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# Pepperdine University Graduate School of Education and Psychology

ASSESSING IN-KIND MIDDLE SCHOOL TEACHERS' CONCERN ABOUT & USE OF SOARS: SCHOOL ONLINE ASSESSMENT REPORTING SYSTEM

A dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Education in Educational Technology

by

John M. Marion

April, 2011

Michele Stimac, Ed.D. - Dissertation Chairperson

This dissertation, written by

#### John M. Marion

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

## DOCTOR OF EDUCATION

Doctoral Committee:

Michele Stimac, Ed.D. Chair

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Ruth Johnson, Ph.D.

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# DEDICATION

To my children and their children, present and future.

Value Life-Long Learning

#### ACKNOWLEDGEMENTS

It is a pleasure to thank those who helped make this journey possible. I would not have been able to finish my dissertation without the guidance of my committee members, encouragement from colleagues and friends, and support from my family.

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I thank Dr. Richard Wiley, President of Endicott

College in Beverly Massachusetts for his generous support.

Dr. Wiley inspired and supported my efforts to pursue my

doctorate while I was employed at Endicott College as

Associate Dean of Academic Computing.

Under Dr. Wiley's leadership, students at Endicott
College round-out their academic studies by completing a
capstone experience. This dissertation completes my lifelong-learning capstone experience. Thank you Dr. Wiley.

Dr. Cynthia Stevenson, Superintendent of the Jeffco Public Schools is a champion of equality for all in the Jeffco Public Schools. Through Dr. Stevenson's leadership, all students are offered a program of study that is challenging, career inspiring and equitable in providing support services to all. Her leadership and care for all students is truly inspirational. Thank you for all you do.

I also express my appreciation to Dr. Carol Eaton,

Executive Director of Assessment and Research in the Jeffco

Public Schools, for her support and helpful suggestions.

I am indebted to my colleagues, the administration, faculty, and staff for their on-going support during the writing of this dissertation. To Principal Rob Hoover and Assistant Principal Becky Brown, thank you for your support, patient understanding, and meaningful encouragement.

When my research was in its early proposal stage, former Middle School Principal Dr. Heather Beck offered her professional support and encouragement. Through Dr. Beck's interest and guidance, she helped give my dissertation meaningful focus. Her encouragement to pursue my doctorate was empowering to me. Thank you for all that you have done Dr. Beck.

Math teacher Dr. David Benke was always willing to help me by offering his best advice whenever I had a question. Thank you Dr. Benke for helping me "get-r-done!"

Another colleague, Dr. Linda Trouville from the Dracut Public Schools in Massachusetts, was very supportive in the early stages of my doctorate. Dr. Trouville shared her dissertation experience, and offered me her expert advice whenever I had a question. Thank you for your support, encouragement, and friendship Dr. Trouville.

I always will be thankful for the support of my neighbors/friends from Chestnut Street (aka Chestnut

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Finally, I would like to thank my loving and supportive wife, Joann. She was always there, standing by me through good times and bad. Her encouragement and support were highly motivating during the writing of this dissertation.

# John M. Marion

# **VITA**

# **Education**

1997-2011	PEPPERDINE UNIVERSITY Doctoral Degree – Ed.D. Educational Technology	Los Angeles, CA
1970-1973	FITCHBURG STATE UNIVERSITY  Masters Degree in Science Education	Fitchburg, MA
1965-1969	FITCHBURG STATE UNIVERSITY  Bachelor of Science Degree in Education	Fitchburg, MA

# **Experience**

#### 2003-Present **DEER CREEK MIDDLE SCHOOL**

Littleton, CO

### **Technology Education Teacher:**

- Teacher 7<sup>th</sup> 8<sup>th</sup> Grade Technology Education
- Webmaster School Center Mentor/Trainer Deer Creek Middle School Web Site
- Infinite Campus Mentor/Trainer Deer Creek Middle School
- Virtual Education/INFORM/SOARS Mentor/Trainer Deer Creek Middle School
- Values Awards: Selected for Teamwork Deer Creek Middle Jeffco Schools
- Employee of the Month Award 2004-05 & 2005-06
- Parent Teacher Student Association (PTSA) Teacher Rep, Deer Creek Middle School

#### 2000-2003 DRACUT PUBLIC SCHOOLS

Dracut, MA

#### **Media Technology Specialist:**

- Led the supervision, training, and evaluation of all aspects of the media/technology programs, K-12
- Managed the technology budget: hardware, software, professional development, and e-rate funding
- Prepared and awarded NCLB Title II Part D Grant Enhancing Education Through Technology (\$9,000)
- Authored the technology component of the district's Five-Year Strategic Plan for Education Reform
- Coordinated K-12 Technology Committee responsible for updating the district's Five-year Technology Plan
- Submitted Educational Technology Plan updates on-line to the Massachusetts Department of Education
- Aligned district technology curriculum to Massachusetts Instructional Technology Standards – K-12
- Presented Technology Integration Standards to district administrators at annual Administrative Retreat
- Initiated an Instructional Technology Specialist support group to assist with technology/classroom integration
- Supervised the collection of student data (K-12) and submitted on-line to Mass. Department of Education

- Posted and managed Dracut Public School data on Massachusetts Department of Education Web Site:
  - District's Directory Administrator (Maintaining district data) http://profiles.doe.mass.edu/
  - Virtual Education Space (VES) http://ves.mass.edu/index.html
  - Curriculum Library Alignment and Sharing Project (CLASP) http://ves.mass.edu/programs1.html
- Webmaster and e-Mail Postmaster of the district's web site: www.dracut.k12.ma.us
- Presented to School Committee for review and adoption an Acceptable Use Policy (Internet and e-Mail)
- Supervised the management of the district's Wide Area Network (WAN)
- Supervised the purchase, installation, and testing of technology/media during the Construction of Lakeview Jr. High, Dracut, MA
- Advisor to the Dracut High School Technology Club
- Oversee student internship program at Cable TV Studio (AT&T) Cablecast of Local Government Meetings
- Implemented and supervised a Summer Computer Camp Program, Lakeview Junior High School

#### 1998-2000 **READING PUBLIC SCHOOLS**

Reading, MA

## **Director of Technology:**

- Led the supervision, training, and evaluation of all aspects of the media/technology programs, K-12
- Administered Mass. Department of Education Technology Professional Development Grant (\$60,000)
- Appointed by School Committee to Board of Directors: Reading Community Television, Inc. (RCTV)
- Chaired K-12 Technology Committee (Administrators, Teachers, Parents, and Students)
- Webmaster of the Reading Public School's Web Site: www.reading.k12.ma.us
- Managed the Reading Public Schools network system
- Managed data collection required by Massachusetts Department of Education
- · Advisor to the Reading Memorial High School Technology Club

#### 1990-1998 ENDICOTT COLLEGE

Beverly, MA

#### **Associate Dean of Academic Computing:**

- Planned for the innovative and creative use of computing in all academic disciplines
- Co-Chaired the Technology Committee to develop long range plans for academic computing
- Served as active member of both the Academic Council and Administrative Council
- Collaborated with the Academic Dean and Associate Deans to integrate technology in all areas of study
- Organized and taught technology workshops to assist faculty with integrating technology in their instruction
- Taught Technology courses for the Education Department (Teacher Preparation) and Business Department
- Directed the operation of the Academic Computing Center (Five Computer Labs)
- Supervised the Lab Manager and several work-study students that provided technology helpdesk support
- Served as Webmaster of the academic web site: www.endicott.edu
- Established and directed a program for student purchase of Apple Macintosh and IBM Computers

### 1986-1990 **NEWBURYPORT PUBLIC SCHOOLS**

Newburyport, MA

#### **Computer Coordinator, K-12:**

- Led the supervision, training, and evaluation of all aspects of the media/technology programs, K-12
- Chaired the Newburyport School's Computer Council, K-12
- Proposed, developed, and implemented long range plans, computer education, K-12
   Funded by Massachusetts Department of Education Chapter 188 Grant
- Proposed, and developed a computer curriculum scope & sequence, K-12
- Trained K-12 staff in hardware and software applications: Integration of Computers in the Classroom, AppleWorks, and LogoWriter
- · Prepared annual budget: hardware, software, supplies and materials
- Purchased, installed, inventoried and maintained equipment and supplies
- Proposed, developed, and implemented a Summer Computer Class Program

#### 1984-1986 **UNICOM, INC.**

Providence, RI

Regional Manager: Massachusetts Computer Education Market

- Responsible for sales and service of computer hardware and software: Apple, IBM, and Compatibles
- Managed customer support and provided information/pricing as requested in bid specifications
- Assisted at computer education conferences

#### 1969-1984 GROTON-DUNSTABLE REGIONAL SCHOOLS

Groton, MA

Teacher: Full time classroom teaching at the Elementary and Middle School levels

- Fulbright-Hayes Teacher Exchange Participant: Southampton, England: 1974-75
- Appointed as school system's first Computer Coordinator, K-12: 1982
- Chaired the Groton-Dunstable's Computer Task Force
- Proposed and developed a computer curriculum, K-12
- Trained K-12 staff in hardware and software applications
- Proposed, developed, and implemented a Summer Computer Class Program

### **Teacher Certification**

Massachusetts Certification # 103144: Elementary/Middle School Teacher (K-9)

**Instructional Technology Specialist (K-12)** 

Colorado Certification # 0229879: Elementary/Middle School Teacher (K-8)

# **Educational Technology Activities**

## **Massachusetts Department of Education**

- Participant in "Local Technology Plan Benchmark Standards" Working Group for Educational Technology Advisory Council: 2000-2003
- Participant in "Technology in the 90's Teleconference"
   Chapter 188 Grant "Long Range Planning for Technology Education"
   Broadcast from Boston University Studio on May 10, 1988
- Expert Trainer Special Net: Telecommunications Project: Special Education Department: 1988-1989 School Year
- Instructor for the In-service Training Institute:
   Computers in Special Education Classes: Summer 1989

#### **Massachusetts Computer Using Educators (MassCUE)**

- Member: 1986-2003
- Executive Board: Outreach Coordinator: 1989-1990 Special Interest Group (SIG) Coordinator: 1990 Educational Technology Advisor: 1999
- The Merrimack Valley Special Interest Group Leader: 1988-1990
- Liaison: Educational Technology Advisory Council (ETAC):

Massachusetts Board of Education: 1987-1990

• Liaison: Massachusetts Department of Education:

Bureau of Teacher Preparation and Program Approval:

Certification of School Services Personnel: Computer Science Subcommittee: 1990

• Area Coordinator for the Annual Open House at the State House: 1987-1990

# **Instructed/Lectured in Educational Technology 1981-1998:**

- University of Massachusetts: Lowell Campus
- · Fitchburg State University
- Northern Essex Community College
- Endicott College
- Salem State University
- Merrimack Education Center

# **Advisory Board / Consulting**

#### 1989-1990 CLARIS CORPORATION, INC.

Santa Clara, CA

- National Technology Education Advisory Board, K-12
- NECC Computer conference Representative

#### 1987-1990 LEGO SYSTEMS, INC.

Enfield, CT

LOGO COMPUTER SYSTEMS, INC.

New York, NY

- Consultant and teacher trainer of Lego-Logo Computer Robotics and Programming
- Training workshops in Logo and Lego-Logo offered in schools, computer conferences
- NECC Logo Computer conference customer sales and service

# 2004-2006 JEFFERSON COUNTY PUBLIC SCHOOLS

Golden, CO

- Educational Technology Information Literacy Advisory Committee
- Technology Equity Study Group Jeffco Schools
- Intel Teach to the Future Training Program Master Teacher

# **Memberships**

 $International\ Society\ for\ Technology\ in\ Education-(ISTE)$ 

International Technology and Engineering Education Association – (ITEEA)

Phi Delta Kappa, International Membership

Montachusett Chapter Officer - University/College Relations 2000-2002 Jefferson County Public Schools Chapter 2003-2005

Association for Supervision and Curriculum Development (ASCD)

Who's Who in American Education – Marquis Publication

#### ABSTRACT

In recent years technology has been integrated into every sector of education. Using Student Online Assessment Reporting System (SOARS) to assess score results and design instructional strategies for improved learning is a challenge and will cause concern to teachers.

This is a descriptive comparative study designed to measure select Middle School teachers' Stages of Concern and Levels of Use regarding the SOARS assessment tool.

SOARS was adopted by Jeffco Public Schools (CO) to chart student progress by presenting Colorado Student Assessment Program (CSAP) score data. This study determined if there was a significant difference between the Stages of Concern and Levels of Use of High Profile and Low Profile Middle School teachers.

High Profile Middle Schools have demographic data that show the highest percentile levels of free/reduced lunches, ethnicity rates, and mobility rates and Low Profile Middle Schools have the lowest percentile levels.

This study targeted a select group (N=72) of coresubject teachers (Language Arts, Math, and Science) from High and Low Profile Middle Schools. There were three High Profile Middle Schools and three Low Profile Middle Schools that participated in this study.

When comparing results of this research, data show there are no significant differences between the two groups of High and Low Profile Middle Schools' teachers regarding their Stages of Concern and Levels of Use of SOARS. Both High and Low Profile Middle School teachers benefit from an equal level of teacher preparation, support, and commitment by all.

### Chapter 1. Introduction

Dr. Cindy Stevenson, the Superintendent of Jefferson County Public Schools (Jeffco Public Schools), Colorado's largest district, presented her educational priorities for the district at an administrative orientation session held in July of 2006. Dr. Stevenson reviewed the Jeffco Public Schools' Mission Statement - to provide a quality education that prepares all children for a successful future. She reviewed the Jeffco Public Schools Strategic Plan, noting the following goals for every department and every school in the district.

Goal 1: All students will graduate with meaningful choices for their future as a result of the quality instruction and rigorous curricula in Jeffco Public Schools.

Goal 2: All employees will be efficient, welcoming, customer-oriented, and accountable for a high performing organization to ensure that all students graduate with meaningful choices. (Jeffco Public Schools, 2006)

To emphasize the importance of the mission and goal statements, Dr. Stevenson set the 2006-2007 school year themes for all in the Jeffco Public Schools: Leadership for Every Child - Every Day and to do Whatever It Takes to

align resources, services, and structures to match the mission statement and goals. Dr. Stevenson also emphasized the need to continue the development of curricula and assessments to create improved systematic and systemic programs in the Jeffco Public Schools.

Superintendent Stevenson's presentation emphasized that schools must assure equal access to educational resources for all students and teachers. Dr. Stevenson states that all means all, with no excuses. All means all students and teachers in all schools, regardless of the schools' demographics such as income, ethnicity and mobility rate of students.

## Mandate for Accountability: No Child Left Behind (NCLB) Act

Jeffco Public Schools' Mission and Goal Statements correlate with the national mandate to be in compliance with the NCLB Act, as presented by President George W. Bush, who called for increased accountability in the nation's schools.

The NCLB Act of 2001 (Executive Summary of the No Child Left Behind Act of 2001, 2004) brought to state and local school administrators and teachers a mandate for being accountable for measuring progress and assuring proficiency for all students.

