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A SINGLE CASE STUDY OF A THREE YEAR COORDINATED SCHOOL HEALTH
PROGRAM AT A RURAL NORTH MISSISSIPPI ELEMENTARY SCHOOL

Dissertation

Presented for the

Doctor of Philosophy

Degree

The University of Mississippi

By

SANDRA LENA HOWELL

December 2010

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ABSTRACT

The single case study presents the story of the implementation of a three year Coordinated School Health Program (CSHP) at a rural North Mississippi school. The school was recognized by the Mississippi Department of Education, Office of Healthy Schools, as one of ten selected model Mississippi healthy schools. An awarded grant of one hundred thousand dollars funded the implementation of the CSHP over a three year period. The study examined the impact of the CSHP on the students, staff, and personnel. Two types of data were collected and analyzed including archived documents and interviews conducted with five members of the school's health council. The study is the first single case research of a CSHP implemented in a Mississippi school. Upon completion of the three year CSHP, the Bower Foundation selected ten additional schools to implement a CSHP. The case school was invited to share experiences and expertise by mentoring the schools. In 2005, ten schools were identified as healthy schools; in 2010 twenty schools are. The possibilities for CSHP continue.

DEDICATION

This dissertation is dedicated to my family for their continual love, inspiration, and support. Special thanks to my husband, Steve, who held my hand each step of the way. Thank you my sons, Matthew and Nathan, and your beautiful families for your constant encouragement to “forge ahead.” Special credit is given to my parents and family who always had faith in my abilities and supported me in every endeavor.

LIST OF ABBREVIATIONS AND SYMBOLS

ADHD	Attention-Deficit-Hyperactive Disorder
AED	Automated External Defibrillator
AR	Adiposity Rebound
ARIC	Atherosclerosis Risk In Communities
BMI	Body Mass Index
BRFSS	Behavioral Risk Factor Surveillance System
CDC	Center for Disease Control
CPR	Cardio Pulmonary Resuscitation
CSH	Coordinated School Health
CSHI	Coordinated School Health Index
EPSDT	Early Periodic Screening Diagnostic Treatment
MDE	Mississippi Department of Education
MSIS	Mississippi Student Information School Administration System
NHAMES	National Health and Nutrition Examination Survey
PBIS	Positive Behavior Intervention and Support System
SHI	School Health Index
SHPPS	School Health Policies and Programs Study
SY	School Year U. S. United States

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CHAPTER 1

INTRODUCTION

The state of Mississippi has alarming health statistics. *State of Health in Mississippi* (2008) cites Mississippi is ranked first nationally in both obesity and cardiovascular disease related deaths, second in the nation in Type II Diabetes, and fifth in cancer related deaths. Also, asthma related problems are the number one cause of school absenteeism in Mississippi. *Childhood Asthma* (2008) estimates 10.2 percent of Mississippi's children have asthma. Within a typical classroom, three of every thirty students are likely to have asthma, which is the leading chronic illness among children (*Healthy Youth*, 2008).

In 2004, as a response to the increasing frequency of childhood obesity and other startling health statistics in Mississippi schools, the Mississippi Department of Education (MDE) restructured the health related departments and formed the Office of Healthy Schools. The MDE, Office of Healthy Schools collaborated with the John D. Bower Foundation which endorsed the school health program. The new program, "Health is Academic," promoted health, safety, and wellness of Mississippi children (*Healthy Schools Mississippi*, 2008).

Previously, the Mississippi state legislature recognized the magnitude of school health issues and passed the Mississippi Healthy Students Act of 1972 and adopted the Mississippi Department of Education Office of Healthy School's motto "students being fit, healthy, and ready to succeed." In December of 2007, the Mississippi Board of Education authorized the Office of Healthy Schools to adopt the Physical Education/ Comprehensive Health Rules and

Regulations and the Nutrition standards outlined in the Mississippi Healthy Students Act of 1972.

Public health professionals are interested in school-based programs, according to Franks, Emmett, Cowin, and Reilly (2007), to provide a base for lifelong healthy behaviors and to lower the impact of chronic disease for individuals and society. Research examining the support of school health programs within the United States (Wechsler, McKenna, Lee, and Wietz, 2004) found forty six states support the use of the School Health Index (SHI) surveys and twenty seven states have policies supporting school health councils. Mississippi is one of only four states requiring school health councils in each school.

Statement of Purpose

The purpose of this single case study is to present the story of the implementation of the Coordinated School Health Program (CSHP) at a rural north Mississippi school during the 2005-2006, 2006-2007, and 2007-2008 school years (SY). The study examined the impact of the CSHP on the students, staff, and personnel. Data was collected in two forms: (1) analysis of archived documents related to the CSHP and (2) interviews conducted with five members of the school's health council, including the school principal, counselor, nurse, a teacher, and a parent.

Significance of the Study

Research exists for individual components of school health including topics of nutrition (Horowitz, 2004), physical education programs (Nihiser, 2007), and health services (Johnson & Deshpande, 2000). A review of existing research however, found only a few case studies of health programs in individual school districts (Cooper, 2003), but no case studies at the

individual school level. In addition, there is limited research on CSHPs in the state of Mississippi. One study (Molaison, Kolbo, Speed, and Dickerson, 2007) provides data on the Mississippi CSHP. This report provides a point of reference to help the participating schools assess where they are in comparison to other schools in the School Health Network and schools in the rest of the state.

This single case study which presents the story of a CSHP conducted at one rural North Mississippi elementary school over a three year period adds to the knowledge of school health programs within the state and to the literature on school-based health initiatives. The study also describes the processes and impact of one of the state's efforts to address the health of Mississippi's citizens.

The Coordinated School Health Program

The Mississippi Department of Education Office of Healthy School, in cooperation with the John D. Bower Coordinated School Health Network, selected the case study elementary school as one of ten model Mississippi schools to pilot a CSHP during the 2005-2006, 2006-2007, and 2007-2008 SY. The case study school was chosen based on criteria including existing student health programs, school district commitment, and community partnership. The case study school received a one hundred thousand dollar grant over a three year period to implement the CSHP.

The "Coordinated School Health Model" program design was developed by Lloyd Kolbe and Diane Allensworth for the Center for Disease Control and Prevention (CDC). The national model for the CSHP incorporates eight components: (1) health instruction; (2) physical education; (3) health services; (4) food services; (5) counseling and psychological services; (6)

healthy school environment; (7) health promotion for staff; and, (8) family and community involvement (Allensworth & Kolbe, 1987).

In May of 2006, during the initial planning stage of the program, a SHI survey was conducted. Twenty-four members of the school health council responded to the eight components of the SHI survey (Appendix A). The school health council was comprised of selected students and parents, community volunteers, a school counselor, a school nutritionist, a physical education teacher, a school nurse, and instructional teachers. Of the eight components, the data indicated limitations in three areas: health services for students, health promotion for staff, and family and community involvement. Based on this data, the program design changed during the course of the three year implementation. This provided baseline data to create a specialized coordinated health plan for the school.

The Mississippi Department of Education and the John D. Bower School Health Network (2008) defines a CSHP as a planned and coordinated school-based program designed to enhance child and adolescent health by providing a framework for school districts and schools to use in organizing and managing school health initiatives. The purpose of the John D. Bower Coordinated School Health Network is to promote fundamental improvements in the health status of all Mississippians through the creation, expansion, and support of quality healthcare initiatives.

Research Questions

The central phenomenon of this research study is the CSHP provided to students, teachers, and staff at the case study school. Guiding questions which were used to explore the central phenomenon are:

- What services were provided to the students and the employees?
- How did the school principal, teacher, nurse, counselor, and parent perceive their role in the process of implementing the CSHP?
- What are the perceived positive and negative impacts of the CSHP on the school principal, teachers, nurse, counselor, and parent?
- How has the implementation of the CSHP in this context impacted the school district's health education agenda, and efforts to improve school health?

Methodology of the Research Study

A qualitative single case study was used to respond to the research questions. Weiss (1994) states a case study has “coherence, depth, development, and drama of a single fully understood life.” This three year case study tells the story of the CSHP implemented initially during the 2005-2006 SY and continued through both the 2006-2007 SY, and the 2007-2008 SY. The two forms of data which were collected and analyzed included archival documents and personal interviews of five members of the school wellness council.

Archival documents were analyzed, including (1) school performance data, (2) student related data, (3) school nurse documents providing data for student school services and student participation in physical education and nutritional programs, and (4) program evaluation data indicative of the school health index (SHI) survey. Glesne (2006) emphasizes that by gathering historical data, it is possible to “see differently the patterns of behavior that were evident from current data and you might perceive a relationship of ideas or events previously assumed unconnected.”

Personal interviews were conducted with five members of the elementary school's wellness council. The participants include a school principal, counselor, nurse, teacher, and parent. Glesne (2006) cites Maxwell (1996) in stating "Your research questions formulate what you want to understand; your interview questions are what you ask people in order to gain that understanding" (p. 81). Transcribed narrative data provided the participant's perceptions of the CSHP. The topics include: (1) services provided to students and employees, (2) teachers, nurse, and counselors perceived part in the process, (3) level of involvement in the CSHP, (4) perceived impact of CSHP of students, teachers, and employees, (5) areas of CSHP that seemed to work well (and why), (6) areas of CSHP that did not seem to work well (and why), (7) level of fit between CSHP activities and other professional responsibilities, (8) impact of CSHP on school district agenda and school health reform, and (9) recommendations for future CSHP improvement.

Limitations of the Research Study

Themes and personal interview perceptions of this study were reflective of only five members of the school wellness council. No school personnel at the rural North Mississippi elementary school were interviewed except for the elementary school principal, counselor, nurse, a teacher, and a parent.

Definition of Research Terms

The following operational definitions will assist the reader in the understanding of terms applicable to the study.

Body Mass Index (BMI): a number calculated from a person's weight and height. BMI provides a reliable indicator of body fatness for most people and is used to screen for weight categories that may lead to health problems (Centers for Disease Control, June 5, 2005).

Coordinated School Health Index (CSHI): A self-assessment and planning guide that will enable one to identify the strengths and weaknesses of a school's policies and programs for promoting health and safety, develop an action plan for improving student health and safety, and involve teachers, parents, students, and the community in improving school policies, programs, and services (Centers for Disease Control, June 5, 2005).

Coordinated School Health Program (CSHP): A planned and coordinated school-based program designed to enhance child and adolescent health by providing a framework for school districts and schools to use in organizing and managing school health initiatives. The program consists of the following eight components: Healthy School, Health Services, Health Education, Physical Education, Counseling, Psychological and Social Services, Nutrition Services, Family and Community Involvement, and Health Promotion for Staff. (Mississippi Department of Education, *Healthy Schools Mississippi*, June 5, 2005).

Demographic Information: For the purpose of this study, the demographic information will include student gender, race, student attendance, and Body Mass Index data.

Early and Periodic Screening Diagnostic Treatment: (EPSDT) An Early Periodic Screening, Diagnosis, and Treatment (EPSDT) Program is the child health component of Medicaid. It is required in every state and is designed to improve the health of low-income children by financing appropriate and necessary pediatric services. (<http://www.hrsa.gov/epsdt/>)

John D. Bower Foundation: A foundation which directs its funds and energies into making sustainable, systemic improvements in the state's health and education infrastructures. Through

strong, substantive partnerships with organizations that share its vision, the Foundation leverages limited resources into grants that support mutual goals of better health outcomes and better health policy. Many health policy changes also spur productive grant making.

(<http://www.bowerfoundation.org/htdocs/foundation.html>)

Mississippi Department of Education: (MDE) The Mississippi Department of Education is the state education agency of Mississippi. It is headquartered in the former Central High School Building in Jackson. (http://en.wikipedia.org/wiki/Mississippi_Department_of_Education.html)

Mississippi Student Information System (MSIS) School Administration Manager: The database utilized by Mississippi school districts to record, track and access student attendance, disciplinary and retention data, grades, counseling, parental information, and special education eligibility. (<http://www.mde.k12.ms.us/msis/index.html>)

Obesity: A complex chronic disease developing from the interaction of multiple genetic, cultural, socioeconomic, behavioral, physiologic, metabolic, cellular, and molecular influences. Obesity means deposition of excess fat in the body, caused by ingestion of greater amounts of food that can be used by the body for energy. The excess food, whether fats, carbohydrates, or proteins, is then stored almost entirely as fat in the adipose tissue to be used later as energy- an excessive high amount of body fat or adipose tissue in relation to lean body mass (Guyton & Hall, 2000).

Obesity in Youth: Body Mass Index of 95th percentile or BMI of ≥ 30 kg/m², whichever is lower (Barlow, 2007).

Office of Healthy Schools: The Department of Education (MDE) restructured and consolidated its health and safety- related programs under the umbrella of the Office of Healthy Schools. Through the efforts of the Office of Healthy Schools, the Mississippi Department of Education offers a system of coordinated school health services to 152 school districts to assist

them in developing organizations that make the connection between good student health and high academic achievement. The Office of Healthy Schools is responsible for administering the following health and safety related services and programs:

- Safe and Orderly Schools
- Child Nutrition
- Coordinated School Health Program
- School Nurse Program
- Early Periodic Screening Diagnostic and Treatment Program
- Title IV- Safe and Drug Free Schools and Communities Program including the Mississippi Data Improvement Project
- Junior Reserve Officer Training Corps (<http://www.bowerfoundation.org/htdocs/foundation.html>)

The Structure of the Research Study

This study contains five chapters. Following chapter one, the second chapter is a review of research and literature related to child health and health education. The literature review for this study includes the three areas of: (1) obesity: a new pandemic, (2) health research studies, and (3) coordinated school health programs: a paradigm shift. Chapter three highlights the rationale for the design of the study and the methods used in the study. In chapter four, an analysis of the study is provided in two parts. The first section describes the CSHP at the case study school based on document analyses. The second section uses the interview data to examine the perceptions of key participants in the CSHP. Chapter five analyzes the meaning of

the results, offers suggestions and recommendations for improving CSHPs, and provides recommendations for further study.

