paper-pencil	Computer-based

I chose to repeat the experiment for four different projects in Excel because it helped me eliminate the chance of an Excel project being more difficult than another. Also, alternating between CBT and PPTs increased the amount of validity of the study with the intentions that a similar trend was shown for all four exams. The

repetition of the study uncovered the differences that existed in the two sections of IT Apps.

The tests for projects 1-4 were the same for both sections no matter of the assessment method that was administered. The students who complete the computer-based test had the same amount as students who did it on paper. The paper test allowed students to check over answers and go back to blank or uncertain questions and the students using ExamView were be able to do the same on the computer. Both assessment methods were scored to the same scale the only difference that existed was that the PPTs were checked by me and not the computer. The class that took the computer-based assessment got their test score the instant they submitted the test. Paper-based tests had to be graded and scored by me and were returned to the students to figure out the score of their test. Also, both sections were able to use Excel to help them answer the questions on the test.

Data Analysis

Gay, Mills, Airasian (2006, p. 602) define a t test as an inferential statistics technique used to determine whether the means of two groups are significantly different at a given probability level. I used a T-test and compared the means of the scores of computer-based and paper-based assessment to determine if there was a statistical significant difference in one testing method over the other. I used all four test scores to compare the computer-based to the paper-based assessments. After each class completed the assessment I recorded each student's grade on the test. The tests had a 50 point value and students were given the points they earned on the test out of the 50 points then I calculated the percentage grade. For example, if a

student got 40 out of 50 points on the test then their percentage was 80%. After both sections points and percentages were figured I calculated the class average for each section for the version of the test they took. I used Excel to calculate the mean, median, mode, standard deviation, and t test for the Project 1 test. I repeated this process Projects 2-4. The t test compared both tests scores where I used a 2 tailed test for distribution and a type 1 paired test. The t test results were compared to the level of significance of $p > 0.5$. If the results of the t test on 2 or more of the unit tests were greater than 0.5 then my study would show a statistically significant difference, however, if 2 or more were less than 0.5 my hypothesis would be correct. A t test would prove if my hypothesis that the test scores from a computer-based and paper-based assessment were not going to create a statically significant difference or not.

Timeline

August 16, 2010: Met sample and began teaching Excel curriculum

September 10, 2010: Administered Project 1 Assessment and recorded test scores

September 30, 2010: Administered Project 2 Assessment and recorded test scores

October 14, 2010: Administered Project 3 Assessment and recorded test scores

November 5, 2010: Administered Project 4 Assessment and recorded test scores

November 5, 2010: Calculated statistical data, analyzed, and formed results

January - March 2011: Final research report completed

CHAPTER 4: RESULTS

The problem that I researched was to determine if computer based assessments (CBT) were effective in adequately assessing students or if traditional paper-based assessments (PPT) were the best method to use. The research question for this project was the following: Were high school students' test scores higher based on completing a computer-based (CBT) or paper-based assessment (PPT) in my Information Technology Applications class? My hypothesis for this study was that the test scores from a computer-based and paper-based assessment will not create a statically significant difference. In this chapter you will discover the results of the study as they were calculated form carrying out the experiment.

Description of Sample

The sample used in this study consisted of 51 high school students that were enrolled in my IT Apps course. There were two different classes of students that were used one class consisted of 25 students and the other 26 students. The students signed up to take the course in the fall and were used as a convenience sample to me. Of the 51 students, 45 of the students were sophomores, 4 juniors, and 2 seniors. However, these numbers did not affect the results of the study.

Data Analysis of Research Question

The research question for this project was: Were high school students' test scores higher based on completing a computer-based (CBT) or paper-based assessment (PPT) in my Information Technology Applications class? My hypothesis for the project was that the test scores from a computer-based and paper-based assessment will not create a statically significant difference. Gay, Mills, Airasian (2006, p. 602) define a t

test as an inferential statistics technique used to determine whether the means of two groups are significantly different at a given probability level. I used a t test to compare the means of the scores of computer-based and paper-based assessment to determine if there was a statistical significant difference in one testing method over the other. The t test compared both tests scores where I used a 2 tailed test for distribution and a type 1 paired test. The t test results were compared to the level of significance of $p > 0.5$. If the results of the t test on 2 or more of the unit tests were greater than 0.5 then my study would show a statistically significant difference, however, if 2 or more were less than 0.5 my hypothesis would be correct. A t test would prove if my hypothesis that the test scores from a computer-based and paper-based assessment were not going to create a statically significant difference or not.