The NCLB Act will strengthen Title I accountability by requiring States to implement statewide accountability systems covering all public schools and students. These systems must be based on challenging State standards in reading and mathematics, annual testing for all students in grades 3-8, and annual statewide progress objectives ensuring that all groups of students reach proficiency within 12 years. Assessment results and State progress objectives are broken out by poverty, race, ethnicity, disability, and limited English proficiency to ensure that no group is left behind. (Executive Summary of the No Child Left Behind Act of 2001, 2004)

In response to the continual need for national and statewide assessment of student progress, Jeffco Public Schools adopted the Colorado Student Assessment Program (CSAP) in 1996, well before the NCLB Act (2001) became federal law. CSAP currently fulfills the mandate for compliance with both the No-Child Left Behind Act of 2001 and the 2010 U.S. Department of Education, ESEA Blueprint for Reform (2010) signed by President Barack Obama.

Jeffco Public Schools utilizes CSAP as its primary assessment standard. CSAP assessment is based on instructional standards set by Colorado's Department of

Education. The CSAP is administered annually to Jeffco Public Schools' students.

In addition to the requirements set by the federal government, the Jeffco Public School's program of study is under periodic accreditation review. The Colorado

Department of Education considers the assessment of student progress measured by CSAP as an important standard used to measure student academic progress.

### Adoption of a Web-based Database Tool for Assessment

In order to respond to assessment mandates, Jeffco
Public Schools adopted Virtual Education, an online webbased database tool used to provide administrators and
teachers with access to student CSAP test score results.
The district piloted Virtual Education during school year
2002-2003 at select schools. All of the district's nineteen
middle schools adopted Virtual Education in school year
2003-2004.

Virtual Education was replaced by INFORM at the beginning of the school year 2005-2006. At the beginning of the following school year 2006-2007, CSAP test result data stored in the INFORM system were transferred to a new database system.

School Online Assessment Reporting System (SOARS) is the current web-based database used as the primary

assessment tool to present CSAP results for the Jeffco Public Schools.

#### Statement of Problem

In recent years technology has been integrated into every sector of education. "It is an inescapable reality that teachers must respond somehow to educational reform initiatives that are sweeping the nation" (Hargreaves, 1997, p. 57).

Learning the best practice use of technology in the classroom as well as learning how to utilize SOARS to assess score results is a challenge and will cause concern among teachers. Consequently, it was the intent of this research to determine the teachers' Stages of Concern and Levels of Use regarding the use of SOARS for assessment.

### Concerning the Use of SOARS for Instructional Design

SOARS online database of CSAP scores can be accessed for several purposes. One of the core uses of SOARS is to review student CSAP scores from the SOARS database, study these in light of the students' strengths and weaknesses in their academic progress, and to determine areas of instruction that can be redesigned to address the students' various academic needs.

One such instructional design to consider is how summative CSAP data can be utilized while developing a more

formative assessment approach. Formative assessment will help teachers enhance their instructional strategies and help students enhance their learning experience.

Scriven (1967) defined summative assessment as assessing student progress through tests scores after learning is supposed to have occurred to determine whether or not learning did occur. Formative assessment is used to describe student progress during the learning process, which will inform teachers' instructional decisions.

Formative assessment should lead to an increase in student success by providing important feedback to both teacher and student as work progresses.

Additional clarifications of distinctions are found in a published handbook (Bloom, Hastings, & Madaus, 1971) of formative and summative evaluation of student learning that further defines strategies for summative and formative evaluation of student learning.

One of the goals of Jeffco Public School's assessment department is to move from assessment of learning to assessment for learning. This approach implies a change in the use of assessment tools for improved instruction. Too often summative assessment is the standard method that most teachers are comfortable using.

In the Jeffco Public Schools all teachers have access to the SOARS tool. SOARS presents summative data of learning that may be used to develop a formative approach as teachers design instructional strategies to improve student achievement throughout the Jeffco Public Schools, regardless of the schools' demographic profile.

# Statement of Purpose

The purpose of this research was to determine and compare two differing demographic populations of Jeffco's Middle School teachers' Stages of Concern and Levels of Use regarding SOARS. The results would determine if there is a difference between two sets of Middle School teachers that represent two differing demographic populations.

# Research Questions

- 1. What are the teachers' Stages of Concern regarding the SOARS tool in a select group of Jefferson County Middle Schools; namely, those that represent the four highest and four lowest school profiles in categories established by the district with reference to free/reduced lunches, ethnicity rates, and mobility of students?
- 2. What are the teachers' Levels of Use regarding the SOARS tool in a select group of Jefferson County Middle Schools; namely, those that represent the

four highest and four lowest school profiles in categories established by the district with reference to free/reduced lunches, ethnicity rates, and mobility of students?

3. Is there a difference in the Stages of Concern and Levels of Use of teachers between high and low profile schools based on percentile rates of free/reduced lunches, ethnicity rates, and mobility of students?

### Significance of Study

School districts throughout the country are being held responsible for assessing student progress. This nationalization of student assessment formally began with the creation of the Elementary and Secondary Education Act (ESEA) that was signed into law by President Johnson on April 11, 1965. ESEA was an aspect of President Johnson's Great Society that declared a War on Poverty. Title I of the ESEA focused on providing federal aid to help poor and minority students throughout the country.

The ESEA evolved to become the NCLB Act of 2001 when President Bush signed the reauthorization of ESEA. The NCLB Act further expanded the federal government's demand for accountability by putting more demands on school accountability in return for federal funding. A significant

change in this revision of NCLB is that all students are included in the assessment process, not just the disadvantaged.

With the 2010 renewal of ESEA, President Obama lays out a Blueprint for Reform (2010) that includes five priorities to improve education in all schools in the United States. One of the five priorities calls for College and Career Ready Students. Another priority calls for Equity and Opportunity for All Students.

As stated in Jeffco Public Schools' Superintendent's Mission Statement, all students will be provided a quality education that prepares all children for a successful future.

An assessment of the Stages of Concern and the Levels of Use of SOARS from select Middle Schools' core-subject teachers will help identify common/different Stages of Concern and Levels of Use of the teachers and would determine if there is equity between the teachers of the two demographically different populations.

# Delimitations of Study

This study did not include all of the schools and grade levels in the Jeffco Public Schools. The target population of this study was Middle Schools, grades 6, 7, and 8.

This study did not include all teachers in the six schools. Only targeted teachers who teach core-subject areas; Language Arts, Math, and Science in selected middle schools were included in this study.

Reading teachers were also included. Middle schools do not have the topic of reading as part of the core curriculum but the subject of Reading is offered to students who require additional support.

### Limitations of Study

This research used two of the three components of the Concerns Based Adoption Model (CBAM), Stages of Concern and Levels of Use. The third component, Measuring Innovation Configuration (MIC), was not used in this study. The MIC focuses on adoption and implementation of change at a district-wide level so its broad policy implications were outside the scope of this study. This research used CBAM as a tool for describing the Stages of Concern and Levels of Use of SOARS.

In this study, the questionnaires were not used to measure changes over a period of time. This research study was focused on a one-time analysis of two independent groups. This researcher gathered data of the Levels of Use through a self-reporting system in the form of a questionnaire rather than through an interview approach.

### Chapter 2. Literature Review

Through a review of selected literature, a conceptual framework for this research is presented that is divided into three areas.

First is a historic overview of federal programs that require schools to assure equity for students in schools. The review will cover a timeframe from the Elementary and Secondary Education Act (ESEA) of 1965, (K12 Academics, 2010), to the NCLB Act of 2001 (Executive Summary of the No Child Left Behind Act of 2001, 2004), and then to the 2010 U.S. Department of Education, Office of Planning, Evaluation and Policy Development, the ESEA Blueprint for Reform (ESEA Blueprint for Reform, 2010).

Following the historic overview of federal programs, an overview of strategies of both summative assessment and formative assessments is presented. The use of Response to Intervention (RTI) in the Jeffco Public Schools to assist educators in identifying areas of strengths and weaknesses of student learning is also presented. The Jeffco Public Schools development and use of Instruction and Intervention, informed by Assessment, (I2A) and the use of a Data Decision Making Model is discussed.

Last, an overview of the Concerns Based Adoption Model is presented as it applies to this study of middle school

teachers' Stages of Concerns and Levels of Use regarding the SOARS assessment tool.

# Historic Overview: Equity - ESEA, NCLB, and ESEA Blueprint for Reform

The principle of accountability for results and how accountability is applied equitably across all schools in the Jeffco Public Schools is the focus of this historical overview.

School districts throughout the country are being held responsible for assessing student progress. This nationalization of student assessment began with the creation of the Elementary and Secondary Act (ESEA) that was signed into law by President Johnson on April 11, 1965. ESEA was one aspect of President Johnson's Great Society that declared a War on Poverty. Title I of the ESEA focused on providing federal aid to help poor and minority students throughout the country.

"The Great Society established the federal role in education as an equity role, as a role of the federal government trying to help kids who were neglected for some reason or another in schools," said Jack Jennings, the president of the Center on Education Policy, a Washington research and advocacy group (Robelen, 2005, p. 2).

"And that has remained as the federal role, even in the guise of No Child Left Behind. ... That legacy remains," said Mr. Jennings (Robelen, 2005, p. 2).

When President Reagan signed the 1988 reauthorization of ESEA, he emphasized the importance of educational outcomes, including demands for testing and accountability that maintained the equity legacy of previous presidents.

With the 1994 ESEA reauthorization and Goals 2000 initiative, President Clinton's emphasis on outcomes expanded the 1988 reauthorization. The Improving America's Schools Act of 1994 required states to have academic standards, testing, and disaggregated reports to assess whether disadvantaged students were making adequate yearly progress (AYP) toward meeting performance standards. States were mandated to develop uniform academic standards for all their students and align assessments to measure student progress (Robelen & Sack, 1999; Robelen, 2005).

No Child Left Behind Act of 2001 is the historic, bipartisan education reform effort that President Bush proposed in his first week in office. Congress passed the law on January 8, 2002. The NCLB Act of 2001 reauthorized the Elementary and Secondary Education Act (ESEA) of 1994, the main federal law affecting education from kindergarten through high school. NCLB is built on four principles:

- 1. accountability for results,
- 2. more choices for parents,
- 3. greater local control and flexibility, and
- 4. an emphasis on doing what works best, based on scientific research (Executive Summary of the No Child Left Behind Act of 2001, 2004).

In March of 2010, further revisions were proposed by

President Obama and published by the Department of

Education in a document entitled; ESEA Blueprint for

Reform: The Reauthorization of the Elementary and Secondary

Education Act (ESEA Blueprint for Reform, 2010).

Accountability requirements chart the growth of the standards and achievement movement that began in the 1970s with minimum competency tests. Most states have adopted state-level standards in math, reading, history, science, and other subjects that require an administration of tests to ensure that students are meeting the standards.

In 1993, the Colorado General Assembly enacted legislation aimed at bringing about a coordinated improvement in the performance and accountability of the state's K-12 education system. The Colorado Department of Education established Standards for Colorado Students (Higher Expectations, Better Results: Establishing Standards for Colorado Students, 1994).

Most states have adopted high-stakes tests used to assess whether students are making progress. In 1996, the Colorado Department of Education (CDE) adopted CSAP to measures student progress.

ESEA evolved to become the NCLB Act of 2001 when President Bush signed into law the reauthorization of ESEA. NCLB Act further expanded the federal government's demand for accountability by putting more demands on school accountability in return for federal funding. A significant change in NCLB is that all students are included in the assessment process, not just the disadvantaged.

The role of equity for all students continues to be a major thrust of the lawmakers. The NCLB act defines a more rigorous accountability of the ESEA's provisions. States throughout the country are required to test all students annually in grades 3-8 in reading and mathematics; to disaggregate the scores by race, gender, English-language proficiency, disability, and socioeconomic status; and then to publish the data. The law's intent is to have all students reach proficiency in twelve years. Proponents believed that anything less than 100 percent proficiency signaled a retreat from high expectations for every student.

Robelen (2005) quotes Jennings, who was a longtime top aid to Democrats on the House education committee, and helped rewrite the ESEA several times, as saying,

The No Child Left Behind Act, building on Clinton's legacy, clearly has expanded the federal role beyond children at risk to affect all children. The federal role has evolved to be much broader, but still at its heart is an equity concern. (p. 2)

In the ESEA Blueprint for Reform, The Reauthorization of the Elementary and Secondary Education Act of 2010,

President Obama outlines five priorities to improve education in all schools in the United States:

- 1. College and Career Ready Students
- 2. Great Teachers and Leaders in Every School
- 3. Equity and Opportunity for All Students
- 4. Raise the Bar and Reward Excellence
- 5. Promote Innovative and Continuous Improvement (ESEA Blueprint for Reform, 2010, pp. 3-6)

Two of the five priorities set by the ESEA Blueprint for Reform are relevant to the mission and goals of the Jeffco Public Schools and are significant in this research.

The first priority is to have College and Career Ready Students. Priority one states that "every student should graduate from high school ready for college and a career,

regardless of their income, race, ethnic or language background, or disability status." (ESEA Blueprint for Reform, 2010, pp. 3-6)

As stated in Chapter One, the Jeffco Public Schools' Mission Statement is to provide a quality education that prepares all children for a successful future.

The third priority of ESEA Blueprint for Reform is to have Equity and Opportunity for All Students.

All students will be included in an accountability system that builds on college and career-ready standards, rewards progress and success, and requires rigorous interventions in the lowest-performing schools. Schools should provide greater equity to give students a fair chance to succeed, and give principals and teachers the resources to support student success by taking steps to ensure equity, by such means as moving toward comparability in resources between high-and low- poverty schools. (ESEA Blueprint for Reform, 2010, pp. 3-6)

The Jeffco Public Schools embrace both NCLB and the ESEA Blueprint for Reform's focus on equity for all in our students in all of our schools. When the Superintendent states that all means all, Dr. Stevenson, Superintendent of

Schools, gives emphasis that equity for all is a high priority in the Jeffco Public Schools.

# Summative and Formative Assessment Strategies

During the last four decades, a distinction between two types of assessments used in education has been delineated. Scriven (1967) and Bloom, Hastings, and Madaus (1971) defined different points of view between summative and formative evaluation. Stiggins & Chappuis (2005) define summative assessment as a measure of test results taken after a task is completed to determine whether learning has or has not occurred. Stiggins & Chappuis define formative assessment as a process of describing assessments of learning during a task, before the task is completed. By having assessments taken during a task, the instructor will be better informed when making instructional decisions regarding the student needs and the appropriateness of the task. Informed instructional decisions will lead to more successful students.

In the most powerful type of formative assessment, the teacher "uses a variety of assessment tools and methods to record and provide continual evidence of the student's progress in mastering the foundations that underpin and lead up to state standards." (Stiggins, 2005, pp. 325-326).