CHAPTER 2

REVIEW OF LITERATURE

Obesity has increased to epidemic proportion in Mississippi. Public perceptions of health education and interventions among children are impacting policy makers, health care researchers, and public health care professionals. Schools are an ideal environment to focus efforts on reducing the rising health issues affecting school age children in Mississippi.

In a school health index study in Rhode Island elementary schools, Pearlman, Dowling, Bayuk, Cullenen, and Thacher (2005) cite (Wechsler, Devereaux, and Davis, 2004) stating: “Due to the prevalence of increasing childhood obesity, schools are ideal places to support healthy eating and physical activity” (p. 1). Within the school environment, the school administrators, nurses counselors, teachers, and parents need a program to capture the attention of the students and to help reduce the rising health issues. The creation and implementation of an expanded paradigm of coordinated school health programs within K-12 education focuses on improving the health and well-being of the youth in Mississippi.

A plethora of literature and research exists on individual components of the school health model and various curricula; however, no research exists on CSHPs implemented in Mississippi schools and the impact of the CSHP on students, staff, and personnel. The three categories of research are examined to frame this single case qualitative study: (1) obesity: a new pandemic, (2) health and research studies, and (3) paradigm shift: coordinated health plans.

Obesity: A New Pandemic

The obesity rate of children is steadily increasing in the United States. The researcher, a science teacher at the case study school previous to the CSHP, was most concerned about the number of over-weight students and the over whelming health issues of the fourth and fifth grade students. The 2001 National Health and Nutrition Examination Survey acknowledge the number of overweight children has doubled over the last two decades and has nearly quadrupled from four percent in 1969 to fifteen percent in the 1999-2000 (SY). Evans (2005) cites obesity in the United States has been identified as an epidemic by the Centers for Disease Control and Prevention. The National Center for Chronic Disease Prevention and Health Promotion include: (1) obesity among children has tripled during the past thirty years, (2) obesity in children aged six through eleven increased from 6.5 % in 1980 to 19.6 % in 2008, and (3) a dramatic increase in obesity among adolescents aged twelve through nineteen increasing from 5.0 % to 18.1 %. Similarly, obesity has increased to epidemic proportions in Mississippi.

The transition from infectious disease to chronic disease as a pandemic in the 21st century is of interest to Kimm and Obarzanek (2002). The authors discuss the correlates of obesity as indicated in studies of the National Heart, Lung, and Blood Institute Growth and Health Study. Environmental, biological, psychosocial, socioeconomic, and dietary factors are defined as the correlates of obesity. The authors attribute the increase in obesity to the sedentary lifestyles and the availability of abundant foods, which may lead to a national crisis.

Opinions vary on the obesity issue. Gibbs (2005) presents the “flip” side to the obesity problem. The author proposes the question, “Is it possible that urging the overweight or mildly obese to cut calories and lose weight may actually do more harm than good?” The author states a growing number of dissenting researchers accuse government and medical authorities, as well

as the media, of misleading the public about the health consequences of rising body weights. The physiology of obesity alludes to the complexity of the chronic disease of obesity. Montague (2003), identifies the three compartments of fat as visceral, retroperitoneal, and subcutaneous and explains how fat functions in the body. The author identifies the causes of obesity as environmental, genetic, and psychological factors.

The Child and Youth Prevalence of Overweight Survey (2003), under the direction of Dr. Jerome R. Kolbo, examined the prevalence of those overweight and at risk of becoming overweight among Mississippi children in grades one through eight and found a high percentage of Mississippi first graders were already overweight and that 24 % of students in grades one through eight were overweight. The Coordinated School Health Program implemented at the rural north Mississippi elementary school assisted school administrators and employees to focus on the positive impact of health, safety, and wellness through the implementation of the new school program, "Health Is Academic."

Health Research and Studies

According to the Centers for Disease Control and Prevention (CDC), obesity related health threats face both adults and children. Researchers (Evans, Fikelstein, Kamerow, and Renaud, 2005) developed an instrument designed to capture opinions about childhood obesity in comparison with issues surrounding youth. The author's study measured public attention, awareness, and attitudes concerning obesity. Data was gathered from 1,047 U.S. households with targeted domains of school, communities, and media. The survey demonstrates a strong public support for specific interventions in vending, standardizing food size portions, unhealthy food choices in cafeterias, and food advertising and marketing. The findings are of great interest

to policymakers and others who endorse specific interventions in both the public and private health sectors. Other policies in place include healthy and attractive food choices, food safety, and food advertising and marketing within the cafeteria and school properties.

Good oral health is equally important to children's health. In the Marshall, Lichtenberger Gilmore, Profit, Stub, and Levy (2005) study, 645 children participated in the Iowa Fluoride Study. Parents completed questionnaires regarding beverage intake, overall children's health and oral health behaviors. Results of the study support the author's hypothesis that milk and dairy provide Vitamin D and Calcium nutritional value, and milk is inversely related to sugar beverage intakes. This study provides evidence of the validity for the beverage and newly passed vending policies in Mississippi.

Many schools provide both breakfast and lunch for students. Nutritional guidelines are being examined by school health agencies as to the nutritional content of foods served. Few studies exist with emphasis on timing of adiposity rebound. Researchers (Dorosty, Emmett, Cowin, and Reilly, 2000) conducted a longitudinal study of 889 children from birth to five years of age researching factors that influence the timing of the adiposity rebound (AR). The study found the ages of birth to five is the age as the age at which body mass index (BMI) increases which is a critical period for the development of obesity. The authors hypothesize high-protein intake influences early AR, although results of the study conclude dietary intakes were not associated with the timing of adiposity rebound.

Can there be a correlation between overweight and obesity in children with attention-deficit/hyperactivity disorder? Holtkamp, Konrad, Buller, Heussen, Herpertz, Herpertz-Dahlmann, and Hebebrand (2004) conducted a study of 97 male patients with the diagnosis of Attention-Deficit/Hyperactivity Disorder (ADHD) to determine if the prevalence of overweight

and obesity is lower in a population of boys with ADHD in comparison with the German healthy male reference population of the same age. The size of the study limits the generalizability and the results confirm both male and female subjects should be included in future clinical samples. As stated by the authors, results of the two year study argue against a protective influence of high levels of physical activity on the development and persistence of overweight and obesity in ADHD boys. The authors hypothesize future studies of ADHD children include an investigation of psychological or behavioral factors and the relationship to obesity.

Health disparities including obesity and cardiovascular diseases are prevalent among children in the Southeastern areas of the U.S. Davy, Harrell, Stewart and King (2004) conducted a study including 205 middle school children in rural Scott County, Mississippi. Findings indicated 54 % of the sample were overweight or at risk of being overweight. Also, data indicates several prevalent lifestyle habits increasing the risk of obesity. As cited by the authors, to prevent obesity an alteration in the targeted lifestyle factors include a reduction in dietary intake of fat, saturated fat, sodium, and soft drinks. This study in rural Mississippi can be a comparable study to the coordinated school health programs currently adopted by several school districts in Mississippi.

At the 2008 Mississippi Healthy School Conference, Sondra Caillavet's presentation, "Why Coordinated School Health," focused on the works of Sallis (1999) and Schoener, Guerrero, and Whitney (1988) and the relationship between coordinated school health programs and academics. Caillavet states that Sallis' (1999) study found intensive physical education programs for students led to an improvement in students' scores in math, reading, and writing and to a reduction in disruptive behavior in the classroom. Additionally, Caillavet referred to the research of Schoener, Guerrero, and Whitney (1988) in which reading and math scores of third

and fourth grade students who received comprehensive health education were significantly higher than those who did not receive comprehensive health education.

Nutrition education is one of the eight correlates of coordinated school health. Horowitz' (2004) goal-oriented educational intervention program, EatFit, challenged adolescents to improve their eating and fitness choices. The pilot study tested 34 middle school students, who were Expanded Food and Nutrition Education Program participants. The Eat Fit program was funded by the Food Stamp Nutrition Education Program. Self-reported recall instruments indicate 41 % positive changes in dietary behaviors, 29 % change in dietary self-efficacy, 56 % change in physical activity behaviors, and 26 % change in physical activity self-efficacy.

The benefits of physical activity and the importance of using accurate tools for measuring physical activity and energy expenditure to curtail the obesity epidemic in the United States was researched by Keim, Blanton, and Kretsch (2004). The study addresses the critical issue of energy balance and the need for dietetic professionals and other health care practitioners to use accurate tools and procedures for estimating total energy expenditure, resting metabolic rate, and physical activity.

The Mississippi Comprehensive School Health Education Program (Comprehensive Health Act, 1994) emphasizes the importance of the early intervention of health and well being with nutritional habits. Lovelady (1997) proposes childhood dietary patterns establish lifetime habits. Twelve Mississippi school districts field tested the Pyramid Pursuit curriculum. The curriculum was designed for grades kindergarten through sixth but only second graders were included in the study. The author's purpose was to determine if significant differences existed in achievement of second grade students receiving instruction on the USDA Food Guide Pyramid. The study included only four weeks of instruction, which greatly restricted the study.

Opinions vary concerning accuracy in identifying obesity within the population, as well as, the use of the Body Mass Index (BMI) as an accurate measure of obesity. Penman (2005) suggests the need of clarity in whether adult obesity is the result from weight gain affecting the whole population equally or those persons who are in the upper half of the weight distribution (above average weight). The author conducted 4,422 telephone surveys to Mississippi civilians eighteen years and older. The National Health and Nutrition Examination Survey (NHANES) and the Behavioral Risk Factor Surveillance System (BRFSS) surveys were analyzed but, for the purpose of Penman's cross-sectional study, the BRFSS is the source of data. As cited by the author, the purpose of the study was to determine whether the Body Mass Index (BMI) followed a normal distribution and whether the distribution curve shifts *en block* to the right or develops accelerating positive skewing. Results indicate public health measures should target persons in the upper part of the distribution rather than at the whole population. The pilot study will be followed by an analysis of weight and height data from the Atherosclerosis Risk in Communities (ARIC) study.

Paradigm Shift: Coordinated Health Plans

As part of the comprehensive study determining a relationship between school health councils and school health policies and programs in U.S. schools, Brener, Kahn, McManus, Stevenson, and Woolsey (2006) analyzed data from the 2000 School Health Policies and Programs Study (SHPPS). The dependent variable was measuring specific aspects of the school health policies, and the independent variable was the presence of a school health council. Results of the study indicate the presence of a school health council alone is not associated with key policies and programs in some areas of school health. The author concludes that community

organizations and coalitions can improve school health program and address specific topics such as beverage contracts, and daily physical exercise.

In a study of upper elementary health-related fitness and nutritional practices, Derri, Aggeloussis and Petraki's (2004) research cites health "fitness" is the same as cardio respiratory fitness which affects heart diseases. More recently, intervention programs interrelating health-related fitness and nutrition education relate with risk factors of cardio-respiratory disease. For the purpose of the study, the authors gathered data from 40 fifth and sixth grade students for eight weeks. The subjects were randomly placed into experimental and control groups to determine the effect a health-related fitness and nutrition program has on fitness components and dietary habits in pre-adolescent students. A one-way analysis of variance tested the hypothesis and found that there were no significant differences between the experimental and the control group. Results indicate improved dietary habits within the experimental group, while the control group showed no improvement. According to the authors, the short duration of the intervention program resulted in no significant improvement in body composition. The authors suggest parental nutritional education will improve the effectiveness of a health-related fitness program and the improvement of fitness and health. This study reaffirms the need for coordinated school health curriculums with emphasis on aerobic activities to improve positive attitudes for physical exercise and to insure quality health.

Studies on the effectiveness of coordinated school health programs provide varying data, state to state. Researchers Greenberg, Cottrell and Bernard (2001) conducted a study of 225 participants who were randomly selected to evaluate the effectiveness of the Ohio School Health Program. Baseline data was evaluated for the purpose of improving future coordinated school health programs. The projected audience included superintendents in 612 public school districts.

Only 52% of the districts (116) completed the survey which represented approximately one-third of the Ohio districts. The survey indicated little coordination between the eight components of a coordinated school health program. The authors encourage local, state, and national educators work more collaboratively to implement successful coordinated school health programs.

Other studies promote school health as an expanded paradigm. As cited by O'Rourke (2005) the paradigm of school health has changed significantly. The author gives credit to classrooms and cafeterias, as parts of health services offered within communities, yet proposed a functional approach promoting coordinated school health as a contributor to an improved work force and better functioning citizenry to secure employment in the future. O'Rourke encourages coordinated school health programs to focus on the long term outcomes of reduced absenteeism, reduced discipline problems, enhanced learning, higher test scores, and higher graduation rates.

Emphasizing the necessity of coordinating health education and physical education, Johnson and Deshpande (2000) investigated factors which impact a coordinated school health program including the school, community, and family involvement. The authors refer to the U.S. Department of Education and the Elementary and Secondary Education Act as supportive entities of health programs.