Table 1: Class 1 Project Data

Class 1 (26 students)				
	Test 1 Paper	**Test 2 Online**	**Test 3 Paper**	**Test 4 Online**
Average	39.462	37.846	40.500	39.423
Median	40	38	40	38.5
Mode	41	35	38	45
Standard Deviation		5.0561 *(Test 1 & 2)*		4.6388 *(Test 3 & 4)*
Ttest		0.1400 *(Test 1 & 2)*		0.1478 *(Test (3 & 4)*

**Tests are worth 50 points.*

Table 1 shows the results of test one which was taken on paper was 39.462, a median of 40, a mode of 41 out of 50 points. Test two which was taken online had an average of 37.846, a median of 38, and a mode of 35 points. Test three which was taken on paper had an average of 40.500, median of 40, and mode of 38 points. Test four which was taken online students average was 39.423, a median of 38.5 and a

mode of 45 points out of 50. The standard deviation of test one and two is 5.0561 and test three and four is 4.6388. A t test was computed between test one and two which was 0.1400 and test three and four of 0.1478.

Table 2: Class 2 Project Data

Class 2 (25 students)				
	Test 1 Online	**Test 2 Paper**	**Test 3 Online**	**Test 4 Paper**
Average	35.3600	36.8400	38.4000	40.1200
Median	33	40	38	42
Mode	30	40	38	43
Standard Deviation		6.8490 *(Test 1 & 2)*		5.4504 *(Test 3 & 4)*
Ttest		0.1326 *(Test 1 & 2)*		0.0526 *(Test (3 & 4)*

**Tests are worth 50 points.*

The results of Table 2 show test one which was taken on paper was 35.3600, a median of 33, a mode of 30 out of 50 points. Test two which was taken online had an average of 36.8400, a median of 40, and a mode of 40 points. Test three which was taken on paper had an average of 38.400, median of 38, and mode of 38 points. Test four which was taken online students average was 40.1200, a median of 42 and a mode of 43 points out of 50. The standard deviation of test one and two is 6.8490 and test three and four is 5.4504. A t test was computed between test one and two which was 0.1326 and test three and four of 0.0526.

Table 3: Class 1 & 2 Ttest Project Data

Class 1 & 2 (Ttest)	
Test 1	0.03595
Test 2	0.48597
Test 3	0.18141
Test 4	0.44747

This project used an alpha of .05 and with 49 degrees of freedom the t value has to be fewer than 2.00. These results in Table 3 show the t value of each test in both class one and two. The t value of test one both online and paper versions in class one and two was 0.03595, test two .48597, test three 0.48597, and test four 0.44747. The hypothesis was proven to be correct after finding that the t test values are found to be significantly less than 2 this difference is considered to be not statistically significant (Gay, 2006).

Discussions of these results as presented are found in the following chapter.

CHAPTER V: DISCUSSION AND CONCLUSIONS

The research conducted in this study was intended to determine if computer based assessments (CBT) were effective in adequately assessing students or if traditional paper-based assessments (PPT) were the best method to use. In years past I have administered computer based assessments to my students on topics of MS Word, Excel, Access, and PowerPoint. The students were not working up to my expectations which made me question my method of assessment. I wanted to make sure that my method of assessment was not the reason for students poor test scores. So I performed a quasi-experiment to determine which method of assessment was most effective in my IT Apps course.

The purpose of this study was to determine if high school students in my IT Apps class test scores were higher by completing a paper-based or computer-based assessment. The hypothesis for this study was that the test scores from a computer-based and paper-based assessment will not create a statically significant difference. In this chapter you will be given an explanation of the results that were calculated in Chapter 4.