The No Child Left Behind Act has increased the importance of summative assessment because States are required to report their achievement standards and evidence of students Annual Yearly Progress (AYP) that assures students are meeting those standards. State assessments often include many standards combined to provide a single summative score of proficiency for each student. That single score is used to determine if the student's learning is sufficient. Summative assessment can inform accountability decisions but is not very helpful at the classroom level when making learning decisions. (Stiggins and Chappuis, 2005).

Interest in summative assessment has far outweighed the importance of formative assessment due to the great number of tests that are used for student grading not only in the classroom but also in test results from local, state, and national sources. For many years, summative assessment has been the traditional assessment method that teachers use. Change from this norm, moving from summative to formative assessment will take time for training and experience using formative assessment.

Educators' have realized that once-a-year standardized summative tests are not likely to affect specific instructional decisions. Summative tests typically fail to

provide a picture of individual student's learning.

(Stiggins and Chappuis, 2005). Formative assessment offers constructive information that will lead to an enhanced development of student learning.

Stiggins and Chappuis indicate that as schools develop their school improvement strategy plan; formative assessment is included more frequently in the newly developed plans for school improvement strategies.

Formative assessment will gain in prominence as teachers and administrators find that formative assessment methods provide a more complete educational assessment of the student's progress.

Stiggins and Chappuis (2005) suggest three approaches to increase the use of formative assessment in classrooms:

- 1. use summative test more frequently,
- 2. use effective data management,
- 3. use the first two approaches with an additional step. Assure that the students understand what they are learning before the learning proceeds.

  (pp. 17-18)

Moving from assessment of learning to assessment for learning. The third approach proposed by Stiggins is assessment for learning in which students work directly "with their teacher to monitor and adjust their own

progress. Students play an important role in communicating evidence of their own learning to those who need it," (Stiggins and Chappuis, 2005, p. 18), including the teachers, administrators and/or parents/guardians of the student. When consistently carried out as a matter of routine within and across classrooms, this set of practices has been linked to profound gains in student achievement, especially for low achievers (Black & Wiliam, 1998; Bloom, 1984; Meisels, Atkins-Burnett, Xue, & Bickel, 2003; Rodriquez, 2004).

The first two formative approaches articulated by

Stiggins are assessment approaches that differ from

assessment for learning. The first two approaches inform

teachers about the current status of student achievement.

Assessment for learning informs students about their own learning and is based on the understanding that students are as much educational data decision makers as the teachers. Teachers and administrators have come to understand that assessment is both a tool for accountability and a blueprint for instruction (Asp, 1998).

Shepard points out that "assessment for learning focuses on students' progress as they learn day-to-day on the curricular scaffolding... This leads to a better understanding of the instructional standards and if

students are mastering basic reasoning, knowledge, performance skills, that supports standards" (Shepard, 2005, pp. 66-70).

Stiggins & Chappuis maintain that every student could and should help manage their learning experience by having access to data that is being assessed. To improve school programs, teachers should have access to data but in addition, getting data and information into the hands of students can help change formative assessment into assessment for learning (Stiggins and Chappuis, 2005).

Chappuis, (2005) point out that schools that are making gains in achievement had students that use formative assessment information more frequently than summative assessment.

Formative assessment began with offering students a clear picture of learning targets, students received feedback on their work that helped them understand where they were with respect to the desired learning target, and students engaged in self-assessment.

Formative assessment provides specific steps that students can take to improve (Black and Wiliam, 1998, p. 7).

As previously stated, the goal of the Jeffco Public School District is to move from assessment of learning to

assessment for learning, which implies a change in the use of assessment as a tool for improved instruction. In the Jeffco Public Schools all teachers have access to the SOARS tool that presents summative data of CSAP results. Teachers evaluate summative CSAP data and work toward developing a formative approach to design instructional strategies to improve student achievement.

Response to intervention. Once assessment data is collected and evaluated, it can be used by teachers and administrators to make informed decisions about how to best identify and meet the students' needs. One strategy adopted by the Jeffco Public Schools to help teachers respond to student academic needs is Response To Intervention (RTI).

As part of the response to intervention process, empirically supported interventions are selected and implemented to determine what set of instructional conditions most benefits the student. When response is the focus, the emphasis of the process is to determine what set of conditions the student needs to benefit from instruction.

The process is designed to first identify the set of conditions that benefit the student and then determine whether services should be provided. Thus, a response to intervention approach requires both

intensive, substantially modified instruction and intensive assessment and evaluation to monitor, evaluate, and modify interventions as necessary to ensure effect. (Richter, 2010, p. 4)

Salvia & Ysseldyke (2007) state that core instruction is for all students; enhanced instruction is for some students; and intensive instruction (i.e., intervention) is for only a few students.

In a multi-tiered framework, assessment and evaluation activities become more frequent, or formative, with the progression from primary to secondary and then to a higher education level of instruction and intervention. At the higher education level, frequent and direct measurements of student response are used to guide on-going development and evaluation of intervention activities in response to the individual student (Barnett, Daly, Jones, & Lentz, 2004; Christ, Burns, & Ysseldyke, 2005).

Instruction & intervention informed by assessment,

I2(A). Another strategy adopted by the Jeffco Public

Schools to help teachers respond to student academic needs

is I2(A), defined as instruction and intervention informed

by assessment. It informs the teachers and administrators

about responsive teaching and learning based on data-driven

decision making. Jeffco instituted the I2(A) initiative to

monitor all of Jeffco Public Schools' initiatives. It is the umbrella that pulls all these research-based practices together at the school and classroom level to help educators effectively implement a guaranteed and viable curriculum, plan effective instruction, provide responsive interventions using ongoing assessment information and other data sources, and enhance teacher skillfulness, boost efficacy, and increase student achievement (Jeffco Public Schools, Department for Learning and Educational Achievement, Assessment & Research, I2A, 2008).

Data decision making model. To assist teachers and administrators in forming instructional strategies, a decision making model was developed and introduced.

At a meeting of administrative director's in the Jeffco Public Schools in September of 2008, participants viewed a PowerPoint presentation of the development of Data Decision Making Model. The presentation identified 4 steps used to develop a model:

- 1. Understanding how the Data Decision Making fits into an RTI structure.
- 2. Understanding what will be the process of Data Decision Making.

- 3. Identifying the district strengths and challenges for reading, writing, and math, through the Data Decision Making process.
- 4. Formulate hypotheses that begin to explain the data results. (Jeffco Public Schools, Department for Learning and Educational Achievement, Assessment & Research, 2008)

The Data Decision Making Model was developed and implemented to consider the following trends for analysis.

- Collect data to inform teachers and administrators about the strength of the CORE curricula.
- 2. Collect data about CSAP scores to analyze the current year's trends and to analyze three year trend data.
- 3. Collect data and report about CSAP sub group trends such as DIBELS - K-3 Reading.
- 4. Collect data and report CSAP secondary analysis.
- 5. Provide summary reports such as BEAR K-2 Reading.

The Dynamic Indicators of Basic Early Literacy Skills

(DIBELS) are a set of standardized, individually

administered measures of early literacy development. They

are designed to be short (one minute) fluency measures used

to regularly monitor the development of pre-reading and early reading skills. Jeffco Schools uses the DIBELS assessments in grades K through 3. All students are monitored three times per year using DIBELS to ensure student development of phonological awareness, alphabetic understanding, and automaticity and fluency with the code. For those students receiving strategic or intensive reading interventions, students are monitored more frequently. (Jeffco Public Schools, Department for Learning and Educational Achievement, Assessment & Research, 2008).

A district-wide summative reading assessment tool BEAR (Basic Early Assessment of Reading) is given to all
kindergarten through second grade students in the district.
BEAR is a criterion-referenced, standardized assessment
that measures K-2 students' acquisition of some essential
components of reading. This assessment is part of the
Colorado Basic Literacy Act requirements (Jeffco Public
Schools, Department for Learning and Educational
Achievement, Assessment & Research, 2008).

Jeffco Public Schools' students benefit from the implementation of RTI, I2A, and the Data Decision Making Model that assures all students' academic needs are being met in both formative and differentiated ways.

#### Concerns Based Adoption Model

An overview of the Concerns Based Adoption Model

(CBAM) is presented as it applies to this study of

teachers' Stages of Concerns and Levels of Use of the SOARS

assessment tool.

CBAM was developed at the University of Texas Research and Development Center for Teacher Education. Development began in the early 1970s and continued until the mid-1980s. CBAM is an applied theory and methodology for tracking the process of implementing change made by educators and educational administrative leadership in schools.

A new focus of CBAM theory and research is being proposed that describes and explains the way teachers experience major organizational change, as opposed to change in curriculum and teaching practice (Vandenberghe, 1983). This focus is potentially relevant to the study of contemporary restructuring initiatives, many of which are directed at changing the fundamental organizational structures and processes of schools (Murphy, 1991).

Fullan and Hargreaves maintain (as cited in Fullan, 1997) that teachers and principals must take the initiative in breaking the cycle of continually "... being on the receiving end of reform" (p. 1). We know that change is often imposed on teachers from outside sources, but we just

do not know how teachers perceive the change process themselves. Nor do we know why they initiate efforts to transform their classroom practices. We have little understanding about the ways that they conceptualize change and the ways they react to reform initiatives. National reform agendas and the research agendas that typically support them do not address teachers' perceptions of how change affects their own pedagogy (Fullan, 1997; Hargreaves, 1997; Hinde, 2003).

Stephen E. Anderson (1997) proposes that CBAM
theory and procedures could be used to generate a more
comprehensive picture of organizational change across
the individuals within an organization than has
typically been the case. The strategy would be to look
less for central tendencies, and more for the
distribution and patterns and linkages between
individual responses across the organization. (p. 362)

CBAM theory proposes that the Stages of Concern are a developmental progression in which teachers implementing a change have concerns of varying intensity across all seven stages at different points in the change process. The stages are identified as: Stage 0, Awareness; Stage 1, Informational; Stage 2, Personal; Stage 3, Management;

Stage 4, Consequence; Stage 5, Collaboration; and Stage 6, Refocusing.

The same developmental progressions apply for the Levels of Use. The Levels are identified as: Level 0: Non Use, Level 1: Orientation, Level 2: Preparation, Level 3: Mechanical Use, Level 4A: Routine, Level 4B: Refinement, Level 5: Integration, and Level 6: Renewal.

For the purpose of this study, CBAM was used to establish a benchmark for the Stages of Concern and for the Levels of Use of the teachers in both High and Low Profile Middle Schools in the Jeffco Public Schools.

Anderson (1997) argues "that further theoretically motivated — not just applied — research is needed to refine the CBAM model and to enhance its relevance to understanding teacher and school-level responses to contemporary focuses of educational change" (p. 331).

Anderson (1997) also makes the point that "...education researchers and practitioners who use CBAM concepts and methods should be more critical in their application of the model, in order to further develop and refine the model over time" (p. 362).

This research study use of CBAM was not intended to measure change over a period of time but only at the time the CBAM questionnaires were administered. The use of CBAM

in this study was to capture the Stages of Concern and Levels of Use of SOARS data for the purpose of comparing the data between High and Low Profile Middle Schools in the Jeffco Public Schools.

### Chapter 3. Methodology

#### Restatement of Purpose

The purpose of this research was to determine and compare two differing demographic populations of Jeffco Middle School teachers' Stages of Concern and Levels of Use regarding the implementation of SOARS. The results determined if there was a difference between two sets of Middle Schools that represent two differing demographic populations regarding the teachers' Stages of Concern and Levels of Use.

#### Restatement of Research Questions

The research questions for this study were:

- 1. What are the teachers' Stages of Concern regarding the SOARS tool in a select group of Jefferson County Middle Schools; namely, those that represent the four highest and four lowest school profiles in categories established by the district with reference to free/reduced lunches, ethnicity rates, and mobility of students?
- 2. What are the teachers' Levels of Use regarding the SOARS tool in a select group of Jefferson County Middle Schools; namely, those that represent the four highest and four lowest school profiles in categories established by the district with reference to

free/reduced lunches, ethnicity rates, and mobility of students?

3. Is there a difference in the Stages of Concern and
Levels of Use of teachers between high and low profile
schools based on percentile rates of free/reduced
lunches, ethnicity rates, and mobility of students?

### Research Design

This is a descriptive comparative study designed to measure select Middle School teachers' Stages of Concern and Levels of Use regarding the SOARS assessment tool.

SOARS was adopted by Jeffco Public Schools to chart student progress by presenting CSAP score data. The data from CSAP are focused on the academic areas of Language Arts, Math, and Science. CSAP data are utilized to help teachers develop instructional strategies to increase student progress. This study determined if there was a significant difference between the Stages of Concern and Levels of Use of High and Low Profile Schools.

#### Two Middle Schools Withdrew from Participation

This study originally targeted a select group of eight Middle Schools' core-subject teachers (Language Arts, Math, and Science), but two of the Middle Schools elected not to participate, one from the High Profile Middle Schools and the other from the Low Profile Middle Schools. The letter

of consent that the principals signed states that they may withdraw their consent and discontinue their school's participation in the research project at any time without prejudice or penalty. The two withdrawals left three High and three Low Profile Middle Schools as participants.

# Assessing Middle School Teachers from Two Differing Demographic Profiles

The six Middle Schools included in this study were selected from the Jeffco Public Schools' Research and Assessment Department's publication Enrollment Data 2003-2004 (2004). A list of Jeffco Middle Schools' free/reduced lunches, ethnicity rates, and mobility of students was compiled from this publication for analysis.

The participating teachers in this study were grouped from two differing demographic profiles, teachers from High Profile Middle Schools and teachers from Low Profile Middle Schools. High Profile Middle Schools have demographic data that show the highest percentile levels of free/reduced lunches, ethnicity rates, and mobility rates. The Low Profile Middle Schools have the lowest percentile levels of free/reduced lunches, ethnicity rates, and mobility rates.

Questionnaire results between the two demographically diverse groups were compared to determine if there were any significant differences in the Stages of Concern and Levels

of Use of SOARS between the participating teachers' in the selected High and Low Profile Middle Schools. With information gathered from the two questionnaires, the district will be informed about the Stages of Concern and Levels of Use of teachers in the select Middle Schools with differing demographics.

The two questionnaires used in this study are Stages of Concern Questionnaire 1, presented in Appendix A and Levels of Use Questionnaire 2 presented in Appendix B.

#### Selection Process for High and Low Profile Middle Schools

To preserve the six participating middle schools' anonymity, the names of the schools do not appear. Schools are coded with roman numerals as identifiers.

The data in Table 1 show the listed middle schools in rank order of percentiles covering the demographics of free/reduced lunches, level of diverse ethnic student populations, and mobility of the student population. The larger demographic percentiles of students in the school resulted in a high ranking number for that school. The rank numbers range from a high of 19 to a low of 1.

The first column lists schools ranked in descending order of percentiles of free/reduced lunches. The next column lists schools ranked in descending order of percentile levels of diverse ethnic student populations.

The third column lists schools ranked in descending order of percentile levels of the mobility of the student population. The last column lists schools in descending order of the total scores of the rank value of the previous three columns.