Larson (2003) addresses the lack of trained health educators. The emphasis on standardized testing and the elimination of health related standards within curriculums have prompted teacher education programs to reduce the emphasis on Health Education. The author states specifications for The National Board for Professional Teaching Standards include rigorous objectives in ten content areas for the Health Education Program. Larson created an online survey (n=229) including the ten content areas and 22 topics in the area to gather data on perceived readiness to teach health in a K-12 setting.

Chapter Summary

Research studies reveal the vast number of studies relating to specific health concerns and health programs at the district, state, or national level. Although, literature surrounding coordinated health programs in individual schools is limited, and there are no case studies of CSHPs at individual school levels in the state of Mississippi. This qualitative case study will contribute to future CSHP studies by presenting a detailed story of the three year CSHP and the state's efforts to address the health of Mississippi's populace. The following chapter will outline the methodological steps used in this case study.

CHAPTER 3

METHODOLOGY

Chapter 3 provides a description of the method used in this qualitative study. Included within this chapter are the professional background of the researcher, the design of the study and the rationale for the methods used in the research. The two part data collection process is outlined. The process used to select interview participants is described along with the interview process. This study is a qualitative study of the coordinated school health program (CSHP) implemented at a rural north Mississippi school and the perceptions of its impact on the students, staff, and personnel. The purpose of the study is to present the story of the coordinated school health program using archival documents and interviews of various members of the school health council within the elementary school setting.

Stake (1995) states a case study is “the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances” (p. xi). Creswell (2003, p. 14-15), refers to a case study as one of the five qualitative traditions of inquiry (ethnographies, grounded theory, case studies, phenomenological research, and narrative research). According to Creswell (2003), case studies involve:

a researcher exploring in-depth a program, an event, an activity, a process, or one or more individuals. The cases(s) are bounded by time and activity, and researchers collect

detailed information using a variety of data collection procedures over a sustained period of time. (p. 15)

Glesne (2006) cites Stake (1995) in stating: “The common denominator, however, (of a case study), is that each—the person, the village, the program—is a *bounded* integrated system with working parts” (p. 13).

Patton (2002) states the researcher is the “instrument” in qualitative studies and should include information about the researcher (p. 566). Creswell (2003) refers to Locke (2000) who focuses on the range of strategic, ethical, and personal issues involved within a qualitative research process (p. 184). According to Glesne (2006), qualitative researchers are “interpreters who draw on their own experiences, knowledge, theoretical dispositions, and collected data to present their understanding of the other’s world” (p. 175). According to Wolcott (1994), as cited by Creswell (2003):

Qualitative research is fundamentally interpretive. This means the researcher makes an interpretation of the data developing a description of the individual or setting, analyzing data for themes or categories, and finally making an interpretation or draw conclusions about its meaning personally and theoretically, stating the lessons learned, and offering further questions to be asked. (p.182)

The Researcher

At the beginning of the 2004-2005 SY, the researcher was a science teacher at the rural elementary school. Due to the teacher’s concerns for the health and well-being of the students, the teacher was inspired to examine existing school health programs as well as the potential for

securing funding for a new health program. The teacher was astonished to find that no Mississippi schools had a coordinated school health program.

After extensive research and with the collaboration of the school district, funding was secured for a coordinated school health program through the John D. Bower Foundation. The researcher was on-site only during the first year of the program. During the second and third year of the CSHP, the researcher was employed with the same school district as a high school administrator, and as the district level Healthy School Coordinator/Grant Writer. To insure the rural elementary school met all grant mandates, the researcher served on the CSHP advisory committee at the rural elementary school. The researcher has been actively involved with coordinated school health for five years.

Design of the Research Study

This study analyzed perceptions of key participants in the case school's health council on the school's CSHP. Creswell (2003) argues that the intent of qualitative research is to understand a particular social situation, event, role, group, or interaction (p. 198). By recording and analyzing the personal perceptions, this study focused on aspects which may have facilitated or impeded the success of similar CSHPs. Researchers must first generate an accurate description of an educational phenomenon as it exists or they lack a firm basis for explaining or changing it (Gall, Gall, & Borg, 2003). The research questions were designed to provide evidence to fully understand the central phenomenon of the Coordinated School Health Program (CSHP). According to Creswell (2003), research questions are used to shape and specifically focus the purpose of the study. The central phenomenon of this research is the story of the implementation and delivery of the CSHP and the services provided to the students, teachers, and

staff. In order to present an accurate perception of the health program and to explore the central phenomenon, the following qualitative questions were examined:

- What services were provided to the students and the personnel?
- How did the school principal, teacher, nurse, counselor, and parent perceive their role in the process of implementing the CSHP?
- What are perceived positive and negative impacts of the CSHP on the school principal, teacher, nurse, counselor, and parent?
- How has the implementation of the CSHP in this context impacted the school district agenda, and school health reform?

Initially, the data collection process included the collection and analysis of archival documents. The documents provided a detailed description of the case study school. Weiss (1994) emphasizes that although analysis and writing can be separated from data gathering, they cannot be separated from each other. Gall, Gall, and Borg (2003) state that a case study researcher needs to spend time analyzing the data while data collection still is in progress. Data analysis, according to Glesne (2006), involves organizing what you have seen, heard, and read so one can make sense of what you have learned. To do so, one must categorize, synthesize, search for patterns, and interpret the data collected.

The categories of archival documents analyzed included: (1) school performance data, (2) student related data, (3) school nurse documents, and (4) program evaluation data of the CSHP. The school performance and school related documents provided detailed descriptions of the case study participants.

The school performance document analyzed provided information concerning the performance level of the school. Student related data was the second category of analyzed

documents. The researcher studied the student information documents gathered from the Mississippi Student Information System (MSIS) for demographic information.

The researcher reviewed school nurse records as the third form of archival documents. The documents provided additional data on student health related issues. Data pertaining to the percentage of students participating in student school services, such as physical education and nutritional education classes answered the research question “What services are provided to the students and employees?” Additionally, school nurse records were analyzed to calculate the number of visits to the school nurse each year and to determine if the number of documented school nurse examinations decreased during the CSHP time frame.

The fourth type of documents analyzed were CSHP evaluation data documents including results from the school health index (SHI) survey. The 2006 School Health Index (SHI) survey provided the baseline data used to create a specialized CSHP for the case school (Appendix A). The John D. Bower School Health Network Evaluation Plan: 2006-2008 Data Collection Form cites documented evidence of the CSHP performance for the 2006-2008 school years (Appendix B). The survey and the evaluation data provided a three year overview of the eight components of the CSHP and were used to help answer research questions including “What are the positive and negative impacts of the CSHP on students, teachers, and personnel?” and “How has the implementation of the CSHP in this context impacted the school district agenda, and school health reform?” Additionally, the district principal budget report cited expenditures for the 2006-2007 and the 2007-2008 SY. This data gave an account of the allocation of resources for the CSHP program. The data was instrumental to answer the research question, “How has the implementation of the CSHP in this context impacted the school district’s health education agenda, and efforts to improve school health?”

The second part of the data collection process was personal interviews. Five members of the school wellness council responded to the research topics and conveyed personal perceptions of the CSHP. Qualitative research is a method appropriate to tell a story (Patton, 2002) and to explore perceptions of the CSHP's impact on students, staff, and employees through interpretation of interview data.

Open-ended topics were presented to the school principal, teacher, nurse, counselor, and parent. Creswell (2003) refers to Maxwell (1996) in distinguishing the difference in research questions and interview questions. Maxwell states "your research questions formulate what you want to understand; your interview questions are what you ask people in order to gain that understanding" (p. 81). The participant's responses to the interview questions provided useful data as the story was told of the implemented coordinated school health program (CSHP) at a rural north Mississippi school during the 2005-2006, 2006-2007 and 2007-2008 school years. The questions also explored perceptions of the individualized health program's impact on the students, staff, and personnel.

The interview participants were sent a letter requesting participation in the study. The researcher also contacted the participant by telephone to arrange an appointment to discuss the study. Electronic mail was used to thank the participant for willingness to participate in the study and to confirm the appointment time and date.

An informal, open-ended, conversational interview process was used to determine personal perspectives of the coordinated school health program. Patton (2002), states the purpose of the interview process "allows one to enter into the other person's perspective" (p. 341). Rubin and Rubin (1995, as cited by Patton, 2002, p. 341) eloquently refer to the interview process as delving into "the art of hearing." The interview process was structured around a set of

topics rather than specific questions. Fontana and Frey (2000, as cited by Patton, 2002, p.342) also refer to conversational interviews as “unstructured interviewing” which allows the process to emerge unstructured.

The topics of the unstructured interviews were derived from the guided questions exploring the central phenomenon of the study. The topics included: (1) services provided to students and employees, (2) principal, teacher, nurse, and counselors perceived part in the process, (3) level of involvement in the CSHP, (4) perceived impact of CSHP of students, teachers, and employees, (5) areas of CSHP that seemed to work well (and why), (6) areas of CSHP that did not seem to work well (and why), (7) level of fit between CSHP activities and other professional responsibilities, (8) impact of CSHP on school district agenda and school health reform, and (9) recommendations for future CSHP improvement.

At the interview session, the researcher gave each participant a copy of the informed consent letter to sign to keep for personal records. Glesne (2006, as cited in Diener and Crandall, 1978, p. 132) and states that “through an informed consent potential study participants are made aware (1) that participation is voluntary, (2) of any aspects of the research that might affect their well-being, and (3) that they may freely choose to stop participation at any point in the study.” The consent letter specified the participant could withdraw from the study at any time. The researcher insured complete confidentiality of the recording process which involved the researcher recording the interview sessions by means of a court stenographer’s recorder and transcribing the oral responses. The researcher gave the participant the opportunity to read and review the transcripts from the interview session.

The interview sessions took place at the discretion of the participant, whether the location was at the identified school or at an alternate location. The initial format of the interview

included the researcher thanking the subject for participating in the study, showing the subject the informed consent form, insuring confidentiality of the study, and requesting a signature to participate in the study. The research gave the participant a copy of the signed form. At this point, the researcher explained the interview process and showed the subject a digital recorder, which recorded the responses; as well as the interview guide which assisted the researcher during the interview process. The interviews lasted between 45 minutes and one hour. At the conclusion of the interview, the subject was thanked and provided an explanation of how the researcher would correspond with them concerning the recorded interview and final copy of the study.

The interviews were transcribed into Microsoft Word documents. The researcher provided a hard copy of the transcribed document to each of the interviewees and asked them to read and make any changes needed. If any edits were necessary, the researcher resubmitted the second draft to the interviewee clarifying any misinterpretations. A letter was sent to each participant thanking them for participating in the research study. A final copy of the interview was included in the follow up letter.

Participants in the Research Study

The interview participants were five members of the school health council from the rural north Mississippi elementary school. The participants were selected based on their active participation in the coordinated school health program from the beginning planning stage during the 2005-2006 SY through the two year implementation process ending in May of 2008. The selected participants included a school principal, nurse, counselor, teacher, and parent.

Data Organization and Analysis

Data from the interview transcripts were analyzed to determine personal perspectives the school health council members have which facilitated or impeded the success of the Coordinated School Health Program at the rural north Mississippi elementary school. The collaborative input of the aforementioned parties was also useful to similar school health programs. Additional themes emerged as both the archival data and personal interviews were interpreted. Collectively, these emerging themes and themes from literature reviews provided a thick description of the central phenomenon. Chapter four revealed the themes in two parts. The first section described the three year process of the implementation of the coordinated school health program based on the archival documents and the second section presents analysis of the interview data.

CHAPTER 4

DATA ANALYSIS

Introduction

Chapter four presents the results of the data collection. The single case study themes are presented in two parts. The first section describes the three year process of the implementation of the Coordinated School Health Program (CSHP) based on the archival documents and the second section presents analysis of the interview data. Data includes (1) analysis of archived documents related to the CSHP and (2) interviews conducted with five members of the school's health council, including the school principal, counselor, nurse, a teacher, and a parent.

The purpose of this single case study was to present the story of the implementation of the Coordinated School Health Program (CSHP) at a rural North Mississippi school during the 2005-2006, 2006-2007, and 2007-2008 school years (SY). The study examined the impact of the CSHP on the students, faculty and staff and added to the knowledge of school health programs within the state, as well as, the impact of one of the state's efforts to address the health of Mississippi's citizens.

A qualitative researcher is described as a "translator of culture who works to understand the others' world and then to translate the text of lived actions into a meaningful account" (Glesne, 2006, p. 174). Transcribed data from the five interviews provided the researcher with participant's perceptions of the CSHP. The interview topics included: (1) services provided to students and employees, (2) the teacher's, the nurse's, the counselor's, and the principal's

perceived part in the process, (3) the level of involvement in the CSHP, (4) the perceived impact of CSHP of students, faculty, and staff, (5) areas of CSHP which seemed to work well (and why), (6) areas of CSHP that did not seem to work well (and why not), (7) the level of fit between CSHP activities and other professional responsibilities, (8) the impact of CSHP on school district agenda and school health reform, and (9) recommendations for future CSHP improvement.

During the 2005-2006 SY, the case school was under the leadership of a veteran principal with 37 years of experience. During the 2006-2007 SY, the school changed leaders and the new leader was a first year career level administrator. The new principal was an assistant principal at the case school during the 2005-2006 SY. One hundred percent of the staff was considered highly qualified under the guidelines of No Child Left Behind for both the 2006-2007 and 2007-2008 SY.