Discussion of Results

The research question for this study was the following: Were high school students' test scores higher based on completing a computer-based (CBT) or paper-based assessment (PPT) in my Information Technology Applications class? This project used an alpha of .05 and with 49 degrees of freedom the t value has to be fewer than 2.00. These results in Table 3 show the t value of each test in both class one and two. The t value of test one both online and paper versions in class one and two was

0.03595, test two .48597, test three 0.48597, and test four 0.44747. The hypothesis was proven to be correct after finding that the t test values are found to be significantly less than 2 this difference is considered to be not statistically significant (Gay, 2006). Since the t test values were much less than 2.00 this proves that there is not a statistically significant difference in the results of an online or paper-based assessment. Therefore, these results mean that it does not matter which form of assessment I use in my IT Apps class, my students will be successful with either method.

I will use the results of this study to plan my IT Apps class for next year involving my assessments. Since the method of assessment does not matter more than likely I will use computer-based assessments. CBT's are easier for me to assign because I do not have to spend countless hours grading tests from sixty plus students. I can simply have students take a computer-based test and let the computer calculate the results for me. I know have no doubt about computer-based tests effectiveness in my IT Apps class, which has been proven in this project.

Other Notable Findings

In the process of completing my research project I discovered a couple of notable findings that were not directly related to the research question but affected the study. The first finding was that it took students longer to take the paper-pencil assessments then the computer-based assessments. My first assumption was that students took more time to read and answer the questions so they would do better. However, I found this to be false after analyzing the results of the study. Even though

it took some students longer to complete the paper-based assessment it did not affect their test score.

The other finding noted during the study was that students enjoyed taking the computer-based assessments more than the paper-pencil version. Many students claimed that it was easier to take the computer based test because it was right in front of them and didn't have to write down their answers. The students also liked how their test score and results were instantly calculated for them as soon as they submitted their test. The students could compare their answers to the test key and find out which specific problems they missed. Again, this finding does not affect the research question because their liking of the computer-based test did not significantly relate to their test score.

Conclusions

In completing this project, I have drawn a few conclusions about the results. The results were no surprise and my hypothesis in the study was proven to be true. However, it was very reassuring to me to know that my students test scores are not affected by the method of assessment I use.

Relevance of the Study to Past Research

This study was very similar to the past research articles that find in doing research which can be found in Chapter 2 of this report. Most of the research experiments that were performed previously performed had the same results which were proved in this study. In other words, the past studies supported my study that there is not a statistically significant difference between the versions of testing, computer-based or paper-based.

Application of Results

This study of comparing computer-based assessments to paper-pencil tests is relevant to the every day world. This study has proven that you can use either a CBT or PPT assessment and the results will be similar and the assessment method does not affect the test score. For example, the American College Testing Program and other college entrance exams can use computers to administer their test and more than likely students are going to do just as good if was performed on paper. Also, many states are using computer based assessments based on the research that has been done on assessment methods. The reason being is that the test scores do not produce a statistically significant difference and why not use the easiest method. Computers make testing much easier simply because it can compile the results and give data to the test administer.

Limitations

This study was pretty cut and dry and did not have many limitations to note. However, this study was limited to the number of students or participants in the study and will change every year. I had no control over the number of participants that were in my study. I was able to perform my quasi-experiment on only two different groups of participants but feel that I got really good results. One other limitation I can think of was that I chose my Excel unit tests to use in the experiment. I could have used other software programs like Access, Word, or PowerPoint assessments in the experiment. However, I feel that I since I used 4 unit assessments out of the Excel curriculum helped the validity of my study. For the most part I had not

uncertainties other than the number of participants used and the subject matter of the assessments in my research project.

Recommendations for Future Research

If I were to ever conduct this study again I do not feel that I would do anything differently. The way I performed my research was consistent with my results of the study and was very simple. To make this study more complex, if ever performed again, one could look at the time it took students to complete the test in relation to their results. Also, you could look at the students' ability using computers compared to their test scores. However, my research question was answered in my study and feel that the way I performed my project was the best for my purpose.