For example, based on 2003-2004 data, Table 1 MS-XIII Middle School (displayed in red) shows a 16.3% free/reduced lunch that ranked 10th in the order. With MS-XIII Middle School there is a 20.2% in ethnicity with a rank order of 11. Last, with a 9.8% in mobility, MS-XIII Middle School ranked 9th in order. With the sum of the three rankings, (10 + 11 + 9) equaling 30, that placed this Middle School in the middle of the list of nineteen schools.

Table 1

Jeffco Middle Schools - High and Low Profile Ranked Sets of Schools (2003-2004 Data)

Jeneole (2000 2001 Batta)											
Jeffco Middle Schools - Ranking Based on 2003-2004 Database											
School	F/R Lunch %	Rank	School	Ethnicity %	Rank	School	Mobility %	Rank	School	Rank Sum	
MS-IXX	76.4	19	MS-IXX	68.8	19	MS-IXX	49.4	19	MS-IXX	57	
MS-XVI	63.0	18	MS-XVI	61.3	18	MS-I	45.7	18	MS-XVI	53	
MS-I	60.7	17	MS-I	42.1	17	MS-XVI	35.7	17	MS-I	52	
MS-XIV	38.8	16	MS-XIV	40.3	16	MS-IX	19.0	16	MS-XIV	47	
MS-IV	37.3	15	MS-IV	32.5	15	MS-XIV	17.8	15	MS-IX	44	
MS-IX	32.6	14	MS-IX	25.1	14	MS-II	17.8	14	MS-IV	43	
MS-IV	25.1	13	MS-XII	24.1	13	MS-IV	17.7	13	MS-III	37	
MS-II	22.7	12	MS-III	23.7	12	MS-III	16.5	12	MS-II	36	
MS-XII	18.9	11	MS-XIII	20.2	11	MS-XII	14.8	11	MS-XII	35	
MS-XIII	16.3	10	MS-II	19.2	10	MS-VI	11.3	10	MS-XIII	30	
MS-XV	12.8	9	MS-XVII	18.2	9	MS-XIII	9.8	9	MS-VII	24	
MS-VII	12.6	8	MS-VII	16.5	8	MS-VII	9.5	8	MS-VI	21	
MS-VI	12.2	7	MS-X	16.0	7	MS-XVIII	9.3	7	MS-XI	17	
MS-XI	10.8	6	MS-XI	14.6	6	MS-X	8.5	6	MS-X	16	
MS-XVII	8.3	5	MS-V	12.4	5	MS-XI	8.5	5	MS-XV	16	
MS-VIII	8.1	4	MS-VI	12.2	4	MS-XV	7.8	4	MS-XVII	15	
MS-X	7.8	3	MS-XV	10.6	3	MS-VIII	7.5	3	MS-XVIII	11	
MS-XVIII	6.6	2	MS-XVIII	6.6	2	MS-V	6.3	2	MS-VIII	8	
MS-V	4.0	1	MS-VIII	5.1	1	MS-XVII	6.1	1	MS-V	8	

Note: The abbreviation F/R is defined as Free/Reduced.

The remaining thirteen schools displayed in white represent schools ranked between the High and Low Profile Schools and were not selected for this study.

Table 2 displays the six schools that were selected for this study based on rank sum using 2007-2008 data.

Three High Profile Schools are shown in yellow and three Low Profile Schools in green.

Table 2
High and Low Profile Middle Schools Selected for Study (2007-2008 Data)

	High & Low Profile Middle Schools Ranking Based on 2007-2008 Data										
School	F/R Lunch %	Rank	School	Ethnicity %	Rank	School	Mobility %	Rank	School	Rank Sum	
MS-IXX	83.4	20	MS-IXX	73.9	20	MS-IXX	51.6	20	MS-IXX	60	
MS-I	69.0	18	MS-I	43.0	18	MS-I	48.0	19	MS-I	55	
MS-XIV	45.3	16	MS-XIV	36.4	15	MS-XIV	19.4	16	MS-XIV	47	
MS-XV	13.9	7	MS-XVII	15.8	8.5	MS-X	17.9	6	MS-XVII	16	
MS-XVII	12.6	6	MS-X	13.2	4	MS-XVII	15.8	2	MS-XV	15	
MS-X	7.8	2	MS-XV	14.8	7	MS-XV	14.7	1	MS-X	12	

Note: The abbreviation F/R is defined as Free/Reduced

Two middle schools exempt from participation. Note that MS-V was exempt from the final six selections. MS-V participated in a pilot study in 2003-2004. Also, this researcher is a teacher at MS-V so to avoid the possibility of bias in the research; MS-V was not selected for participation in this study.

Also, MS-VIII Middle School was exempt due to a pending change of personnel in the Principal's position. Furthermore, a major building-reconstruction project was underway at this Middle School. Teachers were responsible for packing and storing materials in their classrooms so

the Interim Principal decided that it was best not to participate in this research at this point in time.

In each of the remaining six Middle Schools there are approximately eighteen targeted core-subject teachers per school. Approximately 100 teachers in the six Middle Schools were possible participants in this study.

### An In-house Pilot Study Conducted in 2003-2004

The following discussion of a pilot study conducted in 2003-2004 appears here to describe how two questionnaires used for an in-house survey were piloted at MS-V. The in-house pilot described below was conducted solely at MS-V.

At the first MS-V teachers' meeting in August of 2003
Dr. Heather Beck, Principal, presented the school
district's goals for the year. At this meeting Professional
Learning Teams were created to focus on district goals. One
of the district goals was to develop a plan to have the
teaching staff literate about student assessment. As a
teacher in this school, the researcher's Professional
Learning Team selected technology and the use of Virtual
Education for assessment as its focus. The Technology
Professional Learning Team developed the following three
goals for the year:

1. To survey the teaching staff to assess their Stages of Concern and Levels of Use regarding Virtual Education.

- 2. To provide training opportunities for teachers to learn how to use Virtual Education data to assess student progress.
- 3. To assure that everyone has a Virtual Education account and can log-in to that system with user name and password.

During September and October, 2003, user accounts were verified in order to assure teachers had access to Virtual Education. At the October meeting, the Technology Professional Learning Team discussed the creation of a survey tool to determine teachers' use of the tool. The Technology Professional Learning Team members also discussed the variety of concerns the staff expressed in learning about Virtual Education and the role of assessment to measure student progress.

At the November 2003 meeting the Technology

Professional Learning Team, members brought in lists of

concerns to be included in the survey. Under the leadership

of the current researcher, Technology Professional Learning

Team members selected the Concerns Based Adoption Model

(CBAM), developed by Archie George, Gene Hall, and

associates, as an appropriate instrument that could be

adapted for our use. The CBAM questionnaires were designed

to assess staff members during the adoption of this new

innovation using the Stages of Concern (George, Hall, & Stiegelbauer, 2006) and Levels of Use (Hall, Dirksen, & George, 2006) questionnaires.

All concerns expressed by the teaching staff at MS-V were considered, with appropriate concerns being incorporated into the adapted questionnaires that were used in this in-house pilot study.

# Stages of concern and levels of use reviewed by a panel from the Technology Professional Learning Team.

During the month of December 2003, the Technology

Professional Learning Team reviewed the CBAM questionnaires

to verify that the questionnaires covered the expressed

concerns of the teaching staff and are the appropriate

tools to use.

The purpose of the review was to determine if CBAM questionnaire items are appropriately understood in terms of the educational setting of the participants when determining the Stages of Concern and Levels of Use regarding Virtual Education at MS-V. This researcher and five classroom teachers, all of whom were members of the Technology Professional Learning Team, volunteered as review panelist.

Professional development workshops on virtual education. In January, 2004, on the first day back from

holiday break, professional development workshops addressed the second and third goals of the Technology Professional Learning Team's goals for the year. The Technology Professional Learning Team, with the assistance of the MS-V Instructional Coach, offered each of the school's four teaching teams a workshop on Virtual Education.

The workshop included hands-on instruction on logging into the Virtual Education system, along with the Virtual Education Training Guide (Jeffco Public Schools, 2002, Instructional Department) used by the teachers as a step-by-step guide for accessing student data on the Virtual Education site. Teachers were shown how and where to locate student test scores using the Reports and Performance Center links within Virtual Education.

Adapted Concerns Based Adoption Model questionnaires piloted. At the end of the January 2004 workshop, teachers were given the two adapted CBAM questionnaires that were reviewed by the Technology Professional Learning Team.

Teachers were asked to complete and return the two questionnaires. The first questionnaire measured the teachers' Stages of Concern regarding the use of Virtual Education, and the second questionnaire measured the teachers' Levels of Use of Virtual Education.

Participants also signed and returned a Letter of

Consent document that assured everyone involved in this

survey was fully informed and that information about the

participants and data collected would be kept in strictest

confidentiality and anonymity. Data from the questionnaires

were collected and entered in an Excel worksheet for

analysis and discussion at the next meeting.

At the January and February 2004 meeting of the Technology Professional Learning Team, discussions focused on the development of future Virtual Education workshops to address the Stages of Concern and Levels of Use of the MS-V faculty.

During the remainder of the school year 2003-2004, individual help was offered to teachers needing assistance. This individual intervention approach was selected in place of large group workshops. This approach provides a just-intime training opportunity.

In May 2004, the Technology Professional Learning Team distributed updated CBAM questionnaires to assess the staff's Stages of Concern and Levels of Use at MS-V. The results assisted the Technology Professional Learning Team in developing plans for continued training in Virtual Education for the 2004-2005 school year with a focus on the Stages of Concerns categories of awareness and

informational needs that were identified from the May follow-up survey.

At the conclusion of this pilot study, this researcher recommended that further research should be conducted in select Middle Schools across the district. This recommendation lead to the research conducted in this dissertation.

#### Stages of Concern and Levels of Use Described

The Stages of Concern questionnaire used in this study is comprised of thirty-five (35) questionnaire items. The items are grouped by five questionnaire items for each of the seven Stages of Concern they represent (Appendix C).

Stages of concern. The following describes each of the seven Stages of Concern.

Stage 0: Unconcerned (Awareness) - The individual indicates little concern or involvement with the innovation.

Stage 1: Informational - The individual indicates a general awareness of the innovation and interest in learning more details about it. The individual does not seem to be worried about himself or herself in relation to the innovation. Any interest is in impersonal, substantive aspects of the innovation,

such as its general characteristics, effects, and requirements for use.

Stage 2: Personal - The individual is uncertain about the demands of the innovation, his or her adequacy to meet those demands, and/or his or her role with the innovation. The individual is analyzing his or her relationship to the reward structure of the organization, determining his or her part in decision making, and considering potential conflicts with existing structures or personal commitment. Concern also might involve the financial or status implications of the program for the individual and his or her colleagues.

Stage 3: Management - The individual focuses on the processes and tasks of using the innovation and the best use of information and resources. Issues related to efficiency, organizing, managing, and scheduling dominate.

Stage 4: Consequence - The individual focuses on the innovation's impact on students in his or her immediate sphere of influence. Considerations include the relevance of the innovation for students; the evaluation of student outcomes, including performance

and competencies; and the changes needed to improve student outcomes.

Stage 5: Collaboration - The individual focuses on coordinating and cooperating with others regarding use of the innovation.

Stage 6: Refocusing - The individual focuses on exploring ways to reap more universal benefits from the innovation, including the possibility of making major changes to it or replacing it with a more powerful alternative (George, Hall, & Stiegelbauer, 2006).

Levels of use. The participating teachers selected the Level of Use that best described their use of SOARS. Their selection ranged from zero, Non-Use, to level six, Renewal. The following describes each of the Levels of Use.

Level 0: Non Use - State in which the user has little or no knowledge of the innovation, has no involvement with the innovation, and is doing nothing toward becoming involved.

Level 1: Orientation - State in which the user has acquired or is acquiring information about the innovation and/or has explored or is exploring its value orientation and its demands upon the user and the user system.

Level 2: Preparation - State in which the user is preparing for the first use of the innovation.

Level 3: Mechanical Use - State in which the user focuses most effort on the short-term, day-to-day use of the innovation with little time for reflection.

Changes in use are made more to meet user needs than client needs. The user is primarily engaged in a stepwise attempt to master the tasks required to use the innovation, often resulting in disjointed and superficial use.

Level 4A: Routine - Use of the innovation is stabilized. Few if any changes are being made in ongoing use. Little preparation or thought is being given to improving innovation use or its consequences.

Level 4B: Refinement - The participants vary the use of the innovation to increase the expected benefits within the classroom. They are working on using the innovation to maximize the effects with their students.

Level 5: Integration - State in which the user is combining own efforts to use the innovation with the related activities of colleagues to achieve a collective effect on clients within their common sphere of influence.

Level 6: Renewal - State in which the user is reevaluates the quality of use of the innovation, seeks major modifications or alternatives to the present innovation to achieve increased impact on clients, examines new developments in the field, and explores new goals for self and the system (Hall, Dirksen, & George, 2006).

#### Permissions to Conduct Research

In order to begin this research, it was necessary to first acquire permission (Appendix D) to use Concerns Based Adoption Model from SEDL, (Southwest Educational Development Laboratory) located in Austin, Texas.

In addition, permissions from the Jeffco Public

Schools External Research Review Committee, (Appendix E)

and from Pepperdine University Institutional Review Board

(Appendix F) were requested and granted.

The six selected Middle School Principals received a letter requesting permission to conduct research in their schools (Appendix G) as required by the Jeffco's district regulation IGB-R. All six participating Middle School principals accepted and granted permission to conduct research. A letter of consent was signed by each principal (Appendix H). Copies of the letters were sent to Pepperdine University's Institutional Review Board (IRB), as required

to conduct this research. The original letters of consent from the principals are stored in a secure file with the researcher.

A follow-up letter to the principals was sent to provide a scripted guide of administrative directions for the distribution and collection of the questionnaires. The principals received the scripted guide to review before the packets were distributed to teachers (Appendix I).

## Administration of Questionnaires

The target populations of approximately one hundred teachers in this study are teachers of academic core subjects such as Language Arts, Math, and Science. These are the same academic subjects assessed during CSAP testing. The targeted teachers were surveyed to identify their Stages of Concern and Levels of Use regarding SOARS.

Once permission to conduct the research was granted from Pepperdine's IRB, Jeffco Public School's External Research Review Committee, and from the Middle School Principals, a packet of information was distributed to the teachers of the six selected Middle Schools. The packet of information included a cover sheet to request demographic information from the participants' (Appendix J), two questionnaires, and a teacher's Letter of Consent, (Appendix K)

Time spent on the dissemination of information, including an explanation by the principal regarding the logistics of collecting data for this research, as well as time spent filling out and returning the questionnaire took the teachers approximately thirty (30) minutes to complete.

The first questionnaire measured the teachers' Stages of Concern regarding the use of SOARS, and took approximately twenty (20) minutes to complete. The second questionnaire measured the teachers' Levels of Use of SOARS and took approximately ten (10) minutes to complete.

Once completed, teachers returned the two packets to the school's office, one containing the two questionnaires and the other containing permission to participate with a request for additional demographic information.