During the timeframe of the study, individual Mississippi public K-12 schools were assigned a performance classification based on student achievement. Based on data from the Mississippi Assessment and Accountability Reporting System provided by Mississippi Department of Education, the status of the site school's performance classification changed from Level 5- Superior Performing in 2005-2006 SY to Level 3-Successful Performing during the 2006-2007 SY. Due to the adoption of a new Mississippi Curriculum Test, schools in Mississippi were not rated during the 2007-2008 SY.

The school data, gathered from the Mississippi Student Information System (MSIS), reported the fourth and fifth grade student population during the 2006-2007 SY totaled 674. The teacher to student ratio in the school was 1:18.2. Fifty-one percent of the students in the school were Black, 49 percent were White, and less than one percent was Asian/ Pacific Islander.

Forty-nine percent of the students were female and 51 percent were male. Sixty-one percent of the student body were eligible for free or reduced price meals. According to 2007-2008 SY MSIS data, fifth grade enrollment was 718. Fifty-three percent of the students in the school were White, 47 percent were Black, and less than one percent were Asian/Pacific Islander. The students may have an individualized educational plan and may qualify for Special education services.

Part I: The Story (Document Analysis)

The Program Comes to the Case School.

The three year process of improving school health at the case school began during the summer of 2005. The researcher authored a grant co-sponsored by the MDE, Office of Healthy School and the John D. Bower Coordinated School Health Network. The awarded grant of one hundred thousand dollars funded the implementation of a coordinated school health program over a three year period. In the fall of 2005, the school was recognized by the MDE, Office of Healthy Schools, as one of ten selected model Mississippi healthy schools. Being identified as a model school, the school piloted a three year coordinated school health study, “Coordinated School Health (CSH) Model” developed by the CDC.

The first year of the process focused on training of school and district level leaders conducted by the Mississippi Department of Education, Office of Healthy Schools, the formation of a School Wellness Council comprised of school and community representatives, parents, and students, informing the community about the importance of school health, and organizing and conducting the community’s first school sponsored health awareness fair.

Three day training sessions were held in Philadelphia, Mississippi during the

months of August, November, and February of each of the three years of the piloted program. The CSHP training sessions required one hundred percent commitment of not only the awarded school, but also from representatives of the entire school district. School and district team members required to attend included the school health coordinator, principal, district superintendent, financial director, nutritional director, and publicity director. If any CSH member missed a training session, the awarded school would have been fined three thousand dollars which would be deducted from the grant amount.

In the spring of 2006, the health coordinator and school principal's objective was to inform and educate both school and community leaders about the critical health problems facing Mississippi students. The newly formed School Health Council became active participants of the CSHP with the initial goal of school and community health awareness. To obtain one hundred percent buy-in from all school level principals, meetings were held within each school in the district. Several school council members attended the sessions and shared information about the upcoming May, 2006 community-wide health awareness fair.

After training was complete, the first objective for the school health council was to plan and conduct a town-hall health awareness meeting. On May 16, 2006 approximately two hundred students, parents, community leaders and MDE representatives attended the health awareness meeting which was held in the school cafeteria. The community and school organizations donated all supplies, advertisement, and entertainment resulting in incurring of no expenses. The next stage of the formative CSH process focused on conducting a School Health Index survey. The SHI results were interpreted to identify health priorities for the CSHP.

Document Analysis: School Health Index.

According to the school principal, the case school's mission focused on the utilization of school and community resources for the purpose of meeting the needs of each student. As part of the school's community effort, in August 2006, under the direction of the school principal, the 24 member school health council completed the SHI survey. The school health council included a diverse representation of the community. Stakeholders included students, parents, the school counselor, the school nurse, teachers, school principals, local university representatives, local business owners, law enforcement officers including the police, fire, and sheriff departments, mental health counselors, representatives from service organizations and health care participants.

Technical services for the SHI survey were provided by the John D. Bower Foundation under the direction of Jerome Kolbo, Ph.D., professor in the College of Health and Human Services at the University of Southern Mississippi. The eight components of the survey included: (1) school health and safety policies and environment, (2) health education, (3) physical education and other physical activity programs, (4) nutrition services, (5) health services, (6) counseling, psychological, and social services, (7) health promotion for staff, and (8) family and community involvement. Each component of the survey contained a series of questions pertaining to school health practices, programs and activities. Questions were collectively discussed by the council members and points were allotted based on the site school's participation for each question or topic. Three points were recorded if the question was fully in place, two points for a question partially in place, one point for an underdeveloped question, and zero points for a question not in place. The low, medium, or high percentages were determined by dividing the sum of the allotted points by the total points, thus indicating school participation

in each health area. From the SHI results, the school health team identified three of the lowest percentages as priorities of school health which were implemented at the site school. Tabulations of individual school module scores are available at the Centers for Disease Control and Prevention.

The School Health Index (SHI) also provided a detailed description of the eight components. Strengths of the school health efforts at the case school were identified and a plan of action was suggested based on the weaknesses within each component. The following information details the areas of improvements needed for the case school.

Interpretations of SHI Results

Component I: Nutritional Services.

High percentages were achieved on the SHI by meeting the health and nutritional needs mandated by the United States Dietary Guidelines and by providing students with a classroom learning laboratory for nutrition and health education. The Mississippi Cooperative Extension Service served as a resource for links with nutrition-related community services. The federally funded nutrition program was taught by a nutritionist. Each student received 45 minutes of instruction once a week. Hands-on instruction of nutrition education principles including dietary guidelines, good meal management, and food safety practices were incorporated with health principles. The Organ-Wise Guys puppets and student-made fitness equipment made of recycled products were used to emphasize the relationship between nutrition and health instruction. Areas of suggested improvement included better collaboration between food service staff and teachers.

Component II: Counseling, Psychological and Social Services.

Survey data indicated certified school counselors, psychologists, and community based social workers provided services to improve students' mental, emotional, and social health. The

school counseling and psychology program also exhibited strengths not only to the health of students but also to the health of the school environment. Programs fully in place focused on collaboration with school staff and health and safety promotion for students and family. Also receiving high scores was the area of identification of students with health problems affected by nutrition and physical activity, or victims and predators of violence. Areas of recommended improvement included health and safety promotion for students and families and collaboration among staff.

Component III: Health Education.

Results from the SHI indicated strengths with health programs in which students received forty minutes of health instruction each week focusing on physical, mental, emotional and social dimensions of health. Community agencies and stakeholders came into the school and assisted with the instructional programs. The SHI indicated health education classes were offered for both fourth and fifth grade classes in which the health curriculum was consistent with state health standards. Within each classroom, active learning strategies offered students the opportunities to practice health skills. Health assignments encouraged student interaction with family and the community. Other strengths, according to the SHI, were in the area of professional development. Teachers were trained in health education, in the implementation of various health techniques, and on topics of healthy eating. Areas of improvement included needed training on topics of preventing unintentional injuries, violence, suicide, asthma awareness, and tobacco use.

Component IV: Physical Education and Other Physical Active Programs.

Survey data revealed the fourth and fifth grade level students received ninety minutes of physical education weekly. Through planned activities, physical education promoted student

optimum physical, mental, emotional, and social development, and promoted activities and sports that all students enjoy and can pursue throughout their lives. Suggested areas of improvement included 50 minutes of physical education per week and an adequate teacher/student ratio. The previous teacher/student ratio in physical education classes was 1:60. The recommended ratio was 1:30. An additional recommendation was to include sequential physical education curriculum consistent with standards and health-related physical fitness. Lesson plans focused on the goal of engaging the maximum number of students in healthy physical activities both indoor and outside the school. Physical education teachers were encouraged to eliminate practices that resulted in student inactivity during physical education classes. The physical education teachers were encouraged to insure all students were physically active approximately 40 percent of the class period.

Component V: School Health and Safety Policies and Environment.

The school had a school health committee with written health and safety policies. Procedures were in place to supervise school safety, tobacco-use policies, and the no-tolerance for harassment or bullying. Improvement plan recommendations included adding a recess period to the school day. Other suggestions were a written crisis response plan and staff development training on unintentional injuries, violence, and suicide, as well as, fundraising efforts supportive of healthy eating for an improved healthy school environment.

Component VI: Family and Community Involvement.

Low scores on the SHI survey indicated the area of educating families was only partially in place through a school newsletter. The programs received low scores and were considered under developed programs due to the lack of community access to

school facilities, the promotion of parent and community involvement, and parent and community active involvement in programs. Recommendations for the improvement plan included an effort to educate families about effective parenting strategies involving safety, physical activity, nutrition, tobacco use, and asthma. Increased community access to school facilities was also recommended.

Component VII: Health Services.

Of the sixteen health service questions within this component, the case school had only four areas of strength. The areas included the identification of students as victims or perpetrators of violence, ensuring immediate and reliable access to medication for students with asthma, establishing a strong link with community resources, and the collection and dissemination of student medical information. The SHI survey indicated low scores in the area of school environment and policies relating to students' health and safety. A full time nurse or school health physician was recommended. Recommendations were made to increase health services for tracking students with known asthma, providing or facilitating case management for students with poorly controlled asthma, and offering asthma management education to all students with asthma.

Component VIII: Health Promotion for Staff.

The zero score on the SHI survey indicated no programs were in place for health promotion for school staff. Improvement plan recommendations included promoting staff participation in areas of health screening, stress management, physical activity and fitness, healthy eating and weight management. Staff training sessions were suggested in the areas of conflict resolution, tobacco-use cessation, first aid or cardio pulmonary resuscitation (CPR), and asthma education and/or management.

The School Health Index identified strengths and weaknesses of the case school's health policies and environment linked to the students' health and safety. The three lowest scoring or under developed SHI components were family and community involvement, health services, and health promotion for staff. Based on the SHI survey, a new Coordinated School Health Program was implemented at the case school.

The New Coordinated School Health Program

Based on the results of the SHI, a new individualized coordinated school health program was designed and implemented at the case school during the fall of 2006. The program design focused on areas of needed improvements within the eight components of the SHI. The expanded paradigm of coordinated school health program, according to Kolbo, positively impacts the health and well being of students, teachers, administrators, and staff. (J. Kolbo, personal communication, June 15, 2008). Several documents were analyzed to provide the contextual data for presenting the story of the implementation of the CSHP: The district principal budget report cited expenditures for the 2006-2007 and 2007-2008 SY and the John D. Bower School Health Network Evaluation Plan 2005-2008 Data Collection Form (Appendix B).

Health Promotion for Staff.

The CSHP improvement plan in the area of health promotion for staff included improving staff wellness and decreasing staff absenteeism. A large portion of the school grant monies were spent in the category of staff wellness. School financial records indicated funds totaling \$13,573.36 were used to purchase fitness equipment and supplies. Fees totaling \$7,887.00 were used to offer Weight Watchers at Work™ program to all employees and staff. The school certified physical education instructor coordinated the purchasing of equipment and

the establishment of the fitness room and the school principal orchestrated the Weight Watchers at Work program.

In October of 2006, a vacant classroom was designated as the Fitness Room offering each staff member and school employee the opportunity to exercise either before, during, or after school. Measurable indicators, from the school fitness log-in report cited twelve staff members and employees used the Fitness Room on a regular basis. The highest number of daily participants was thirty. During the 2007-2008 SY student enrollment increased and the fitness classroom was needed for instructional purposes. The exercise and fitness equipment was moved into the gymnasium. Due to the openness of the area and the lack of privacy, the equipment was not used as much. Plans were implemented to move the equipment back to the classroom or to a more private area.

In the spring of the 2005-2006 SY under the direction of the school district health coordinator, the site school sponsored a health awareness fair open to the community. The primary goal of the health fair was to educate the community about school health. Health materials and brochures were distributed to all participants. Additionally, another goal was to encourage those attending to participate in the free health screenings.

The opportunity to improve staff wellness was the Weight Watchers at Work program from January 2007 through September 2007. The weight reduction program was funded by the CSHP and all school employees and staff were encouraged to participate free of charge. The 36 staff members participated during the first ten week session and 24 of the original 36 members continued during the next ten weeks and five new members joined. As of May 2007 the rural elementary school participants lost a total of 1,475 pounds. The case school has been identified

by the Weight Watcher's Organization as one of the outstanding Weight Watchers at Work programs.

Health Services.

In 2005-2006 the case school did not have a school nurse on site. First aid was provided to the 794 students by a teacher's assistant. The school district's registered nurse came to the school if services were needed. CSHP funds were used to hire one Early, Periodic, Screening, Diagnosis, and Treatment Program (EPSDT) nurse and a nurse assistant. According to the rural elementary school nurse, the EPSDT school nurse program provided primary health care, first aid, emergency care and preventive health services such as screenings and in-services to all students and staff in the school.

School records indicated during 2006-2007 SY the EPSDT nurse provided 6,840 instances of services to students and 339 instances of service to staff members. Services provided include the dispensing of 3,039 medications, 314 parent contacts, and the completion of 97 EPSDT screening. Over the two school semesters, services were also provided for 1686 students through height/weight/BMI, vision screening, and asthma education. During the 2007-2008 SY, the nurse provided 7,695 student visits and 391 staff visits, dispensed 2,339 medications, made 1,625 parent contacts and completed 160 EPSDT screening. In addition, serves were provided for 2,199 students. The services and time period included:

- August- Height/Weight/BMI
- October- Lion's Club Vision Screens
- November-Flu Shots
- December-Vision Research
- April-Height/Weight/BMI, and

- May-Puberty Education.