Summary

This study has solidified the fact that my ITApps students' test scores are not affected by the method of assessment I use in class. There is not a statistically significant difference between paper-based and computer-based assessments. The results were very helpful to me and reassured which method I should use in my classroom to help students be successful. Students enjoy using technology in the classroom and like take computer assessments. This study makes the fact that computer-based assessments are just as effective as paper-based assessments in my IT Apps class. Therefore, I will be using computer-based assessments in my ITApps class for years to come and will not hesitate after knowing they are an effective assessment method.

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APPENDIX A: Written Project Approval

RE: Research Project Approval
Eldon Hubbard
You replied on 7/26/2010 3:59 PM.
Sent:Friday, July 23, 2010 10:51 AM
To: Crystal Palser

Crystal

I think it would be interesting to see the results of this. You certainly may pursue this project associated with your classes.

Eldon L Hubbard

-----Original Message-----
From: Crystal Palser
Sent: Friday, July 23, 2010 10:08 AM
To: Eldon Hubbard
Subject: Research Project Approval

Eldon,

I am currently taking a research class and have decided to do a research project in my IT Apps class. I am going to look at the difference between students taking a paper pencil test and a computer-based test. I am going to have students in both sections of IT Apps take both methods of assessments on 4 unit tests and compare the scores. If you want to see my research proposal I can get that to you. I'm really excited to see the results of this study.

However, for me to continue with the research process I need your approval. If you have any questions let me know.

If you can get back to me, I'd appreciate it!

Thanks,

Crystal Palser
Business
Gering Public Schools

Summary of Learning
Crystal Palser
December 2011

I am so thankful for the opportunity that Concordia has provided me with to earn my Master's Degree in educational administration. I am very impressed with the program and would recommend it to anyone wanting to earn their Master's Degree. I am not only pleased with the convenience and attainability of the program but the learning experience I have gained from it. With one class left, I am very excited to be done but at the same time a little sad that I will not be taking any more classes. The classes were all very interesting and related directly to my everyday job.

There were a number of areas that helped me grow as a teacher and helped prepare me to be an administrator someday.

The first thing I learned from the program is the importance of relationships. Relationships are very important for things to get done in schools whether its students, teachers, administrators, and the community. Schools can achieve anything they want if they have healthy working relationships with all stakeholders in the district. This concept has helped me look at the relationships I have in my professional and personal lives.

The second area where this program helped me grow as an educator was in law class and the information I learned from the class. The law class raised my awareness to law in today's schools and the professional behavior expected from teachers, students, and administrators. I find myself questioning everything I do and thinking about how it looks in the sense of the law. It has made me make wiser decisions about what I do in my classroom. I also look at issues that are going on in education today and apply case law that we learned in the class.

The most important thing I learned from this program is that I need to know who I am before I ever become an administrator. I need to know myself better than anyone else because if I do not, who I am will always be questioned. I need to be able to make decisions and be ready to tell why I made that decision without being defensive. I have to earn the respect of the teachers and students in the school, knowing my strengths and weaknesses with help in that process. I also now know the importance of being a lifelong learner and how important it is to stay educated. I want to be the best administrator I can be and need to use the resources in the world today to help me do that.

My newly acquired knowledge has impacted my teaching and personal life in many different ways. It has made me more aware of my actions and the effect they have on me and other people. Also, it has made me think in the shoes of an administrator, even though I am a teacher. I always analyze things even in my classroom as if I was an administrator and think how I would handle it. In my school when things happen or teachers tell me stories of how our administrators handled different situations, I analyze them and think about what I would have done. I always think about the decision they make, if I did not agree, I think about why not. I try and determine why they made the decision they made.

Some of my post Master's Degree professional goals are to gain the knowledge and acquire the skills through my experiences to prepare me to become and administrator. Someday I would like to be an administrator at the secondary level. For now, I want to be the best teacher that I can possibly be and grow from every experience I can. I want to be a good administrator and have the experience and knowledge that the job requires. Until the opportunity presents itself, I am going to work on being the best person I can be in all avenues of my life: professionally and personally.

I am so thankful and appreciative of Concordia University for providing me with this experience to earn my Master's Degree. I would say that this program has been easy for me because I really enjoyed the classes and the work was applicable to my job. I am so thankful that this opportunity fell into my lap 2 years ago, it has changed my life.