To assure confidentially, the information submitted were placed in two different color coded envelopes to assure that the identifying information was separated from the questionnaires. There was no identifying information of the participants on either of the questionnaires so confidentially was consistently maintained.

The letter of consent that was included in the packet assured the participants that everyone involved in this research was fully informed that information about the

participants and data collected would be kept in strictest confidentiality and anonymity.

Completed questionnaires were collected from the participating schools by the researcher. All data sheets collected were stored in the home of the researcher and kept in a locked file cabinet to assure confidentially.

# Protection of Human Subjects

In preparation for this study, the Pepperdine's
Institutional Review Board (IRB) required that all
researchers must take an on-line tutorial: Human
Participant Protections Education for Research Teams. The
tutorial is sponsored by the National Institutes of Health
(NIH). A certificate of completion of the on-line tutorial
is presented (Appendix L). The protection of human subjects
was assured in all phases of this research.

#### Protection of Data

This researcher entered the raw data from the questionnaires into an Excel worksheet for analysis. The Excel worksheet was password protected and stored on this researcher's password protected laptop computer. It was stored on the laptop until the dissertation was completed and then the data was removed.

The research data are stored for an additional three years on a password protected memory stick and kept in a

locked file cabinet where the completed questionnaires are kept at the home of this researcher.

There is minimal risk to the participants involved in this research project. As previously stated, there were many steps being taken to assure that identity and confidentiality issues were protected.

#### Chapter 4. Results

This chapter presents data that was collected from the six participating middle schools. Results regarding the Stages of Concern and the Levels of Use of the two participating groups is presented and discussed. Each of the three research questions is presented for analysis.

# Data Analysis for Stages of Concerns

The data collected were analyzed to establish the Stages of Concern of the participating teachers. The rating number for each item on the questionnaire ranged from zero for not true to seven for very true. Participants selected a number from the range zero to seven (0-7) that best matched their intensity of the concern regarding the item.

The researcher entered the teachers' ratings into a spreadsheet for analysis. The researcher calculated the sum of each of the thirty-five items to determine the total of each of the seven Stages of Concern from each group of Middle School teachers. Each item on the questionnaire is pre-determined to be one of the stages of the seven Stages of Concern.

Table 3 show Stages of Concern results of each questionnaire item's sum and mean data of High Profile and Table 4 show sum and mean data from Low Profile Schools.

Table 3
High Profile Middle Schools' Stage of Concern Sum and Mean Data

										Н	igh Prof	ile Mido	de Scho	ools - C	BAM-S	Stages o	of Conce	ern (SoC	) - Resi	ults fro	n the 35	Questi	ionnaire	Items											
Item #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Stage	Cl	M	R	P	Cl	Cn	$\perp$		R	P	M	CI	Cn	A	R	R	Cl	M	-	P	Cl	A	P	P	Cn	R	Cn	Cn	M	A	A	-	M	A	1
Sum	114	124	126	87	115	108	117	150	132	154	142	112	132	133	119	157	166	149	184	163	170	52	164	158	129	148	118	127	144	154	60	177	145	114	163
Mean	3.45	3.76	3.82	2.64	3.48	3.27	3.55	4.55	4.00	4.67	4.30	3.39	4.00	4.03	3.61	4.76	5.03	4.52	5.58	4.94	5.15	1.58	4.97	4.79	3.91	4.48	3.58	3.85	4.36	4.67	1.82	5.36	4.39	3.45	4.94

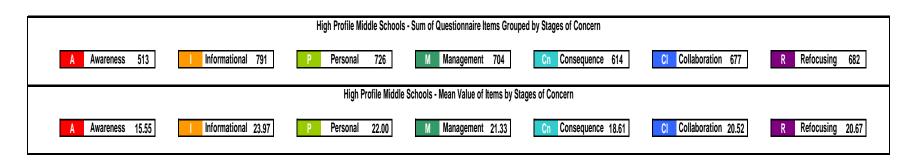


Table 4
Low Profile Middle Schools' Stage of Concern Sum and Mean Data

										L	ow Prof	ile Mido	lle Scho	ools - Cl	BAM - S	tages o	f Conce	ern (SoC	C) - Res	ults fro	m the 3	5 Quest	ionnaire	tems											
Item #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Stage	Cl	M	R	P	Cl	Cn	$\perp$		R	P	M	Cl	Cn	Α	R	R	Cl	M		P	Cl	A	Р	P	Cn	R	Cn	Cn	M	A	A		M	A	
Sum	94	123	108	79	114	125	128	190	144	183	161	114	146	152	155	177	177	168	205	180	172	102	183	185	152	157	161	137	160	194	102	200	167	148	186
Mean	2.41	3.15	2.77	2.03	2.92	3.21	3.28	4.87	3.69	4.69	4.13	2.92	3.74	3.90	3.97	4.54	4.54	4.31	5.26	4.62	4.41	2.62	4.69	4.74	3.90	4.03	4.13	3.51	4.10	4.97	2.62	5.13	4.28	3.79	4.77

	Low Profile Middle Schools - Sum of Questionnaire Items Grouped by Stages of Concern										
A Awareness 698	Informational 909	P Personal 810	M Management 779	Cn Consequence 721	Cl Collaboration 671	R Refocusing 741.00					
	Low Profile Middle Schools - Mean Value of Questionnaire Items by Stages of Concern										
A Awareness 17.90	Informational 23.31	P Personal 20.77	M Management 19.97	Cn Consequence 18.49	Cl Collaboration 17.21	R Refocusing 19.00					

#### Data Analysis for Levels of Use

Data analysis of the Levels of Use for High and Low Profile schools follow the same research analysis procedures as the Stages of Concern analysis. The ratings of the Levels of Use range from zero for Non-Use to six for Renewal. Once each participant's choice of Levels of Use was entered into a spreadsheet, the sum of each Level of Use was calculated. Based on the sum of responses for LoU items, a mean score was calculated based on the number of participating teachers from either High Profile or Low Profile Middle Schools.

Table 5 displays the sum and mean data for analysis for High Profile Middle Schools. Table 6 displays the sum and mean data for analysis of Low Profile Middle Schools.

Table 5
High Profile Middle Schools' Levels of Use, Sum and Mean
Data

High Profile Middle Schools - CBAM - Levels of Use - Results from the Eight Items - Sum & Mean Scores										
Levels of Use (LoU)	Non Use	Orientation	Preparation	Mechanical Use	Routine	Refinement	Integration	Renewal		
Item #	0	1	2	3	4	5	6	7		
Sum	7	3	2	10	4	5	1	1		
Mean	0.21	0.09	0.06	0.30	0.12	0.15	0.03	0.03		

Table 6
Low Profile Middle Schools' Levels of Use, Sum and Mean
Data

Low Prof	Low Profile Middle Schools - CBAM - Levels of Use - Results from the Eight Items - Sum & Mean Scores											
Levels of Use (LoU)	Non Use	Orientation	Preparation	Mechanical Use	Routine	Refinement	Integration	Renewal				
Item #	0	1	2	3	4	5	6	7				
Sum	13	6	5	2	7	4	2	0				
Mean	0.33	0.15	0.13	0.05	0.18	0.10	0.05	0.00				

## Research Question One

What are the teachers' Stages of Concerns regarding the SOARS tool in a select group of Jefferson County Middle Schools; namely, those that represent the four highest and four lowest school profiles in categories established by the district with reference to free/reduced lunches, ethnicity rates, and mobility of students?

High and low profile middle schools' stages of concern mean scores. Figure 1 displays a line graph of High and Low Profile Middle Schools Stages of Concern Mean Scores.

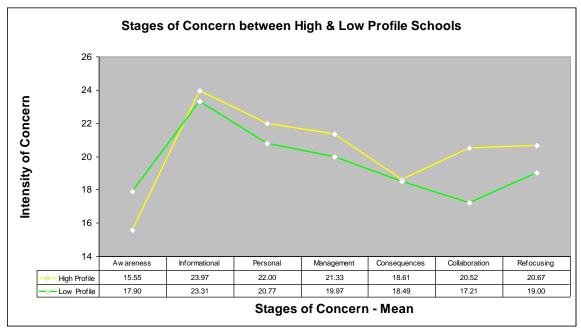


Figure 1. Stages of Concern between High & Low Profile Schools, Line Graph of Mean Scores.

#### Research Question Two

What are the teachers' Levels of Use regarding the SOARS tool in a select group of Jefferson County Middle Schools; namely, those that represent the four highest and four lowest school profiles in categories established by the district with reference to free/reduced lunches, ethnicity rates, and mobility of students?

High and low profile middle schools' levels of use mean scores. Figure 2 displays a line graph of High and Low Profile Middle Schools' Levels of Use Mean Scores.

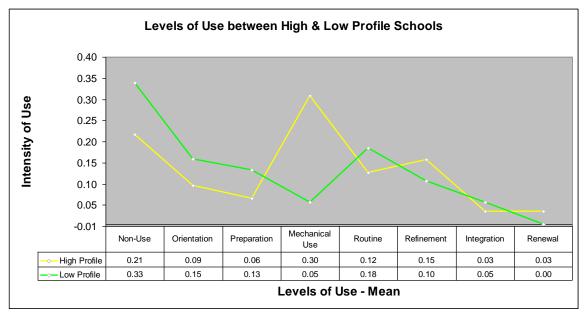


Figure 2. Levels of Use between High and Low Profile Schools, Line Graph of Mean Scores

#### Research Question Three

Is there a difference in the Stages of Concern and Levels of Use of teachers between high and low profile schools based on percentile rates of free/reduced lunches, ethnicity rates, and mobility of students?

The third question required a comparison of the differences between High and Low Profile Middle Schools teachers in the Stages of Concern and in the Levels of Use.

Results presented in Figure 1 in Chapter 4 display a line graph of the mean scores of both High and Low Profile Middle Schools' Stages of Concern. Figure 2 in Chapter 4 displays a line graph of the mean scores of both High and Low Profile Middle Schools' Levels of Use.

#### Participating Teachers' Demographic Data

The following tables detail demographic information regarding the seventy-two teachers from the six participating middle schools in this study.

Table 7		
Total Questionnaires De	livered/Returned bv	<i>Profile</i>
High Profile	Delivered	Returned
MS-I	12	5
MS-14	15	12
MS-IXX	18	16
Low Profile	Delivered	Returned
MS-X	15	7
MS-XV	19	19
MS-XVII	20	13
		(continued)

Low Profile Six Schools Total:	Delivered 99	Returned 72
% Returned:		73%
Table 8		
Number of Middle School Teac	hers by Profile	e 
High Profile Teachers	33	
Low Profile Teachers	39	
Total:	72	
Table 9		
Number of Male and Female Pa.	rticipants	
Male	21	
Female	51	
Total:	72	
Table 10		
Number of Earned Degrees		
Bachelors Degree	21	
Masters Degree	51	
Total:	72	
Table 11		
Mean Number of Years Teaching	g by Profile	
High Profile Experience	Mea	an
Years Teaching:	8	
Years In Current School	: 5	
Low Profile Experience	Mea	an
Years Teaching:	11	
Years In Current School	: 6	
m-1-1 - 10		
Table 12 Number of Participating Teach	hers by Grade I	Levels
	2	
Grade 7	28	
Grade 8	22	
Grade 0		
Grades 7 & 8	20	

Table 13
Number of Participating Teachers by Subject Area

Subject area	Number of teachers
Reading	3
Language Arts	23
Math	25
Science	14
Social Studies	7
Total:	72

## Interpretation of Data

Data results for each of the three research questions are presented in Chapter 5. Discussion in Chapter 5 focuses on the findings, conclusions, and recommendations based on this research with a focal point on in-depth analysis of data results.

## Chapter 5. Findings, Conclusions, Recommendations

This chapter presents findings, conclusions, and recommendations to consider, regarding the data collected that answered the three research questions.

#### Research Question One

What are the teachers' Stages of Concerns regarding the SOARS tool in a select group of Jefferson County Middle Schools; namely, those that represent the four highest and four lowest school profiles in categories established by the district with reference to free/reduced lunches, ethnicity rates, and mobility of students?

Findings: research question one. Research question one required collecting data to identify the Stages of Concern for both groups of High and Low Profile Middle School teachers. The data collection results identify the High and Low Profile Middle School teachers' Stages of Concern.

Table 3 in Chapter 4 present the results of each questionnaire item's sum and mean from High Profile Middle Schools' Stages of Concern sum and mean data. Table 4 in Chapter 4 present the results of Low Profile Schools' Stages of Concern sum and mean data.

#### Research Question Two

What are the teachers' Levels of Use regarding the SOARS tool in a select group of Jefferson County Middle

Schools; namely, those that represent the four highest and four lowest school profiles in categories established by the district with reference to free/reduced lunches, ethnicity rates, and mobility of students?

Findings: research question two. The second research question required collecting data to identify the Levels of Use for both groups of High and Low Profile Middle School teachers. The data collection results identify the Levels of Use for both High and Low Profile Middle School teachers.

Table 5 in Chapter 4 present the results of each questionnaire items from High Profile Middle Schools'

Levels of Use sum and mean data. Table 6 in Chapter 4 present the results of Low Profile Schools' Levels of Use sum and mean data.

#### Research Question Three

Is there a difference in the Stages of Concern and Levels of Use of teachers between high and low profile schools based on percentile rates of free/reduced lunches, ethnicity rates, and mobility of students?

Findings: research question three. The third question required a comparison of the differences between High and Low Profile Middle Schools teachers in the Stages of Concern and in the Levels of Use.

Results presented in Figure 1 in Chapter 4 display a line graph of the mean scores of both High and Low Profile Middle Schools' Stages of Concern. Figure 2 in Chapter 4 displays a line graph of the mean scores of both High and Low Profile Middle Schools' Levels of Use.

#### Conclusions

When comparing the results, the data graphically show that there is no significant difference between the two groups of High and Low Profile Middle Schools' teachers in their Stages of Concern and in their Levels of Use using SOARS to assess student progress. This research supports that equity considerations between High Profile and Low Profile Schools are being met.

# Recommendations - Data Mining for a Deeper Understanding of the Results

The Stages of Concern Figure 1 in Chapter 4 show the comparison between High and Low Profile Scores data viewed in a graphic format that display the peaks and valleys of both High and Low Profile Middle Schools are nearly identical and are closely aligned showing there is no differences between the two groups. Even though the data graphically show no significant differences, there are slight differences in the data worthy of comment.

Stage of concern - informational. The data shown in Figure 1 in Chapter 4 show a high level of concern in both groups of teachers for the Stages of Concern Informational Stage. The Informational Stage is defined in Chapter 3, as "The individual indicates a general awareness of the innovation and interest in learning more details about it. The individual does not seem to be worried about himself or herself in relation to the innovation" (George, Hall, & Stiegelbauer, 2006. p. 8). Both High and Low Profile Middle School Teachers are in the informational Stage of Concern (George, Hall, & Stiegelbauer, 2006).