The improvement plan focused on health service goals included increasing Medicaid screenings and providing in-service asthma education training to all school staff.

Family and Community Involvement.

The new CSHP focused on improving parent and community involvement through increased communication. As a result, the school's assistant principal created the monthly school newsletter. In addition to school related activities, topics of discussion included health, safety, and parenting issues. A newly designed school webpage had a Health Is Academic! link for information about health, fitness and nutrition. Grant funding totaling, \$3,223 was used to purchase a Premier Agenda school calendar for each household. The family perspective calendar contained important school dates with quotes about health and fitness coordinated by the school principal.

School Health and Safety Policies and Environment.

The 2005-2006 SY school audit reported the rural elementary school was in 100% compliance with MDE standards for a healthy school environment. The case school had written health and safety policies in place. The school maintained a safe physical environment and had active supervision to promote safety. A full time security guard and a resource officer were on-call during school hours. The new CSHP included the development of a written crisis response plan.

During the CSHP, training was a priority for improving the school environment. Staff development training was implemented in areas of intentional injuries, violence, and suicide. The school principal focused on training the custodians about proper storage of chemicals within

the building and educating transportation employees about the dangers of emissions from idling buses.

Improvements were made by prohibiting physical activity as punishment.

Students were not allowed to miss physical education class for missed class work or for inappropriate behavior. Foods could not be used as a reward or punishment. Fundraising efforts were supportive of healthy eating and vending policies. The only food vending was in the teacher's lounge and healthy vending guidelines were followed. Bottled water was available to students during physical education classes. The case school had a hydration policy which encouraged students and staff to stay hydrated by drinking water throughout the school day.

Physical Education and Other Physical Activity Programs.

To increase student participation in physical education, the certified physical education teacher supplemented the state aligned curriculum with the SPARK curriculum, a research-based physical education and nutrition program. During the 2005-2006 and 2006-2007 SY, 100 % of the school's fourth and fifth grade students received an average of fifty minutes of physical education each week by a certified physical education teacher. The students participated in physical education class once weekly. Students were physically active for forty minutes of the fifty minute class period. During the 2007-2008 SY, students participated for forty-five minutes twice a week. According to the school district accounting records, the cost of the program totaled \$3,492.83.

Previous to the CSHP, the school did not have an organized recess period or a safe and appropriate outdoor activity area. The idea of creating a peaceful and purposeful playground originated from a concerned parent. A local community organization, The Junior Auxiliary agreed to fund the ten thousand dollar playground project, Peaceful Playground. The selected

program objective, as cited from the Peaceful Playground website, was to “engage the maximum number of students in healthy, often educational, purposeful play.” According to the John D. Bower Evaluation Plan 2005-2008, 100 % of the elementary students enjoyed outdoor activity.

Health Education.

Areas for improvement included the implementation of new programs on the topics of preventing unintentional injuries, violence, and suicide; as well as preventing tobacco use and asthma awareness. Under the direction of the school principal and school counselor programs addressing unintentional injuries, violence, and suicide were conducted in staff development training and within classroom curriculum. The school also addressed bullying through the implementation of the Stamp out Bullying Program™ conducted by Jay Banks Production™. The cost of the program was \$2,164.82.

Secondly, asthma education programs were implemented at the school by the school nurse. Additionally, in early August of each school year, the school nurse updated asthma records by meeting with each teacher to discuss a plan of action for both a student or teacher asthma attack. The school custodian teams and cafeteria staff were proactive and did not use aromatic cleaning supplies and products which trigger asthma attacks.

Additionally, as a result of the SHI results in the area of improving tobacco education, a health educator was later employed to provide tobacco education services to the students at the rural elementary school and other schools in the district. The tobacco educator worked under the guidelines of the Mississippi State Department of Tobacco Control and collaborated with the school nurse and the school district health coordinator. The tobacco education and cessation project was financed through a Mississippi State Office of Tobacco Control grant written by the school district health coordinator totaling \$78,000.00. The district health coordinator oversaw

the program and provided an office for the health educator. The school district incurred no expenses for the implementation of the program.

Counseling, Psychological and Social Services.

The school improvement goal to increase student access to counseling and psychological services improved through the services of the school counselor and an in-residence mental health therapist. Life-Help, a local mental health organization, provided this counseling, psychological and social service to the case school. The counseling team also provided in-service training sessions each month to staff during the regularly scheduled faculty meeting. The counselors also taught character education lessons within the classrooms. The small group sessions allowed counselors the opportunity to become more acquainted with the students.

The identified area of concern included health and safety promotion for students and families, and collaboration with staff. The action taken to address the weaknesses included the creation of a school webpage promoting health and safety to students and their families. Additionally, each parent received an informative monthly newsletter. Parental support in the areas of health and safety significantly increased, according to the school principal.

Nutritional Services.

An area of improvement in nutritional services focused on effective communication and collaboration between food service staff and teachers. A three step action plan included the cafeteria manager reporting to the school health council three times yearly, attending faculty meetings, and sending written communication to teachers and staff discussing upcoming food service projects. The lines of communication also extended beyond the walls of the individual school. The district health coordinator communicated regularly with district and individual

school food service managers supporting the idea of effective communication and collaboration strengthening the nutritional services within the school.

The case school staff and school parent teacher organization collaborated in efforts to improve the nutritional services. The food services met all basic requirements of the United States Department of Agriculture guidelines, but the food services manager desired to make the healthy food choices more appealing for students. Students assisted the cafeteria manager in the selection of foods for the weekly menus. Food choices were decorated and made more appealing. According to the school principal, the goal of creating an inviting atmosphere would also make the dining experience much more pleasant, and would increase student participation in the school breakfast and lunch programs. Incentives, such as stickers and pencils, were given to each student during School Breakfast and School Lunch Week.

The following two tables present the School Health Index (SHI) Overall Scorecard for 2006-2008 and the combined data of the percent level of change as indicated on the School Health Index (SHI) Overall Scorecard for 2006-2008.

Table 1: School Health Index (SHI) Overall Three Year Scorecard 2006-2008

	2006	2007	2008
School Health and Safety Policies and Environment	59%	77%	85%
Health Education	74%	88%	90%
Physical Education and Other Physical Activity Programs	61%	81%	100%
Nutrition Services	85%	67%	87%
Health Services	19%	88%	75%
Counseling, Psychological, and Social Services	83%	100%	94%
Health Promotion for Staff	0%	56%	41%
Family and Community Involvement	28%	44%	56%

Note. Adapted from National Center for Chronic Disease Prevention and Healthy Promotion. (2008). School Health Index. Retrieved on May 20, 2008 from <http://apps.nccd.cdc.gov/SHIonlineSHI/Scorecard/Overall.aspx>

Table 2: CSHP Combined Data: Percent Level of Change

	2005-06 SY			2006-07 SY			2007-08 SY		
	Low 0-40%	Med. 41- 80%	High 81- 100%	Low 0-40%	Med. 41- 80%	High 81- 100%	Low 0- 40%	Med. 41- 80%	High 81- 100%
School Health and Safety Policies and Environment		59%			77%				85%
Health Education		74%				88%			90%
Physical Education and Other Physical Activity Programs		61%				81%			100%
Nutrition Services			85%		67%				87%
Health Services	19%					88%		75%	
Counseling, Psychological, and Social Services			83%			100%			94%
Health Promotion for Staff	0%				56%			41%	
Family and Community Involvement	28%				44%			56%	

Note. Adapted from National Center for Chronic Disease Prevention and Healthy Promotion. (2008). School Health Index. Retrieved on May 20, 2008 from <http://apps.nccd.cdc.gov/SHIonlineSHI/Scorecard/Overall.aspx>

The Mississippi Department of Education Office of Healthy School, in cooperation with the John D. Bower Coordinated School Health Network, selected the case study elementary school pilot a CSHP during the 2005-2006, 2006-2007, and 2007-2008 SY. Archival documents were analyzed and data was collected on the health climate in the school. A Coordinated School Health Program (CSHP) was designed and implemented. A set of activities occurred as a result of the School Health Index (SHI). The second form of data collection was an analysis of interviews conducted from five participants of the school health council.

Part II: Analysis of Interview Data

The following section presents the second part of the data analysis process, which featured interview data gathered from interviews with five participants. The five interviewees included the school principal, the counselor, the nurse, a teacher, and a parent. The interview topics were designed to further understand the central phenomenon of the Coordinated School Health Program implemented at the case school. The narrative data was examined for meaning and impact of the CSHP for interviewees.

An analysis of interview information was gathered from the following research guiding questions: (1) what services were provided to the students, faculty and staff, (2) how did the school principal, the teacher, the nurse, the counselor, and the parent perceive their role in the process of implementing the CSHP, (3) what were the perceived positive and negative impacts of the CSHP on the school principal, the teacher, the nurse, the counselor, and the parent, and (4) how has the implementation of the CSHP in this context impacted the school district's health education agenda and efforts to improve school health.

The first question regarding what services were provided to the students and the employees integrated the topics of services provided to faculty and staff, and services provided to students.

Services Provided to Faculty and Staff.

The following emerging themes for the topic of services for faculty and staff included: (1) health and wellness-Weight Watchers at Work, (2) fitness room and exercise equipment, (3) a full time nurse on campus, (4) teacher training, and (5) community and business support.

Three of the five participants placed importance on the Weight Watchers at Work Program. The principal reported the school health index indicated weaknesses within the staff wellness component of health services. The staff desired to lose weight and become healthier. Weight Watchers at Work was provided to the faculty and staff over a two year period. The principal credits health and wellness services for improving absenteeism among the teachers as a result of the weight loss program. The school's success has been published in the Weight Watcher's book, and members of the staff have spoken to other groups about the success. The principal reported that if taking care of the staff was important, then the staff would then become role models and positively influence the students.

Two of five interview participants emphasized providing exercise equipment and an exercise room as a noticeable service. One participant commented the health and wellness services provided information about health and wellness and ways faculty and staff could change personal lifestyles.

The CSHP provided a nurse and nursing assistant for the faculty, staff, and students. The Medicaid nurse was an EPSDT nurse, which stands for Early Periodic Screening, Diagnosis and Treatment. According to the school nurse in addition to conducting physical examinations, the

nurse offered medical services to staff. An additional benefit was that the nurse coordinated results with a medical physician.

In addition to first aid and medication administration, the nurse also devoted much attention to diabetic and asthma treatment for staff, as well as students. Training was conducted for both diabetes and asthma. According to the nurse, several of the school faculty and staff were either diabetic or asthmatic. Weight management and nutritional counseling sessions were additional services offered at the case school.

The School Health Index survey indicated a need for health and safety promotions within the school and a need for improved staff collaboration. Training services for cardio pulmonary resuscitation (CPR) was a service provided at the case school. Previous to the program, several teachers or coaches were encouraged to be certified, but certifications often expired. The school nurse became the coordinator of emergency training and manager of CPR certification for coaches and staff. Training was also provided for all school staff in the use of the automatic external defibrillators (AED) which were available for emergency situations.

Three of five interviewees emphasized the impact of services provided by local community organizations and businesses. The principal commented that the service organizations “could not say ‘No’ to helping the children become healthier.” As indicated by interview data, several active service organizations included the school Parent Teacher Organization, the local Junior Auxiliary, the Lion’s Club, and 100 Black Men. Also providing services for faculty and staff were the Mississippi State Cooperative Extension Service, the local college and university, and Life-Help, a local region mental health agency.

Services Provided to Students.

The emerging themes for services for students included health services for students, community and business support services, a full-time nurse on campus, family involvement, and nutritional services.

Four of the five interview participants enthusiastically discussed the physical education program offered. Two innovative programs included Project Fit and Dance Dance Revolution. Both programs were funded by either a community business or a local service organization. The Project Fit program featured the use of both outdoor equipment and a wide assortment of innovative indoor items such as weighted hoola hoops, stacking cups, a variety of sport equipment including tennis and golf. Funds were also used to purchase the Dance Dance Revolution™ program and the Play Station II™. A local business donated two televisions and storage cabinets. According to the principal, the students were actively involved in individual competitions with the aerobic exercise. The competitive dance program helped to motivate the students. In addition to going to physical education classes twice a week for 50 minute sessions, the students exercised ten to fifteen minutes daily in the classroom to video tapes or outside on the school track and basketball court totaling 150 minutes per week.

Four of the five interview participants discussed the importance of local community and business support in relationship to the success of the CSHP. A local mental health agency, Life Help, provided a school based therapist. The therapist worked collaboratively with the school counselor. The school counselor stated that having the mental health therapist in residence was “very advantageous and beneficial” because children typically served after school were now served during the school day. Parents came to the school for Life Help appointments and the therapist worked with the individual student and the family.

Also reported was the impact of the local Junior Auxiliary organization, whose outreach and service goal focused on helping the children of the county. Several projects of the organization included supplying school uniforms and school supplies for the students, and providing classroom health kits. The local Junior Auxiliary also donated funds for the STAMP Out Bullying program which informed students about the dangers of bullying. The school principal enthusiastically stated that even at the fourth and fifth grade level “kids don’t tell about bullying; they don’t tell about stealing; they just don’t tell. Students have been trained not to.” The STAMP Out Bullying program, according to the principal, gave the students a voice.