Stage of concern - collaboration. Also showing in Figure 1 in Chapter 4 there is a gap in the stage of Collaboration between the two groups. As indicated in Chapter 3, Collaboration is defined as "The individual focuses on coordinating and cooperating with others regarding use of the innovation" (George, Hall, & Stiegelbauer, 2006, p. 8).

It is this researcher's observation that High Profile
Middle Schools teachers are more likely to work
collaboratively in their schools, in order to service the
more diverse demographic population and the differing needs
of the students.

One of the most challenging demographics that require collaboration is the mobility rate of students. Mobility rate is defined as the number of students who transfer in or out of a school and/or school district.

The three High Profile Middle Schools selected for this study has an average of 21.8% level of mobility. The three Low Profile Middle School selected for this study has an average of 7.9% level of mobility.

With a higher level of mobility, the High Profile Schools' teachers require additional time and effort to keep current with academic needs of the student recently transferred to their class. A collaborative approach to receiving and sharing information with colleagues is essential. With a collaborative approach, the diverse sets of needs of new students are being met.

Level of use - mechanical. Regarding the Levels of

Use, Figure 2 in Chapter 4 display data for Levels of Use
in which the graphic data show a sizeable gap between High

and Low Profile Schools in the Stage of Mechanical Use that
is defined in Chapter 3 as "State in which the user focuses

most effort on the short-term, day-to-day use of the
innovation with little time for reflection. Changes in use

are made more to meet user needs than client needs..." (Hall,
Dirksen, & George, 2006, p. 5).

As previously stated, the High Profile Middle Schools have a greater rate of student mobility than the Low Profile Schools. The use of SOARS to access student data and student information in a High Profile Middle School is more frequent than at a Low Profile Middle School. As student turnover increases, the need to keep current with student data also increases so managing data becomes a high priority.

#### Identifying the Top Stages of Concern

In order to highlight the concerns of High and Low Profile Schools, Appendix M through Appendix P lists the Stage of Concerns results for High and Low Profile Middle Schools. Results list the thirty-five (35) Stages of Concern items from the questionnaires listed by sum in descending order.

Top five Stages of Concern for high profile middle schools. The top five Stages of Concern results for High Profile Middle Schools are based on the sum of the items selected by teachers from the questionnaire. Note that the Stages of Concern are identified after each statement by one of the following; Awareness, Informational, Personal, Management, Consequence, Collaboration and Renewal.

The top five Stages of Concern for High Profile Middle Schools are:

- 1. I would like to know what will be required of me in the immediate future in the use of SOARS for student assessment. (Informational)
- 2. I would like to know the long-term goals of student assessment using SOARS. (Informational)
- 3. I would like to know what other schools in the district are doing with student assessment using SOARS. (Collaboration)
- 4. Along with using SOARS data I would like to involve my students in the assessment process by getting them to set assessment goals for themselves. (Collaboration)
- 5. I would like to know how my teaching is supposed to change when I am using SOARS for student assessment. (Personal)

# Top five stages of concern for low profile middle schools. The top five Stages of Concern items for Low Profile Middle Schools are identified and can be interpreted for a better understanding.

- 1. I would like to know what will be required of me in the immediate future in the use of SOARS for student assessment. (Informational)
- 2. I would like to know the long-term goals of student assessment using SOARS. (Informational)
- 3. Although I am not fully aware of the assessment tools in SOARS, I am open to learning about it. (Awareness)
- 4. I would like to know who will make curriculum decisions based on student assessment derived from SOARS data. (Informational)
- 5. I would like to know what resources are available to me as I use SOARS. (Informational)

Top five stages of concern for combined high and low profile middle schools. Appendix O lists a combined Stage of Concern result of both High and Low Profile Middle Schools by sum in descending order.

The top five Stages of Concern combined results of High and Low Profile Middle Schools are presented:

- 1. I would like to know what will be required of me in the immediate future in the use of SOARS for student assessment. (Informational)
- 2. I would like to know the long-term goals of student assessment using SOARS. (Informational)
- 3. I am concerned about the possible conflict between my system of student assessment and the responsibility of using SOARS for assessment. (Consequence)
- 4. I would like to know what resources are available to me as I use SOARS. (Informational)
- 5. Although I am not fully aware of the assessment tools in SOARS, I am open to learning about it. (Awareness)

For a list of the Stages of Concern Results for
Combined High & Low Profile Schools of the Seven Stages by
Sum in Descending Order, refer to Appendix P.

#### Equal Access for All

As indicated in Chapter One, Dr. Stevenson emphasized that schools must assure equal access to educational resources for all students and teachers. All means all of the students and teachers in all of the schools, regardless

of the schools' demographic composition, such as income, ethnicity and mobility rate.

A school's demographic composition plays an important role in how students and teachers interact. Further research regarding the role of demographics and its impact on the whole school populations will provide a better understanding of how to improve a school's performance.

Dr. Stevenson successfully aligned resources, structures, and services to match the district mission statement and goals. Superintendent Stevenson developed curricula and assessments that create improved systematic and systemic programs in the Jeffco Public Schools.

When comparing results of this research, data show there is no significant difference between the two groups of High and Low Profile Middle Schools' teachers in their Stages of Concern and Levels of Use of SOARS. Both High and Low Profile Middle School teachers benefit from an equal level of teacher preparation and commitment to equality for all.

Dr. Stevenson provides leadership by sustaining a strong commitment to a quality education for all students.

All students in the Jeffco Public Schools are provided with meaningful choices for their future through excellent instruction and rigorous curricula.

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## APPENDIX A

# Stages of Concern Questionnaire

(SOARS Questionnaire 1)

# Stages of Concern Questionnaire (SOARS Questionnaire 1)

Instructions: Please check the box that indicates the degree of your present concerns with each statement below. If you consider any item listed as being completely irrelevant at this time, please check "0" on the scale.

## Item Not True - Somewhat True - Very True I would like to help other teachers in my Middle School to use SOARS for student assessment. 2. I am concerned about not having enough time to use SOARS each day. I am concerned that there are some other student assessment approaches that might work better than SOARS. 4. I have extensive knowledge about how to conduct student assessment using I would like to develop a working relationship with teachers in my Middle School and other district Middle Schools to assure uniform use of SOARS for student assessment. I am concerned about whether student progress will be enhanced by teachers using SOARS to assess students. 7. I would like to know if parents are aware of our efforts to use SOARS. I would like to know who will make curriculum decisions based on student assessment derived from SOARS data. 9. I would like to investigate the possibility of using student assessment tools other than SOARS. 10. I would like to know what support services are available to me as we use SOARS for student assessment. 11. I am concerned about my ability to manage all the requirements of student assessment using SOARS. 12. I would like to familiarize parents with the process of how to use student assessment derived from SOARS data. 13. I am concerned about how I will be evaluated as I use SOARS to assess students. 14. I am completely occupied with other tasks to be able to commit to using SOARS. 15. I would prefer using teacher designed assessment rubrics rather than rely on the SOARS data to assess students. 16. I would prefer combining teacher

designed assessments and rubrics with  ${\tt SOARS}$  data to assess students.

Item

- 17. Along with using SOARS data I would like to involve my students in the assessment process by getting them to set assessment goals for themselves.
- 18. I am concerned about the time required to assess students based on SOARS data.
- 19. I would like to know what will be required of me in the immediate future in the use of SOARS for student assessment.
- 20. I would like to have more information on time and energy commitments required by student assessment using SOARS.
- 21. I would like to know what other schools in the district are doing with student assessment using SOARS.
- 22. At this time I am not interested in learning about student assessment using SOARS.
- 23. I would like to know how my teaching is supposed to change when I am using SOARS for student assessment.
- 24. I would like to know how my role will change when I am using student assessment in SOARS.
- 25. I am concerned about revising my use of student assessment (grade book and rubric format) once I begin using SOARS.
- 26. I would like to explore the feasibility of enhancing SOARS data with other assessment instruments.
- 27. I am concerned about the possible conflict between my system of student assessment and the responsibility of using SOARS for assessment.
- 28. I am concerned about meeting my administrators' expectations of using SOARS for student assessment.
- 29. I am concerned about how I will administer all of the materials in SOARS to better meet the academic needs of our student population.
- 30. Although I am not fully aware of the assessment tools in SOARS, I am open to learning about it.
- 31. I will not use feedback from other educators about their use of SOARS.

Not 0	True		ewhat 3	True	∍ <b>- V</b> 5		
0	1	2	3	4	5	6	7
0	1	2	3	4	5	6	7
0	1	2	3	4	5	6	7
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0	1	2	3			6	7 7
0	1	2	3	4	5	6	7
0	1	2	3	4	5	6 I	7
0	1	2	3	4	5	6	7
0	1	2	3	4	5	6	7
							7
							7 7 7

#### Item

- 32. I would like to know the long-term goals of student assessment using SOARS.
- 33. I am concerned that using SOARS data to assess students will take too much time away from my teaching.
- 34. I have not yet been informed about the student assessment tools in SOARS.
- 35. I would like to know what resources are available to me as I use SOARS.

Not	True	<ul><li>Som</li></ul>	ewhat	True	e - V	ery T	'rue
0	1	2	3	4	5	6	7
0	1	2	3	4	5	6	7
0	1	2	3	4	5	6	7
0	1	2	3	4	5	6	7

# APPENDIX B

# Levels of Use

(SOARS Questionnaire 2)

# Levels of Use (SOARS Questionnaire 2)

Instructions: Please read each of the seven items below related to the adoption of SOARS. Choose the item that best fits where you are in the adoption of SOARS and place a checkmark in the box before it. Select only **one** item from the list. It would be wise to read all the items before you choose **one**.

# Non-Use I have little or no knowledge of SOARS, no involvement with it, and I am doing nothing toward becoming involved. Orientation I am seeking or acquiring information about SOARS. Preparation I am preparing for the first use of SOARS. Mechanical Use I focus most effort on the short-term, day-to-day use of SOARS with little time for reflection. My effort is primarily directed toward mastering tasks required to use SOARS. Routine I feel comfortable using SOARS. However, I am putting forth little effort and thought to improve SOARS or its consequences. Refinement I vary the use of SOARS to increase the expected benefits within the classroom. I am working on using SOARS to maximize the effects with my students. Integration I am combining my own efforts with related activities of other teachers and colleagues to achieve impact in the classroom. Renewal I continually evaluate the quality of my use of SOARS.

# Thank you for taking the time to complete these questionnaires!

# APPENDIX C

Stages of Concern Questionnaire Items Displayed by the Stage of Concern They Represent

Statements addressing the Awareness Stage (I am not concerned about SOARS.)

- 14. I am completely occupied with other tasks to be able to commit to using SOARS.
- 22. At this time I am not interested in learning about student assessment using SOARS.
- 30. Although I am not fully aware of the assessment tools in SOARS, I am open to learning about it.
- 31. I will not use feedback from other educators about their use of SOARS.
- 34. I have not yet been informed about the student assessment tools in SOARS.

Statements addressing the Informational Stage (I would like to know more about SOARS.)

- 7. I would like to know if parents are aware of our efforts to use SOARS.
- 8. I would like to know who will make curriculum decisions based on student assessment derived from SOARS data.
- 19. I would like to know what will be required of me in the immediate future in the use of SOARS for student assessment.
- 32. I would like to know the long-term goals of student assessment using SOARS.
- 35. I would like to know what resources are available to me as I use SOARS.

Statements addressing the Personal Stage (How will using SOARS affect me?)

- 4. I have extensive knowledge about how to conduct student assessment using SOARS.
- 10. I would like to know what support services are available to me as we use SOARS for student assessment.
- 20. I would like to have more information on time and energy commitments required by student assessment using SOARS.
- 23. I would like to know how my teaching is supposed to change when I am using SOARS for student assessment.
- 24. I would like to know how my role will change when I am using student assessment in SOARS.

Statements addressing the Management Stage (I seem to be spending all my time getting materials ready.)

- 2. I am concerned about not having enough time to use SOARS each day.
- 11. I am concerned about my ability to manage all the requirements of student assessment using SOARS.
- 18. I am concerned about the time required to assess students based on SOARS data.
- 29. I am concerned about how I will administer all of the materials in SOARS to better meet the academic needs of our student population.
- 33. I am concerned that using SOARS data to assess students will take too much time away from my teaching.

Statements addressing the Consequence Stage (What will be the consequences of my using SOARS?)

- 6. I am concerned about whether student progress will be enhanced by teachers using SOARS to assess students.
- 13. I am concerned about how I will be evaluated as I use SOARS to assess students.
- 25. I am concerned about revising my use of student assessment (grade book and rubric format) once I begin using SOARS.
- 27. I am concerned about the possible conflict between my system of student assessment and the responsibility of using SOARS for assessment.
- 28. I am concerned about meeting my administrators' expectations of using SOARS for student assessment.

Statements addressing the Collaboration Stage (I am concerned about relating what I am doing with what others are doing.)

- I would like to help other teachers in my Middle School to use SOARS for student assessment.
- 5. I would like to develop a working relationship with teachers in my Middle School and other district Middle Schools to assure uniform use of SOARS for student assessment.
- 12. I would like to familiarize parents with the process of how to use student assessment derived from SOARS data.
- 17. Along with using SOARS data I would like to involve my students in the assessment process by getting them to set assessment goals for themselves.
- 21. I would like to know what other schools in the district are doing with student assessment using SOARS.

- 3. I am concerned that there are some other student assessment approaches that might work better than SOARS.
- 9. I would like to investigate the possibility of using student assessment tools other than SOARS.
- 15. I would prefer using teacher designed assessment rubrics rather than rely on the SOARS data to assess students.
- 16. I would prefer combining teacher designed assessment and rubrics with SOARS data to assess students.
- 26. I would like to explore the feasibility of enhancing SOARS data with other assessment instruments.

# APPENDIX D

Permission to Reprint and Distribute SEDL Materials



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To: John M. Marion (Licensee)

From: Nancy Reynolds
Information Associate
SEDL
Information Resource Center-Copyright Permissions
4700 Mueller Blvd.
Austin, TX 78723

Subject: License Agreement to reprint and distribute SEDL materials Date: March 7, 2007; revised March 12, 2008 and February 17, 2011

Thank you for your interest in using the excerpts from the books 1) Measuring Implementation in Schools: The Stages of Concern Questionnaire written by Archie A. George, Gene E. Hall, and Suzanne M. Stiegelbauer and 2) Measuring Implementation in Schools: Levels of Use written by Gene E. Hall, Deborah J. Dirksen, and Archie A. George, Both of these books were published by SEDL in 2006. You have asked to use excerpts as follows:

- 1 From Measuring Implementation in Schools: The Stages of Concern Questionnaire, Stages of Concern Questionnaire (SoCQ) published as Appendix A, pages 79-82 and also available as a PDF document on an accompanying CD-ROM.
- 2 From Measuring Implementation in Schools: Levels of Use, **The Basic Interview Protocol** published as Appendix A Pages 53-56.