Having a nurse on campus was expressed as significant by four of the five interviewees. Prior to the CSHP the school did not have a school nurse. One district level nurse serviced 4,843 students. The Early Periodic Screening, Diagnosis, and Treatment program (EPSDT), a child health component of Medicaid partnered with the case school and provided funds for a school nurse and nursing assistant, medical equipment and health care supplies. The school nurse conducted student physical examinations. The interview participant stated the program was similar to the well baby visits when parents take the child to the doctor. The CSHP, according to the interviewee, allowed the students the advantage of having a physical at school which benefited both student and parent. The student remained at school and the parents did not have to leave work.

The physical examination was a head-to-toe physical. During the examination the nurse provided information about body changes. Informal conversations helped make a connection with the students and the students would feel more at ease asking medical questions. The nurse conducted lab work and results were coordinated with a medical physician, if needed, and letters were sent home to parents. Additional services provided by the CSHP were eye and dental

health screenings. The Lions Club brought the sight van to the school to conduct vision screens on all fourth grade students. Letters were sent home to the parents. Private donations were used to prescription eye glasses for needy students.

Effective parenting strategies and family involvement to plan meals was an area of improvement within the CSHP. The parent interviewee was complimentary about the newsletters and program information that was available to parents.

The services of a nutrition educator were provided by the Mississippi State Cooperative Extension Service. The nutritionist served as a member of the school wellness council and was actively involved in the area of nutrition education. Three of the five interviewees discussed the merits of having a nutritionist teaching the students. The nutritionist went into every classroom once each week and taught nutrition education and the rewards of physical fitness. The students were actively engaged in the learning process. One participant talked about the students making inexpensive hand weights out of recycled plastic water bottles filled with sand. Other exceptional nutrition services discussed by the parent were improvements made in food choices within the school cafeteria and the school vending policy which offered only healthy snacks and water.

A wide variety of services were provided to the students, faculty and staff at the case school including health and wellness-Weight Watchers at Work™, the fitness room and exercise equipment, a full time nurse on campus, teacher training, and community and business support. The interview participants cited the services had an impact on the CSHP at the case school.

The second question relating to how the school principal, teacher, nurse, counselor, and parent perceived their role in the process of implementing the CSHP integrated the topics of: (1) the principal's, the nurse's, the counselor's, and the teacher's perceived part in the process, (2)

the level of involvement in the CSHP, and (3) the perceived impact of CSHP of students, teachers, and employees.

Role and Perceived Part in the Process.

The emerging themes for the topic of perceived part in the process included the following: (1) school principal: administrating and assisting with the CSHP, (2) school nurse: medical coordinating and implementation of the CSH nursing program, (3) school counselor: facilitator of the CSH counseling program, (4) teacher: leadership role for students, faculty and staff, and (5) parent: volunteer with community organizations.

Initially in the interview process, the school principal discussed the roles of the stakeholders in the CSHP implementation process. The school principal was the school health coordinator and perceived the principal's role as one to assist stakeholders in every aspect of the CSHP, adding that the stakeholders played a major part in the CSHP. The principal commented one reason the school was "in the know" with Coordinated School Health was because of the rigorous training sessions which were requirements of the John D. Bower Network and the Mississippi Department of Education. The school health coordinator was the assistant principal at the school during the first year of the CSHP and assumed the role of school principal during the second year of the grant. The interviewee stated as a first-year principal and administrator of the CSHP there were times when the requirements of the grant were overwhelming. With enthusiasm, the school principal affirmed the CSHP provided many opportunities and the benefits outweighed initial perceptions of the grant requirements.

The school nurse described the role of a CSHP nurse as one providing basic medical information and services to students, faculty, and staff. From the nurse's perspective, in addition to conducting EPSDT physical examinations, much time was devoted to the coordination of

parental meetings and general parental communication. Also, the interviewee was responsible for the coordination of other agencies coming into the school to conduct student services. As part of the CSHP nursing program, every fourth and fifth grade student received both eye and dental screenings. The nurse ascertains community organizations that come into the school are valuable to the CSHP because not every parent takes their child to the eye doctor or dentist every year.

The interviewee who was the school counselor viewed the role as a facilitator or an “arranger.” From the participant’s perspective, available community resources were assets to the school. The school counselor assisted in making a “connection” between what was available in the community and what was needed in the CSHP. The interviewee added that many church groups, in addition to community and business organizations, wanted to give assistance to families and children. The participant helped make this possible by setting up opportunities for churches to give donations to the students and families in need.

The counselor stated that students who feel safe, happy, and healthy, or who are at least working toward those goals, certainly achieved more than ones who were not. The interview participant attributed the improvements in student behavior and improved classroom management to the CSHP at the elementary school.

Being a member of the wellness council and having been a part of the SHI survey, the interviewee who was a teacher viewed her role as that of a lead teacher. From the teacher’s viewpoint, teachers were on the “front line,” especially “face-to-face” with children and were the first to detect or even sense any student difficulty. The participant acknowledged that often situations occurred in which teachers needed the expertise of the nurse or counselor to assist with the physical, social, and psychological needs of the student. Remarking that parents and

community involvement were central for the success of the CSHP, the teacher interviewee described the CSHP collaboration as a definite “team effort.”

Parent: Volunteer With Community Organizations.

When asked about the program, the parent interviewee began to smile and recount the initial school wellness meeting in which many community representatives were in attendance. The interviewee was elated that school wellness council members represented or “crossed every area” within our community. Health organizations, police officers and service organizations were a few volunteers that became active members of the CSHP that assisted and served children in the elementary school.

Level of Involvement in the Coordinated School Health Program.

Identified themes for level of involvement in the CSHP included the following: (1) school principal-CSHP coordinator, (2) school nurse-coordinating and implementing the CSH nursing program, (3) school counselor-facilitator of the CSH counseling program, (4) teacher-leadership role for students, faculty and staff, and (5) parent-community organizations volunteer.

To successfully implement the CSHP, vigorous training was required of the John D. Bower Foundation. In the beginning training stage, the school administrator, superintendent, and school health coordinator were the CSHP team members attending the training sessions. In core three of the training, the school district business manager, the food service director, and the publicity director were added to the team. The principal reported that often it was difficult for the school superintendent to attend, but the district made a 100 percent commitment to the CSHP and the Bower Foundation. The interviewee also stated the superintendent’s support and the

business manager's understanding of the budgeted finances were vitally important to the implementation of the grant.

As the CSHP coordinator, the school principal's responsibilities included conducting the school health index, planning and directing the coordinated school health meetings, and making sure the school wellness plan was written. The interviewee stated that often the "load" was difficult to carry, but the program was important. Schools need "to do that one more thing for the students" and implement a CSHP primarily because many of our children are not being taught healthy habits at home. The interviewee related the CSHP taught students about healthy food choices, exercise, and the importance of taking care of themselves when they are young. The more support a school has from the administrative team and from the wellness council, the better the program will be and the more likely, it is that the program will be sustained. The principal commented on the level of involvement and the working relationship between the administration, nurse, and counselor. For the upcoming year, the principal would like for the nurse and counselor to visit the classrooms more; for example, the counselor would have 30 minute "prepackaged" lessons. Frequent visitations in the classrooms allow students the opportunity to know who the nurse and counselor are and become comfortable coming to them with a problem.

The school nurse's role included daily interaction with the education and prevention of student medical problems. Whenever possible, the nurse went to classrooms and talked with the students, but small group meetings were more realistic for a large school. Each day the nurse was involved making sure students were well and at school learning. The nurse assured the interviewer that the job was rewarding but was often time consuming. The interviewee gave the following example: A student had a headache and the teacher wanted the nurse to check vital

signs. If vitals indicated nothing was wrong, the nurse would ask the student questions concerning eating a nutritious breakfast and going to bed early at night. From this point, the nurse corresponded with the teacher, the administration, and the parent. The nurse proudly stated this interaction helped keep children at school.

According to the teacher, the educator's role in the CSHP was leadership and education. The teachers often instructed using individual topics of health education, although the interviewee preferred an integrated approach to health education. The interviewee stated the topics of health and making good choices were integrated in many subject areas throughout the typical school day. Additionally, the school's CSHP incorporated an integrated effort among the nurse, counselors, parents, and business and service organizations. The teacher was grateful for the collaborative efforts of the principal, nurse, and counselor working together to help a child, especially in situations when students were hesitant to come to school. For these reasons, the teacher said, "I was very grateful for the CSHP."

During the parent interview, the interviewee discussed parent involvement in local service organizations and participation on the school wellness council. The Junior Auxiliary educational goals focus on helping all school age children. Each day members came into the school and assisted the school with small projects ranging from the preparation and delivery of health kits to each classroom to larger projects involving large monetary donations such as the bullying program, STAMP Out Bullying.

The themes for the level of involvement in the CSHP included the school principal as the CSHP coordinator, the school nurse identified as the CSH nursing program coordinator, the school counselor as the facilitator of the CSH counseling program, the teacher serving as a leadership role for students, faculty and staff, and the parent as a community organizations

volunteer. Each interview participant had an active role in the CSHP process and impacted the health of the case school.

Perceived Impact of the CSHP of the Student, Faculty and Staff.

The themes for topic three, perceived impact of CSHP on students, faculty, and staff included the following: (1) perception of student's reaction to the new physical education program, (2) perceptions of the student's views regarding the nutrition education and the vending policy, and (3) faculty and staff perceptions of the wellness program.

Three of the five interviewees commented the physical education aspect of the CSHP had a tremendous impact on students. The school principal said the health program allowed students to have a different perception of physical education. Prior to the CSHP, the students perceived P.E. class as a time to have fun, to hang out, and play dodge ball. Students enjoyed having fitness options within the physical education class. During the CSHP, students showed excitement about the program by continually asking what the class was going to do that day. Students could choose to go outside and use fitness equipment, play basketball, learn tennis and golf skills, or receive aerobic exercise with Dance Dance Revolution. The SPARK curriculum incorporated the importance of teaching appropriate body movements and exercises to play certain sports and the importance of fair play. Project Fit impacted the classroom curriculum by teaching students to follow multiple directions.

The principal also felt the student's outlook improved from not knowing what to expect to developing high expectations regarding the school's physical education program. Acquired expectations included learning new skills, being entertained, and having cool programs. The interviewee was thrilled to report new students entering school had previously been informed about the cool activities offered in physical education class. Students sometimes would ask to

play dodge ball, but teachers did not encourage the sport. The game of dodge ball was eliminated because the school did not want students eliminated from opportunities for physical activity. All students were encouraged to be physically active the full 50 to 60 minutes.

The teacher observed one of the favorite physical education programs was Dance Dance Revolution. The kids loved dancing to the music which was competitive, but not hard core competition. The interviewee told about a particular classroom activity done each day as students were about to “nod off.” Physical activity was integrated within the spelling curriculum. The teacher cited the class usually did exercises, including jumping jacks or free-style exercises of their choice, to the physical acting out of spelling words. The integrated activity elevated the heart rate and stimulated the brain. “You know, it was such a small thing,” said the teacher, “but the activity got everybody moving.” The participant laughed and said the students thought she was a little off balance, but gradually each student loved the activity because of the active involvement. The interviewee said a teacher’s goal should be to make learning fun. The spelling activity was fun allowing students to be actively engaged in a lesson while integrating physical education and health education within the instructional curriculum.

The parent interview also focused on the benefits of the CSH physical education program. The CSHP had an impact on the participant’s after-school family activities. The family never placed importance on physical fitness activities such as bike riding and walking together. The parent attributed the change within the family unit to the fourth grade child’s “pumped and motivated” attitude toward exercise.

From a parent’s perspective, the CSHP’s emphasis on healthy food choices made an impact on the entire family. The school adopted a vending policy that allowed only flavored/unflavored water and healthy snacks at school. The parent stated teachers also

encouraged parents to send healthy snacks from home. The interview participant commented that family shopping practices changed from purchasing soft drinks and unhealthy snacks to that of purchasing water and healthy snacks. The interviewee purchased healthy snacks for the fourth grade student, and made similar purchases for the younger school age children. The CSHP made an impact on every member of the student's family. Since the implementation of the CSHP, the participant's family members have remained committed to making wise food and drink choices. The interviewee has completely eliminated soft drinks from the family's diet.

Some school districts in the state adopted very strict food policies restricting foods brought into the schools. The school principal stated many schools do not allow parents to bring birthday cakes, cupcakes or cookies, "no anything" into the school. A nutritional goal within the CSHP was to instruct students about nutritional balance. The principal stated the site school encouraged parents to bring cupcakes on birthdays as long as healthy choices were also provided to the students.

The school principal commented the Weight Watcher's program was a large part of the CSHP. The school required strenuous guidelines such as required attendance and repayment for Weight Watcher fees if a faculty or staff member was absent from a meeting. Because the Bower grant was paying for the program fees, the principal thought faculty and staff must be committed. Otherwise, the monies would be spent on other school priorities. A few times excuses were offered, such as "I was at this or that." The principal's response was that excuses were not acceptable.

The faculty and staff soon had a different perception and commitment. During the first round of 12 weeks, the group lost 700 pounds, which was 200 pounds over the 500 pound goal. During the next round of 12 weeks, the principal required each faculty and staff member to pay

the dues. The objective for the change in fee payment was sustainability. The principal wanted to determine if the program could sustain itself, which the program did. The next year in January the principal told the group, “New year, new you.” Every faculty and staff member was encouraged to participate in the Weight Watcher’s program.