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Thank you, again, for your interest in using excerpts from SEDL's publications Measuring Implementation in Schools: The Stages of Concern Questionnaire and Measuring Implementation in Schools: Levels of Use. If you have any questions, please contact me at 800-476-6861, ext. 6548 or 512-391-6548, or by e-mail at nancy.reynolds@sedl.org.

Sincerely,	
Nancy Reynolds for SEDL	Date signed
Agreed and accepted: Signature:	
	Date signed
Printed Name:	

## APPENDIX E

Permission to Conduct Research

External Research Review Committee

Jeffco Public Schools



**Building Bright Futures** 

Assessment & Research 1829 Denver West Drive #27 Golden, Colorado 80401-0001 phone: 303-982-6565 for: 303-982-0841

infico.k12.co.us/assessment

April 19, 2006

John M. Marion

Dear Mr. Marion:

This letter is to inform you that your request to conduct a research study. Assessing in-Kind Middle School Teachers' Stages of Concern and Levels of Use of INFORM - an On-Line Student Assessment Tool, has received preliminary approval by the Jefferson County Public Schools External Research Review Committee, pending receipt of a letter of approval from Pepperdine University's Graduate School Education and Psychology's Institutional Review Board.

Please be aware that you must seek final approval for your research project from the principal in the school where your study will be conducted, in accordance with district regulation IGB-R:

- The Research Committee will contact principals and/or program managers in the schools/programs where the study will be conducted.
- A written description of the project and other supporting materials will be sent by the researcher to the principal(s)/program manager(s) for review.
- Schools or programs interested in participating in the project will then meet with the researcher to arrange for implementation of the study. No school or department will be forced to participate in an approved study.
- For research conducted in schools, the principal, in consultation with staff and community, shall be the final decision-maker regarding participation.

The External Research Review Committee has sent a letter notifying the principals that preliminary approval for your study has been granted and that they will need to provide final approval if they wish to participate. Please call me at (303) 982-5945 if you have any questions.

Sincerely,

Shelley Shea

External Research Review Committee

### APPENDIX F

Permission to Conduct Research

Institutional Review Board

Pepperdine University

# PEPPERDINE UNIVERSITY

# Graduate School of Education and Psychology

May 13, 2008 John Marion

Protocol #: E0907D02

Project Title: Assessing In-Kind Middle School Teachers'
Concerns About & Use of SOARS: School Online Assessment
Report System

Dear Mr. Marion:

Thank you for submitting the revisions requested by Pepperdine University's Graduate and Professional Schools IRB (GPS IRB) for your study Assessing In-Kind Middle School Teachers' Concerns About & Use of SOARS: School Online Assessment Report System. The IRB has reviewed your revisions and found them acceptable. You may proceed with your study. The IRB has determined that the above entitled project meets the requirements for exemption under the federal regulations 45 CFR 46 -

http://www.nihtraining.com/ohsrsite/guidelines/45cfr46.html
that govern the protections of human subjects.
Specifically, section 45 CFR 46.101(b) (1) states:

(b) Unless otherwise required by Department or Agency heads, research activities in which the only involvement of human subjects will be in one or more of the following categories are exempt from this policy:

Category (1) of 45 CFR 46.101, research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (a) research on regular and special education instructional strategies, or (b) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

Based upon review, the GPS IRB has determined that your proposed study is exempt from further IRB review.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit a Request for Modification Form to the GPS IRB. Because your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from

qualifying for exemption from  $45\ \text{CFR}\ 46.101$  and require submission of a new IRB application or other materials to the GPS IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the GPS IRB as soon as possible. We will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the GPS IRB and the appropriate form to be used to report this information can be found in the Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual (see link to "policy material" at http://www.pepperdine.edu/irb/graduate/).

Please refer to the protocol number denoted above in all further communication or correspondence related to this approval. Should you have additional questions, please contact me. On behalf of the GPS IRB, I wish you success in this scholarly pursuit.

Sincerely,

Rephanie M. Wor. Ph.D.

Stephanie Woo, Ph.D.

Chair, Graduate and Professional Schools Institutional Review Board

Graduate School of Education and Psychology

cc: Dr. Lee Kats, Associate Provost for Research &
Assistant Dean of Research, Seaver College

Ms. Ann Kratz, Human Protections Administrator

Dr. Stephanie Woo, Chair, Graduate and Professional Schools IRB

Ms. Jean Lee, Manager, Graduate and Professional Schools

Dr. Michele Stimac

Ms. Christie Dailo

# APPENDIX G

Principal's Letter of Invitation
to Participate in Research Study

January 7, 2008

Dear Middle School Principal:

My name is John M. Marion and I teach Technology Education at the Deer Creek Middle School. I have been enrolled at Pepperdine University in a Doctoral Program for the past ten years and I am about to complete all of the requirements for graduating with an Ed.D. in Educational Technology.

I am writing this letter to seek permission from you to complete research for my doctoral requirements that involves your school's participation. This research project was approved last April by the Assessment Department of the Jefferson County Public Schools pending permission from the Institutional Review Board (IRB) at Pepperdine. I completed my preliminary oral exam at Pepperdine last June and now I must submit to the IRB at Pepperdine a document that states that I have the permission from the Principal of each of the eight schools selected for this research. Your permission is essential to my completing this requirement.

The title of my dissertation is **Assessing In-Kind Middle School Teachers' Concern about & Use of SOARS: School Online Assessment Reporting System.** This research is directed only to teachers in your school that teach the core subjects that are included in the CSAP test, specifically math, reading, writing, and science teachers. My research questions are:

- 1. What are the teachers' stages of concerns regarding the SOARS tool in a select group of Jefferson County Middle Schools; namely, those that represent the four highest and four lowest school profiles in categories established by the district with reference to reduced/free lunches, ethnicity rates, and mobility of students?
- 2. What are the teachers' levels of use regarding the SOARS tool in a select group of Jefferson County Middle Schools; namely, those that represent the four highest and four lowest school profiles in categories established by the district with reference to reduced/free lunches, ethnicity rates, and mobility of students?
- 3.Is there a difference in the stages of concern and levels of use of teachers between high and low profile schools based on percentile rates of reduced/free lunches, ethnicity rates, and mobility of students?

Enclosed, please find a copy of the selected teacher's cover letter, two questionnaires to be completed by the selected teachers, and a letter of consent for your signature. Please let me know if I have your permission by signing the letter of consent and mailing the form to me in the enclosed envelope.

As an incentive, I am offering a \$10.00 Gift Certificate to Starbucks or Barnes & Noble to be sent to each teacher that takes the time to complete these questionnaires and to any office staff involved in helping with the collection of the completed data sheets.

Thank you for taking the time to consider my request. I look forward to your reply.

Sincerely,

John M. Marion

# APPENDIX H

Principal's Consent Form

for Research Study

# Principal's Consent Form for Research Study Assessing In-Kind Middle School Teachers' Stages of Concern and Levels of Use of SOARS - an On-Line Student Assessment Tool

I,	agree to participate in a
research study under the direction of Dr. 1	Michele Stimac of Pepperdine
University and John M. Marion, an education	nal technology doctoral
candidate at Pepperdine and teacher in the	Jeffco Public School. This
project is research being conducted in par	tial fulfillment of the
requirements for a dissertation.	

I give my informed consent to participate in a research project that involves teachers in my school completing two questionnaires that will assess the Stages of Concern and Levels of Use of teachers using the SOARS on-line assessment tool. This research will determine if there is a difference between teacher questionnaire results of high and low profile student populations, based on free/reduced lunches, ethnicity, and mobility data of the district's Middle Schools.

#### Overview Description of Purpose and Methodology of Research Project:

Using two adapted Concerns Based Adoption Model (CBAM) questionnaires, the researcher will determine the teachers' stage of concern and level of use regarding the use of the assessment tool - SOARS - in the Jefferson County School District (Jeffco). The questionnaires will be administered to select in-kind Middle Schools in Jeffco. This research will determine if there is a difference between teacher questionnaire results of high and low profile student populations, based on free/reduced lunches, ethnicity, and mobility data of the district's Middle Schools. It is estimated that this research project will take less than one (1) hour of the participant's time to complete the letter of consent, and two questionnaires and to submit the completed contents in the packet to the school's office.

This letter also confirms that:

- The protection of all individual rights is critical.
- This is a voluntary participation.
- I may withdraw my consent and discontinue my school's participation in the research project at any time without prejudice or penalty.
- Information collected will be handled in a way that maintains the confidentiality of the teachers' responses.
- Identity of teachers will remain anonymous.
- The researcher will provide answers to any questions regarding procedures.
- There is no physical risk involved in this research project.
- There is no emotional risk involved in this research project.
- There is no use of deception in this research project.

Princip	pal's Si	ignature	e:				Da	ate:	
Printe	d Name:								
Note:	Please	return	this	signed	letter	in	the	enclosed	envelope.

Thank you for completing the information requested and returning it promptly.

# APPENDIX I

Principal's Guide for Administration of Research

#### Principal's Guide for Administration of Research

Your Middle School was selected as one of eight Jeffco Middle Schools to participate in a Doctoral research study regarding teacher's concerns about and use of SOARS. Only core academic subject teachers (Reading/Writing, Math, and Science) in your school are selected to participate. The researcher will provide research packets to you to distribute to the selected teachers. Each packet includes a cover letter requesting additional demographic data for this study, a letter of consent and the two CBAM questionnaires to be completed.

The letter of consent will assure the participants that participation is voluntary and that everyone involved in this research will be fully informed that information about the participants and data collected will be kept in strictest confidentiality and anonymity. The protection of human subjects will be assured in all phases of this research.

The first questionnaire will measure the selected teachers' Stages of Concern (SoC) regarding the use of SOARS and the second questionnaire will measure the selected teachers' Level of Use (LoU) of SOARS. There is no identifying information about the participants on the questionnaires.

When completed, the selected teachers will return the packets to your office. To assure confidentially, the cover letters and letters of consent from each packet will be placed in one envelope and the two questionnaires will be placed in a second envelope. This will assure that any identifying information will be separate from the questionnaires. Completed questionnaires will be collected from the principals' office by the researcher upon completion.

A \$10.00 Gift Certificate to Starbucks or Barnes & Noble will be sent to the participating teachers for taking the time to complete these tasks. Teacher's identity will be based on the demographic information they provided.

If you have any questions regarding the administration of this research study, please contact John M. Marion

Thank you for your co-operation and participation!

# APPENDIX J

Teacher's Cover Letter with Request for Additional Demographic Data

#### SOARS - Stage of Concern & Level of Use Questionnaires

The purpose of the attached two questionnaires is to determine your 1) stage of concern and 2) level of use in using SOARS to assess student achievement. The items were developed from a pilot study conducted by the Professional Learning Team - Technology Group at Deer Creek Middle School during the 2003-2004 school year.

In **SOARS Questionnaire 1**, please check the box that indicates the degree of your present concerns (not true to very true) with each item listed. If you consider any item listed as being completely irrelevant at this time, please check "0" on the scale.

In **SOARS Questionnaire 2**, please select one (1) item that best represents your level of use of the SOARS student assessment tool.

In order to provide a more complete analysis of the demographics included in this study, please fill in the following:

1.	Gender: Male Female
2.	Highest Degree: Bachelor's Master's Ph.D./Ed.D
3.	Years of full-time teaching experience:
4.	Years of full-time teaching experience at this school:
5.	Grade Level: 7 8 7&8 Other
6.	Subject - Academic Area:
	A \$10.00 Gift Certificate to Starbucks or Barnes & Noble
will	be sent to you for taking the time to complete these tasks,

# just check off your preference.

Starbucks Barnes & Noble

Note: The information above will be used for statistical use only. This form will be submitted apart from the two questionnaires and will not be used for identification.

Also, please find a consent form for research study. Your participation in assessing your level of use and concerns regarding SOARS is important.

Please return the two questionnaires, the letter of consent along with this cover letter to the Principal's Office as soon as possible.

Thank you for your participation!

### APPENDIX K

Teacher's Consent Form

to Participate in Research

#### Teacher's Consent Form for Research Study

Assessing In-Kind Middle School Teachers' Stages of Concern and Levels of Use of SOARS - an On-Line Student Assessment Tool

I, \_\_\_\_\_ agree to participate in the research study under the direction of Dr. Michele Stimac of Pepperdine University and John M. Marion, an educational technology doctoral candidate at Pepperdine and teacher at Deer Creek Middle School. This project is research being conducted in partial fulfillment of the requirements for a dissertation.

I give my informed consent to participate in a research project that involves completing two questionnaires that will assess the Stages of Concern and Levels of Use of teachers using the SOARS on-line assessment tool. This research will determine if there is a difference between teacher questionnaire results of high and low profile student populations, based on free/reduced lunches, ethnicity, and mobility data of the district's Middle Schools.

Overview Description of Purpose and Methodology of Research Project:

Using two adapted Concerns Based Adoption Model (CBAM) questionnaires, the researcher will determine the teachers' stage of concern and level of use regarding the use of the assessment tool – SOARS – in the Jefferson County School District (Jeffco). The questionnaires will be administered to select in-kind Middle Schools in Jeffco. This research will determine if there is a difference between teacher questionnaire results of high and low profile student populations, based on free/reduced lunches, ethnicity, and mobility data of the district's Middle Schools. It is estimated that this research project will take approximately one-half (1/2) hour of the participant's time to complete the two questionnaires and submit the completed contents in the packet.

This letter also confirms that:

- The protection of all individual rights is critical.
- This is a voluntary participation.
- I may withdraw my consent and discontinue participation in the research project at any time without prejudice or penalty.
- Information collected will be handled in a way that maintains the confidentiality of my responses.
- My participation will remain anonymous.
- The researcher will provide answers to any questions regarding procedures.
- There is no physical risk involved in this research project.
- There is no emotional risk involved in this research project.
- There is no use of deception in this research project.

I understand that the investigator is willing to answer any inquiries I may have concerning the research herein described. I understand that I may contact the investigator, John Marion, at jmarion@\*\*\*.com or the investigator's faculty advisor, Dr. Michele Stimac, at \*\*\*-\*\*-\*\*\* if I have other questions or concerns about this research. If I have questions about my rights as a research participant, I understand that I can contact Dr. Stephanie Woo, Chairperson of the Graduate and Professional Schools Institutional Review Board, Pepperdine University, at \*\*\*-\*\*\*-

Signature:	Date:		
Printed Name:			

Note: Please return this signed letter along with the two completed questionnaires and the demographic cover sheet to the Principal's Office as soon as possible.

Thank you for completing the information requested and returning it promptly.

### APPENDIX L

Human Participant Protections Education for Research Completion Certificate

# Human Participant Protections Education for Research Teams

Page 1 of 1





#### **Completion Certificate**

This is to certify that

#### **John Marion**

has completed the Human Participants Protection Education for Research Teams online course, sponsored by the National Institutes of Health (NIH), on 02/18/2005.