The faculty and staff made other health modifications in addition to the weight loss program. The principal commented that eating habits changed. Faculty and staff were making healthier food choices for lunch, such as salads, Smart Ones™, and fruits. During the second round of the weight loss program, the cafeteria manager became involved in the program and provided healthier choices of foods. The principal said most of the employees had an overall better attitude. Some faculty members did not want to participate in the Weight Watchers program, so the school branched off to include fitness options. The school created a fitness exercise room because the school wanted to offer options to meet everyone’s health needs.

Faculty and staff attendance improved during the CSHP. School attendance records indicated during the 2006-2007 SY, 402.5 days, or four percent of the total days were missed due to sickness and illnesses requiring medical care. During the 2007- 2008 SY, 992.5 days, or approximately 9.5% of the total days were missed. One teacher had a major illness and missed a large percentage of the school year and three teachers were out for a six week maternity leave. Removing these outliers, records indicate 6.6% of the total school days were missed. The principal focused on the importance of taking care of the adults in the building so each faculty or staff member would be better able to take care of the students. The students could identify happy adults. Faculty and staff members were given the opportunity to relax with massage therapy. A massage therapist came into the school once a month, and gave 30 minute massages for the fee of twenty dollars. Additionally, beauty representatives gave facials during the teacher’s

conference and planning time. According to the principal, for 30 minutes the faculty and staff were in a quiet room with soft music and nice candles, and someone was paying attention and taking care of their needs.

The third research question related to what are the perceived positive and negative impacts of the CSHP on the school principal, teachers, nurse, counselor, and parent integrated the following topics: (1) areas of the CSHP that seemed to work well and why, (2) areas of the CSHP that did not seem to work well and why not, and (3) level of fit between CSHP activities and other professional responsibilities.

Areas of the CSHP That Seemed to Work Well and Why

The emerging themes for the topic areas of the CSHP which seemed to work well and why included the following: (1) the physical education program, (2) the staff wellness program, (3) the nutrition education program, (4) the nursing EPSDT program, and (5) the counseling programs.

All five interviewees emphasized successes of the Coordinated School Health physical education program. The teacher and school principal discussed the purchasing of physical fitness equipment, but attributed success to the organized curriculum, which accentuated group and team efforts in a non-competitive way. The parent interviewee was enthusiastic about the physical education program having options for physical activity and cited the variety of activities served the needs of every child because not every student was athletically oriented. The school counselor discussed how the staff wellness and physical education program became interwoven. From a school nurse's perspective, the program was a success because students learned about the food guidelines and the Food Pyramid from the nutritionist and the physical education program taught the students how to burn caloric intake from foods through physical activity.

In addition to the scheduled physical education class, the teachers incorporated organized exercise during recess period. Students were given the choice of walking the track or utilizing the playground equipment. Gradually, more and more classes began to walk the track during the recess period. A new program, Walk Across America, was organized. For every mile each class walked, a footprint was put in the hallways to show achievement. The mileage was charted on a large wall map of the United States. The counselor smiled and said, “Wellness breeds wellness, it seems.” Additionally, the teacher added that if students are happy, then the student will feel better and have improved attendance.

Three of the five interviewees considered staff wellness one of the successful programs. The school nurse discussed the collaborative effort of the staff, mentioning each person was in a “good mood and trying to help each other.” The school principal attributed buy-in as a contributing factor. Parents, teachers, students, a well diversified school wellness council, business and community organizations, and district and individual school level administrators were all supportive of the CSHP. Additionally, the interviewee elaborated that celebrating school success publicly was necessary. Through the use of newsletters, newspapers, and school websites, the school informed parents and community about all CSHP activities and why CSHP was a good thing.

Three of the five interview participants discussed the value of the nutrition programs. The school nurse gave credit to the Weight Watchers™ program and to the nutritionist provided by the Mississippi State Cooperative Extension Department. Although, the school principal was confident the partnership with the Mississippi Cooperative Extension Service would continue, concern was expressed about the possibility of not having a school nutritionist for future classes. The school nurse commented on losing 50 pounds and how the school climate improved due to

the CSHP. The comment was made that “everybody helped each other. It was just a big camaraderie thing.” We worked on recipes together and were trying to help each other.”

The nurse proudly bragged on the school’s CSHP commitment to hire a school nurse and nursing assistant. The school “more than doubled” the number of student physical examinations with the EPSDT program. In the opinion of the school nurse, the program was a great asset because it kept students at school. The students received medical treatment at school. According to the interviewee, many parents typically did not take children to the doctor to have a regular physical or to check blood sugar level. The CSHP health goals focused on preventive health and becoming aware of major medical situations before the problem accelerated, such as the obesity rate within the state.

The school counselor attributed success in the areas of social, emotional, and psychological services. The CSHP was extremely fortunate to have a strong, nurturing program that included support from community organizations and churches. Often mentors came into the school to spend one hour a student. The counselor paired the mentor with a student. The mentor either tutored the student in a subject area or the student and mentor “hung out” to talk. The counselor particularly mentioned the participation of 100 Black Men, a mentoring program for elementary young men. Success, according to the interview participant, was attributed to bi-monthly meetings at the school and field trips. The organization awarded certificates as positive reinforcements for behavior and grades. The counselor also attributed the success of the CSHP to the collaborative efforts of the school with colleges and universities. The counseling program utilized the services of two interns enrolled in the university’s master’s counseling program. The interns assisted the school counselor by going to classrooms and teaching character lessons, addressing issues such as bullying, citizenship, conflict resolution, and character building.

Areas Of The CSHP That Did Not Seem To Work Well And Why Not

The emerging themes in the topic of areas of the CSHP that did not seem to work well and why not included the following: (1) organized health curriculum, (2) parental involvement, and (3) communication efforts.

Organized Health Curriculum.

Both the school principal and the teacher discussed the need for more organized curriculum in the health education area. The Mississippi State Cooperative Extension Service nutritionist taught the health skills within the nutrition curriculum. The principal expressed the program was a valuable community resource from which all students, faculty, and staff benefited. The nutritionist recently retired and the principal was unsure if the program would be continued. The principal also expressed concern teachers would be responsible for assembling more resource material to plan for the health curriculum. The teacher interview participant commented the teachers needed more supplemental health resource material in addition to the basic curriculum health resource guide provided by the Mississippi Department of Education.

The parent interviewee would like to have more volunteer parents to assist with various school programs. Many parents are currently involved in various parts of the CSHP, but the interviewee stated that the CSHP would have continued success and sustainability if every parent was involved. Improvement in the area of staff and faculty members communicating with parents were of importance to the school counselor. The CSHP stressed the importance of students being at school. The counselor added parents know about the school attendance policy, but if faculty members created a more consistent line of communication, the effort would be like a building block, where communication goes to the next level.

Level of Fit Between CSHP Activities and Professional Responsibilities.

The emerging theme of the topic level of fit between CSHP activities and other professional responsibilities was the one theme of time.

Four faculty members including the principal, nurse, counselor, and teacher each discussed the topic of time. The principal, as the CSHP coordinator, stated CSHP responsibilities were manageable. The grant added responsibilities during year two which were often overwhelming for the school principal. Unlike other health champions in the school, the principal had many responsibilities extending beyond the typical school day. Smiling, the principal said, “Everybody is busy, but someone has to be responsible to do what is right for kids-healthy kids are going to learn and are going to perform better.” The principal knew the dividends of CSH and explained that was why CSHP was important.

The school counselor explained the benefits of having more scheduled time in the classrooms. Although, the interviewee expressed concern that often “unknown factors” deter classroom visits. Student acute needs may have occurred overnight; possibility a death, a fire, or other trauma in which a child needs the immediate attention of a school counselor first thing in the morning or perhaps most of the day. Situations, such as these, made it difficult for the counselor to schedule group sessions, since she was the only full time school counselor.

Additionally, the teacher reported that during the second year of the CSHP, balancing professional responsibilities and CSHP activities became easier. Feeling more comfortable with the CSHP program, the teacher added that having a monthly theme would make the program even more helpful for teachers.

The fourth research question pertaining to how the implementation of the CSHP in this context impacted the school district’s health education and efforts to improve school health

integrated the following topics of: (1) the impact of the CSHP on the school district agenda and on school health reform, and (2) recommendations for future improvements of the CSHP.

CSHP Impact on the School District Agenda and School Health Reform.

The emerging theme of the topic the impact of the CSHP on the school district agenda and on school health reform included being a committed and proactive school district. Many new school health commitments have become a reality because of the CSHP. Four of the five interviewees applauded the school district's commitment to employ more school nurses and revising physical education and health curriculums. The principal reported these improvements would not have been successful without the complete support of the school superintendent and the school board, and said that the CSHP has "totally changed the school district."

The school nurse stated the school district was one hundred percent on board with CSHP. After the implementation of the CSHP in the elementary school, the district school board adopted a policy to incorporate CSH in each school. The interviewee stated the school district employed a district level school health coordinator and each school principal became actively involved with CSH. Health curriculums and physical education programs were modified to include a focus on improving student health. At this point, CSH was not state mandated. The interviewee commented that schools became pro-active by forming school wellness councils and conducting SHI surveys each year to determine school health strengths and weaknesses. Speaking at state level meetings about the importance of CSHP and the implementation practices in a school continued to be a common practice for the district's superintendent, school board members, school principal, nurse, counselor, and food service coordinators.

The participant discussed the merits of the CSH food services program. Food service managers emphasized food preparation techniques to make food creative and fun for students.

The school cafeteria atmosphere and environments dramatically changed within the district. Due to training sessions and the dreams and aspirations of the school principal, the site school cafeteria currently has a “restaurant feel” compared to the original cafeteria environment. With excitement, the principal described the new and improved cafeteria atmosphere including new picnic tables with interchangeable cloths and canopies which helped create an inviting atmosphere. The principal also stated student health was important to the school and the change in the food service commitment represented the impact of the CSHP.

The school nurse proclaimed nutritional education, especially making good food choices, positively impacted fourth and fifth grade students. The nurse discussed conducting a student survey to determine fruit and vegetable favorites. Data indicated vegetable favorites were comparatively different to the previous generation. The favorite vegetable for fourth and fifth grade students was broccoli. The interviewee stated most people would never dream broccoli would be a favorite vegetable of any child. The nurse added that as a small child, the participant did not even know what broccoli was.

The school counselor expressed that CSHP in the school system has been one of the most positive things in a few decades, stating “the CSHP is so encompassing.” Because of the CSHP, the emotional, mental, and academic connection has become complete. The classroom was connected to the school environment, to the community, and to the family. The school became aware that these areas should be woven tightly together. The counselor stated that “to address one part actually addresses the whole” and the school CSHP gathered all available resources which resulted in positive results.

The counselor discussed a newly implemented school program which was a collaborative effort of the school district. The district implemented the Positive Behavior Intervention and

Support program (PBIS) in grades K-5. One of the district's specific needs was to improve discipline in the schools. The program development involved the teacher, counselor, and administration in the effort to become more pro-active and positive. The counselor proudly stated that once again, various community businesses donated resources for the students, teachers, and counselors. Schools offered incentives to the vast majority of students who come to school every day and do the right thing. Positive behavior was rewarded in hopes that the five or ten percent of students that did not possess the skills would acquire them. The counselor praised the CSHP for impacting the overall school environment.

Recommendations for Future Improvements of the CSHP.

The emerging themes on the topic of recommendations for future improvements of the CSHP included the following: (1) school health index training, (2) nurses in every school, (3) better communication with students, and (4) expansion of CSHP: personal commitments.

Most schools in Mississippi select food service managers, assistant principals, or physical education teachers as the school health coordinator; although the rural elementary school's CSHP coordinator was the school principal. The principal stated that school principals should become very familiar with the CSHP and the CDC's School Health Index. The interview participant maintained that school principals should place priority on school health issues including the use of cleaning products which have strong smells, the importance of buses not idling, keeping hallways cleared, and asthma education and asthma plans. According to the principal, asthma is "a huge area of concern" and emphasized the importance that all schools educate faculty and staff members about asthma. The asthma training insured emergency situations are approached with expertise and confidence.

The principal relayed personal success stories about the importance of students becoming more knowledgeable about asthma and diabetes. Asthma and diabetes training allowed students, faculty, and staff members to assume responsibility for individual health. The “icing on the cake,” the principal proudly stated, was when a child shared medical knowledge to other students, faculty and staff. The school principal stated the CSHP was instrumental in helping the site school learn “all the right things,” adding that schools should start small with the CSHP and to share all successes.”

The school nurse acknowledged that in the “big picture,” each school in every district should employ a school nurse to provide health care and health education. Students and adults need quality health practices and education. The school nurse reported that monthly data was filed with the state nursing department to track the need for future school nurse legislation.

The counselor’s hopes, dreams, and aspirations will become a reality as each school emphasizes and promotes new and exciting programs available within the school. The counselor emphasized the importance of better communications with the students about programs offering social, emotional, and psychological services.

Both the school teacher and the parent discussed the possibility of taking a more active role in CSHP. After-school programs and activities for staff and employees were suggestions made by the interviewed teacher. Crediting the school for offering wonderful staff wellness opportunities, the teacher offered to organize an aerobics class or some other function allowing faculty and staff to bond. Additionally, the parent would like to see continued growth in the CSHP, and discussed the possibility of volunteering to visit school districts interested in the coordinated school health program.