This course included the following:

- · key historical events and current issues that impact guidelines and legislation on human
- participant protection in research.

  cthical principles and guidelines that should assist in resolving the ethical issues inherent in the conduct of research with human participants.

  the use of key othical principles and federal regulations to protect human participants at various

- the use of key caused principles and rederal regulations to protect human participants at varior stages in the research process,
  a description of guidelines for the protection of special populations in research.
  a definition of informed consent and components necessary for a valid consent.
  a description of the role of the IRB in the research process.
  the roles, responsibilities, and interactions of federal agencies, institutions, and researches in conducting research with human participants.

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2/18/2005

### APPENDIX M

Stages of Concern Results for High Profile Schools

Listed by Sum in Descending Order

Туре	Item	Sum	Stages of Concern Results for High Profile Schools Listed by Sum in Descending Order
I	19	184	I would like to know what will be required of me in the immediate future in the use of SOARS for student assessment.
I	32	177	I would like to know the long-term goals of student assessment using SOARS.
Cl	21	170	I would like to know what other schools in the district are doing with student assessment using SOARS.
Cl	17	166	Along with using SOARS data I would like to involve my students in the assessment process by getting them to set assessment goals for themselves.
Р	23	164	I would like to know how my teaching is supposed to change when I am using SOARS for student assessment.
P	20	163	I would like to have more information on time and energy commitments required by student assessment using SOARS.
I	35	163	I would like to know what resources are available to me as I use SOARS.
Р	24	158	I would like to know how my role will change when I am using student assessment in SOARS.
R	16	157	I would prefer combining teacher designed assessment and rubrics with SOARS data to assess students.
Р	10	154	I would like to know what support services are available to me as we use SOARS for student assessment.
A	30	154	Although I am not fully aware of the assessment tools in SOARS, I am open to learning about it.
I	8	150	I would like to know who will make curriculum decisions based on student assessment derived from SOARS data.

Type	Item	Sum	Stages of Concern Results for High Profile Schools Listed by Sum in Descending Order
М	18	149	I am concerned about the time required to assess students based on SOARS data.
R	26	148	I would like to explore the feasibility of enhancing SOARS data with other assessment instruments.
M	33	145	I am concerned that using SOARS data to assess students will take too much time away from my teaching.
M	29	144	I am concerned about how I will administer all of the materials in SOARS to better meet the academic needs of our student population.
M	11	142	I am concerned about my ability to manage all the requirements of student assessment using SOARS.
A	14	133	I am completely occupied with other tasks to be able to commit to using SOARS.
R	9	132	I would like to investigate the possibility of using student assessment tools other than SOARS.
Cn	13	132	I am concerned about how I will be evaluated as I use SOARS to assess students.
Cn	25	129	I am concerned about revising my use of student assessment (grade book and rubric format) once I begin using SOARS.
Cn	28	127	I am concerned about meeting my administrators' expectations of using SOARS for student assessment.
R	3	126	I am concerned that there are some other student assessment approaches that might work better than SOARS.
M	2	124	I am concerned about not having enough time to use SOARS each day.
R	15	119	I would prefer using teacher designed assessment rubrics rather than rely on the SOARS data to assess students.

Туре	Item	Sum	Stages of Concern Results for High Profile Schools Listed by Sum in Descending Order
Cn	27	118	I am concerned about the possible conflict between my system of student assessment and the responsibility of using SOARS for assessment.
I	7	117	I would like to know if parents are aware of our efforts to use SOARS.
Cl	5	115	I would like to develop a working relationship with teachers in my Middle School and other district Middle Schools to assure uniform use of SOARS for student assessment.
Cl	1	114	I would like to help other teachers in my Middle School to use SOARS for student assessment.
A	34	114	I have not yet been informed about the student assessment tools in SOARS.
Cl	12	112	I would like to familiarize parents with the process of how to use student assessment derived from SOARS data.
Cn	6	108	I am concerned about whether student progress will be enhanced by teachers using SOARS to assess students.
P	4	87	I have extensive knowledge about how to conduct student assessment using SOARS.
A	31	60	I will not use feedback from other educators about their use of SOARS.
A	22	52	At this time I am not interested in learning about student assessment using SOARS.

### APPENDIX N

Stages of Concern Results for Low Profile Schools

by Sum in Descending Order

Туре	Item	Sum	Stages of Concern Results for Low Profile Schools Listed by Sum in Descending Order
I	19	205	I would like to know what will be required of me in the immediate future in the use of SOARS for student assessment.
I	32	200	I would like to know the long-term goals of student assessment using SOARS.
A	30	194	Although I am not fully aware of the assessment tools in SOARS, I am open to learning about it.
I	8	190	I would like to know who will make curriculum decisions based on student assessment derived from SOARS data.
I	35	186	I would like to know what resources are available to me as I use SOARS.
P	24	185	I would like to know how my role will change when I am using student assessment in SOARS.
P	10	183	I would like to know what support services are available to me as we use SOARS for student assessment.
P	23	183	I would like to know how my teaching is supposed to change when I am using SOARS for student assessment.
P	20	180	I would like to have more information on time and energy commitments required by student assessment using SOARS.
R	16	177	I would prefer combining teacher designed assessment and rubrics with SOARS data to assess students.
Cl	17	177	Along with using SOARS data I would like to involve my students in the assessment process by getting them to set assessment goals for themselves.
Cl	21	172	I would like to know what other schools in the district are doing with student assessment using SOARS.

Туре	Item	Sum	Stages of Concern Results for Low Profile Schools Listed by Sum in Descending Order
M	18	168	I am concerned about the time required to assess students based on SOARS data.
M	33	167	I am concerned that using SOARS data to assess students will take too much time away from my teaching.
M	11	161	I am concerned about my ability to manage all the requirements of student assessment using SOARS.
Cn	27	161	I am concerned about the possible conflict between my system of student assessment and the responsibility of using SOARS for assessment.
М	29	160	I am concerned about how I will administer all of the materials in SOARS to better meet the academic needs of our student population.
R	26	157	I would like to explore the feasibility of enhancing SOARS data with other assessment instruments.
R	15	155	I would prefer using teacher designed assessment rubrics rather than rely on the SOARS data to assess students.
A	14	152	I am completely occupied with other tasks to be able to commit to using SOARS.
Cn	25	152	I am concerned about revising my use of student assessment (grade book and rubric format) once I begin using SOARS.
A	34	148	I have not yet been informed about the student assessment tools in SOARS.
Cn	13	146	I am concerned about how I will be evaluated as I use SOARS to assess students.
R	9	144	I would like to investigate the possibility of using student assessment tools other than SOARS.
Cn	28	137	I am concerned about meeting my administrators' expectations of using SOARS for student assessment.

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Туре	Item	Sum	Stages of Concern Results for Low Profile Schools Listed by Sum in Descending Order
I	7	128	I would like to know if parents are aware of our efforts to use SOARS.
Cn	6	125	I am concerned about whether student progress will be enhanced by teachers using SOARS to assess students.
M	2	123	I am concerned about not having enough time to use SOARS each day.
Cl	5	114	I would like to develop a working relationship with teachers in my Middle School and other district Middle Schools to assure uniform use of SOARS for student assessment.
Cl	12	114	I would like to familiarize parents with the process of how to use student assessment derived from SOARS data.
R	3	108	I am concerned that there are some other student assessment approaches that might work better than SOARS.
А	22	102	At this time I am not interested in learning about student assessment using SOARS.
А	31	102	I will not use feedback from other educators about their use of SOARS.
Cl	1	94	I would like to help other teachers in my Middle School to use SOARS for Student assessment.
P	4	79	I have extensive knowledge about how to conduct student assessment using SOARS.

# APPENDIX O

Stages of Concern Results for Combined High & Low Profile

Schools Listed by Sum in Descending Order

Туре	Item	Sum	Stages of Concern Results for Combined High & Low Profile Schools Listed by Sum in Descending Order
I	19	389	I would like to know what will be required of me in the immediate future in the use of SOARS for student assessment.
I	32	377	I would like to know the long-term goals of student assessment using SOARS.
Cn	27	349	I am concerned about the possible conflict between my system of student assessment and the responsibility of using SOARS for assessment.
I	35	349	I would like to know what resources are available to me as I use SOARS.
A	30	348	Although I am not fully aware of the assessment tools in SOARS, I am open to learning about it.
Р	23	347	I would like to know how my teaching is supposed to change when I am using SOARS for student assessment.
Cl	17	343	Along with using SOARS data I would like to involve my students in the assessment process by getting them to set assessment goals for themselves.
Р	20	343	I would like to have more information on time and energy commitments required by student assessment using SOARS.
Р	24	343	I would like to know how my role will change when I am using student assessment in SOARS.
Cl	21	342	I would like to know what other schools in the district are doing with student assessment using SOARS.
I	8	340	I would like to know who will make curriculum decisions based on student assessment derived from SOARS data.
Р	10	337	I would like to know what support services are available to me as we use SOARS for student assessment.

Туре	Item	Sum	Stages of Concern Results for Combined High & Low Profile Schools Listed by Sum in Descending Order
R	16	334	I would prefer combining teacher designed assessment and rubrics with SOARS data to assess students.
М	18	317	I am concerned about the time required to assess students based on SOARS data.
М	33	312	I am concerned that using SOARS data to assess students will take too much time away from my teaching.
R	26	305	I would like to explore the feasibility of enhancing SOARS data with other assessment instruments.
М	29	304	I am concerned about how I will administer all of the materials in SOARS to better meet the academic needs of our student population.
M	11	303	I am concerned about my ability to manage all the requirements of student assessment using SOARS.
A	14	285	I am completely occupied with other tasks to be able to commit to using SOARS.
Cn	25	281	I am concerned about revising my use of student assessment (grade book and rubric format) once I begin using SOARS.
Cn	13	278	I am concerned about how I will be evaluated as I use SOARS to assess students.
R	9	276	I would like to investigate the possibility of using student assessment tools other than SOARS.
R	15	274	I would prefer using teacher designed assessment rubrics rather than rely on the SOARS data to assess students.
Cn	28	264	I am concerned about meeting my administrators' expectations of using SOARS for student assessment.
А	34	262	I have not yet been informed about the student assessment tools in SOARS.

Type	Item	Sum	Stages of Concern Results for Combined High & Low Profile Schools Listed by Sum in Descending Order
М	2	247	I am concerned about not having enough time to use SOARS each day.
I	7	245	I would like to know if parents are aware of our efforts to use SOARS.
R	3	234	I am concerned that there are some other student assessment approaches that might work better than SOARS.
Cn	6	233	I am concerned about whether student progress will be enhanced by teachers using SOARS to assess students.
Cl	5	229	I would like to develop a working relationship with teachers in my Middle School and other district Middle Schools to assure uniform use of SOARS for student assessment.
Cl	12	226	I would like to familiarize parents with the process of how to use student assessment derived from SOARS data.
Cl	1	208	I would like to help other teachers in my Middle School to use SOARS for student assessment.
P	4	166	I have extensive knowledge about how to conduct student assessment using SOARS.
А	31	162	I will not use feedback from other educators about their use of SOARS.
A	22	154	At this time I am not interested in learning about student assessment using SOARS.

### APPENDIX P

Stages of Concern Results for

Combined High & Low Profile Schools

Listed by the Seven Stages in Descending Order

Type	Item	Sum	Stages o	of Conce	rn Resul	lts	for	Combin	ned Hig	gh &	Low
			Profile	Schools	Listed	bу	the	Seven	Stages	s in	
			Descend:	ing Orde:	r						

#### Awareness

A	30	348	Although	I.	am 1	not	fully	aware	e of	the	assessr	ment
			tools in	SO	ARS	, I	am ope	en to	lear	rning	about	it.

- A 14 285 I am completely occupied with other tasks to be able to commit to using SOARS.
- A 34 262 I have not yet been informed about the student assessment tools in SOARS.
- A 31 162 I will not use feedback from other educators about their use of SOARS.
- A 22 154 At this time I am not interested in learning about student assessment using SOARS.

#### Informational

- I 19 389 I would like to know what will be required of me in the immediate future in the use of SOARS for student assessment.
- I 32 377 I would like to know the long-term goals of student assessment using SOARS.
- I 35 349 I would like to know what resources are available to me as I use SOARS.
- I 8 340 I would like to know who will make curriculum decisions based on student assessment derived from SOARS data.
- I 7 245 I would like to know if parents are aware of our efforts to use SOARS.

Type	Item	Sum	Stages of Concern Results for Combined High & Low Profile Schools Listed by the Seven Stages in Descending Order
			Personal
Р	23	347	I would like to know how my teaching is supposed to change when I am using SOARS for student assessment.
P	20	343	I would like to have more information on time and energy commitments required by student assessment using SOARS.
P	24	343	I would like to know how my role will change when I am using student assessment in SOARS.
P	10	337	I would like to know what support services are available to me as we use SOARS for student assessment.
P	4	166	I have extensive knowledge about how to conduct student assessment using SOARS.
			Management
М	18	317	I am concerned about the time required to assess students based on SOARS data.
М	33	312	I am concerned that using SOARS data to assess students will take too much time away from my teaching.
М	29	304	I am concerned about how I will administer all of the materials in SOARS to better meet the academic needs of our student population.
М	11	303	I am concerned about my ability to manage all the requirements of student assessment using SOARS.
М	2	247	I am concerned about not having enough time to use SOARS each day.

Type	Item	Sum	Stages of Concern Results for Combined High & Low
			Profile Schools Listed by the Seven Stages in
			Descending Order

#### Consequence

Cn	27	349	I am concerned about the possible conflict
			between my system of student assessment and the
			responsibility of using SOARS for assessment.

- Cn 25 281 I am concerned about revising my use of student assessment (grade book and rubric format) once I begin using SOARS.
- Cn 13 278 I am concerned about how I will be evaluated as I use SOARS to assess students.
- Cn 28 264 I am concerned about meeting my administrators' expectations of using SOARS for student assessment.
- Cn 6 233 I am concerned about whether student progress will be enhanced by teachers using SOARS to assess students.

#### Collaboration

- Cl 17 343 Along with using SOARS data I would like to involve my students in the assessment process by getting them to set assessment goals for themselves.
- Cl 21 342 I would like to know what other schools in the district are doing with student assessment using SOARS.
- Cl 5 229 I would like to develop a working relationship with teachers in my Middle School and other district Middle Schools to assure uniform use of SOARS for student assessment.
- Cl 12 226 I would like to familiarize parents with the process of how to use student assessment derived from SOARS data.
- Cl 1 208 I would like to help other teachers in my Middle School to use SOARS for student assessment.

Type	Item	Sum	Stages of Concern Results for Combined High & Low Profile Schools Listed by Type and Sum in Descending Order
			Refocusing
R	16	334	I would prefer combining teacher designed assessments and rubrics with SOARS data to assess students.
R	26	305	I would like to explore the feasibility of enhancing SOARS data with other assessment instruments.
R	9	276	I would like to investigate the possibility of using student assessment tools other than SOARS.
R	15	274	I would prefer using teacher designed assessment rubrics rather than rely on the SOARS data to assess students.
R	3	234	I am concerned that there are some other student assessment approaches that might work better than SOARS.