Conclusion

The data analysis revealed improvements within all eight components of the Coordinated School Health Program implemented over a three year period. Improvements included:

Component one increased 26%, component two improved 16%, component three was enhanced by 39%, component four grew by 2 %, component five accelerated by 56%, component six increased by 11%, component seven improved by 41%, and component eight increased by 18%.

The interview data revealed similar results with the SHI scorecard data. The interview topic, areas that that did not seem to work well, presented two modules that were of concern to the interviewees. The major area of concern for the interviewees was health education and parental involvement. The SHI scorecard indicated lower percentage gains within the same two areas. Similarly, areas indicated by the interviewees that worked well were directly inline with the interview data. The summary, conclusions, and recommendations of the study are discussed in the next chapter.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this single case study was to present the story of the implementation of the Coordinated School Health Program (CSHP) at a rural north Mississippi elementary school. Data was analyzed in two forms including: (1) analysis of archived documents related to the CSHP and (2) interviews conducted with five members of the school's health council, including the school principal, counselor, nurse, a teacher, and a parent. The study examined the impact of the CSHP on the students, staff, and personnel. The central phenomenon of this research study was the CSHP provided to students, faculty and employees at the case study school. The four research questions used to explore the central phenomenon included: (1) what services were provided to the students and the faculty and staff, (2) how did the school principal, the teacher, the nurse, the counselor, and the parent perceive their role in the process of implementing the CSHP, (3) what were the perceived positive and negative impacts of the CSHP on the school principal, the teachers, the nurse, the counselor, and the parent, and (4) how has the implementation of the CSHP in this context impacted the school district's health education agenda, and efforts to improve school health. Chapter 5 presents a summary of the study. Chapter 5 also includes recommendations for future research.

Summary of the Procedures

The Coordinated School Health Program Document Data.

The three year process of improving school health issues at the Mississippi school began during the summer of 2005. The researcher authored a grant co-sponsored by the MDE, Office of Healthy School and the John D. Bower Coordinated School Health Network. The awarded grant of one hundred thousand dollars funded the implementation of a coordinated school health program over a three year period. Being identified as a model school, the school piloted a three year coordinated school health study, "Coordinated School Health (CSH) Model" developed for the CDC.

In the spring of 2006, the objective was to inform and educate school and community leaders about the critical health problems facing Mississippi students. On May 16, 2006 approximately two hundred students, parents, community business leaders and MDE representatives attended the health awareness meeting which was held in the school cafeteria. The twenty-four member school health council completed the School Health Index (SHI) needs fitness assessment on August 8, 2006.

Based on the SHI, the assessment percentage breakdown ranged from: High- 81-100 %, Low – 0-40%, Medium- 41-80% and High- 81-100%. The SHI identified the highest five modules ranging from 83% to 59%. Listed in order from highest to lowest scores were the categories of nutritional services, counseling and psychological services, health instruction, physical education and other physical activity programs and healthy school environment. The highest scoring five modules, ranging from 85 to 59 %, included (1) nutritional services, (2) counseling, psychological and social services, (3) health instruction, (4) physical education, and (5) healthy school environment. The lowest three scoring modules on the SHI, ranging from 28%

-0%, included the following three areas of: (6) family and community involvement, (7) health services for children and (8) health promotion for staff.

Family and community involvement, scored at the 28th percent on the SHI. Improvement plans included effective parenting strategies involving safety, physical activity, nutrition, tobacco use, asthma, and community access to school facilities. The correction plan of family and community involvement involved the development of a website that linked parents and students regarding safety, physical activity, nutrition, tobacco use, and asthma.

Scoring at the nineteen percent level on the SHI was the area of health services. Weaknesses, as indicated on the SHI, included no full time nurse or school health physician, no indication of health and safety promotion for students and family, no tracking of students with known asthma, no provision for case management for students with poorly controlled asthma, and no evidence of asthma education to all students. The health services action plan for the 2006-2007 SY focused on attaining a school nurse to assist with the health services.

The third module found to be inadequate was health promotion for staff. Scoring at the zero percent level a need was indicated for health screening for staff, stress management programs for staff, programs for staff on physical activity and fitness, eating and weight management, training on conflict resolution, first-aid and CPR, tobacco-use cessation, and asthma management and education. The corrective improvement plan for health promotion for staff incorporated a healthy eating/weight management program for faculty and staff; as well as, promoting participation in physical activity by providing a time and place for personnel to use fitness equipment provided through the grant.

Based on SHI document interpretations, a new individualized coordinated school health program was designed and implemented at the rural Mississippi school. The expanded paradigm of coordinated school health program, according to Kolbo positively impacted the health and well being of students, teachers, administrators, and staff. (J. Kolbo, personal communication, June 15, 2008). The John D. Bower School Health Network Evaluation Plan 2005-2008 Data Collection Form cited documented evidence of the CSHP for 2005-2008 SY. The district principal budget report cited expenditures for the 2006-2007 and 2007-2008 SY.

Interview Summary.

Personal interviews were conducted with five members of the elementary school's wellness council. The participants included the school principal, the counselor, the nurse, a teacher, and a parent. Transcribed narrative data provided the participant's perceptions of the CSHP. The topics included: (1) services were provided to students and employees, (2) teachers, nurse, and counselors perceived part in the process, (3) level of involvement in the CSHP, (4) perceived impact of CSHP of students, teachers, and employees, (5) areas of CSHP that seemed to work well (and why), (6) areas of CSHP that did not seem to work well (and why), (7) level of fit between CSHP activities and other professional responsibilities, (8) impact of CSHP on school district agenda and school health reform, and (9) recommendations for future CSHP improvement.

Interview Results

Question I: Qualitative Data.

Research question one was designed to determine what services were provided to the students and the faculty and staff. To assist in eliciting the answers, the participants were asked to respond to the topics of what services were provided to faculty and staff, and secondly,

what services provided to students. During the interview discussions the following five themes emerged: (1) faculty and staff health and wellness service-Weight Watchers at Work, (2) fitness room and exercise equipment, (3) a full time nurse on campus, (4) teacher training, and (5) community and business support.

Addressing the faculty and staff health and wellness service, the first theme focused on the Weight Watchers at Work program. According to the three of the five interview participants, the program was instrumental in assisting faculty and staff members lose weight and become healthier. The school's success was published by the Weight Watcher's Organization. The school principal emphasized the well-taken care of staff became role models and positively influenced the students.

The emerging second theme of services provided to the faculty and staff focused on the implementation of an equipped fitness and an exercise room. Two of the five participants affirmed the noticeable service. One participant cited the health and wellness services helped change personal lifestyles of the faculty and staff.

The service of providing a full time nurse on campus was the emerging third theme for the topic of services offered. The CSHP provided a nurse and nursing assistant for the faculty, staff, and students. According to the school nurse, the program also provided basic medical services to the faculty and staff, diabetic management, and nutritional counseling and weight management.

Teacher training services, the fourth surfacing theme, emphasized health and safety promotions within the school and improved staff collaboration. The school principal reported improvements were implemented within the CSHP that included teacher training in the areas of asthma, diabetes, and suicide prevention. Additionally, the school nurse cited training for staff in

the areas of cardio pulmonary resuscitations (CPR) and automated external defibrillator (AED) usage.

The fifth emerging theme addressed the services and support provided by the community and businesses. Three of five interviewees emphasized the impact of services provided by local community organizations and businesses including the local Junior Auxiliary, the Lion's Club, 100 Black Men, Mississippi State Cooperative Extension Service, the local college and university, and Life-Help, a local region mental health agency.

Topic two sought to identify services provided to students. During the discussion of student services provided during the CSHP five themes emerged. The first theme addressed health services for students. Four of the five interview participants praised two innovative physical education programs, Project Fit™ and Dance Dance Revolution™, which were purchased for the CSHP by community businesses and a local service organization. Discussions focused on the creative and inventive aspects of the CSH physical education program which meets state mandates of 150 minutes per week of physical exercise.

The second theme of student services emphasized the community and business support of the CSHP. Four of the five participants discussed the importance of the local community and business support in relation to the success of the CSHP. Participant discussions focused on the CSHP faculty and staff working closely with the Life-Help mental health therapist in residence. Also reported was the impact of the local Junior Auxiliary organization, whose outreach and service goal was to help the children of the county. According to the school principal, The STAMP Out Bullying Program™, provided by the Junior Auxiliary organization gave the students a “voice.”

Theme three of student services provided by the CSHP emphasized the importance of employing a full-time nurse and nursing assistant for the elementary school students. Previous to the CSHP one school nurse serviced 4, 843 students within the entire school district. The CSHP provided a school nurse and a nursing assistant for the fourth and fifth grade level students at the rural north Mississippi elementary school. Participants discussed that in addition to typical school nursing duties, the CSH nursing program offered student services including head-to-toe physical examinations, medical laboratory procedures, and student and parent communication regarding medical issues.

The fourth student services theme which emerged was family involvement. Effective parenting strategies and family involvement to plan meals was an area of improvement within the CSHP. The parent interviewee was very complimentary about the newsletters and program information that was available to parents.

Theme five, nutritional services provided to the students, was discussed by three of the five interview participants. The CSHP incorporated the services of a nutrition educator, provided by the Mississippi State Cooperative Extension Service which served as a member of the school wellness council and was actively involved in the area of nutrition education. Discussions also focused on the CSHP nutrition improvements including both food choices and options within the school cafeteria, and the school vending policy which offered only healthy snacks and water to students. The discussion led to question two.

Question II: Qualitative Data.

Research question two revealed how the school principal, the counselor, the nurse, and the teacher perceived individual roles in the process of implementing the CSHP. The interview participants responded to the following topics of: (1) the principal's, the counselor's, the nurse's,

and the teacher's perceived part in the process, (2) level of involvement in the CSHP, and (3) perceived impact of the CSHP of students, faculty and staff. During the discussions five themes emerged. The first theme addressed the five interview participant's perceived parting in the CSH process. The discussion revealed the following perceptions: (1) the school principal: administrating and assisting CSHP champions, (2) the school nurse: medical coordinating and implementation of the CSH nursing program, (3) the school counselor: facilitator of the CSH counseling program, (4) the teacher: leadership role for students, faculty and staff, and (5) the parent: volunteer with community organizations.

The themes for topic two focused on the level of involvement of the school principal, the nurse, the counselor, the teacher, and the parent. The first emerging theme focused on the level of involvement of the school principal. According to the school principal interviewed in the study, responsibilities as the CSHP coordinator included conducting the school health index, planning and directing the coordinated school health meetings, and developing and ensuring the implementation of the school wellness plan.

The emphasis of theme two, the level of involvement, focused on the nurse's level of involvement in the CSHP. In addition to the physical examination duties of the EPSDT nurse, the school nurse's role also involved daily interaction with the education and prevention of student medical problems.

The counselor's level of involvement in the CSHP was revealed in the third theme. The counselor expressed the primary role of the CSH counselor was to be a facilitator or an "arranger." The school counselor assisted in making a "connection" between what was available in the community and what was needed in the CSHP.

The fourth theme sought to identify the teacher's level of involvement in the CSHP. According to the teacher, educational instructors were on the "front line," especially "face-to-face" with children and were the first to detect or even sense any student difficulty. The teacher remarked that parents and community involvement were central for the success of the CSHP and described the CSHP collaboration as a definite "team effort."

The parent's level of involvement in the CSHP, the fifth emerging theme, focused on the parent as a school volunteer and a school wellness council member. As a school wellness council member, the parent discussed the merits of having a diverse wellness council. The interviewee praised various community organizations and businesses, the health organizations, the police officers, and the parents for volunteering both individual and collective services for the CSHP.

Three themes emerged for topic three, the perceived impact of CSHP on students, faculty and staff. The following themes included: (1) student's "new" perception of the physical education program, (2) student's perception of the nutrition education and the vending policy, and (3) the faculty and staff perception of the staff wellness program. The first theme addressed the student's new perception of the physical education program. According to three of the five interviewees, the physical education aspect of the CSHP had a great impact on students which allowed students to develop a different perception of a physical education program. Students showed excitement about the CSH physical education program by continually asking each day what the class was going to do. Students could choose to go outside and use fitness equipment, play basketball, learn tennis and golf skills, or receive aerobic exercise with Dance Dance Revolution™. The SPARK curriculum incorporated the importance of teaching appropriate body movements and exercises to play certain sports and the importance of fair play. Project Fit

impacted the classroom curriculum by teaching students to follow multiple directions. All students were encouraged to be physically active the full 50 to 60 minutes. The teacher discussed integrating physical activity with the spelling curriculum. The interviewee said a teacher's goal should be to make learning fun. The spelling activity was fun allowing students to be actively engaged in a lesson while integrating both physical and health education within the instructional curriculum. The CSHP had an impact on the participant's after-school family activities. The parent attributed the change within the family unit to the fourth grade child's "pumped and motivated" attitude toward exercise.

The second emerging theme, the perceived impact of the CSHP of the student, faculty and staff, focused on student's perception of the nutrition education and the vending policy. From a parent's perspective, the CSHP emphasized having food options and making healthy food choices. The parent stated the CSHP had an impact not only the individual students, but on entire families. Since the implementation of the CSHP, the participant's family members have remained committed to making wise food and drink choices. Additionally, the school principal stated many schools within the state adopted a policy to not allow parents to bring birthday cakes, cupcakes or cookies, "no anything" into the school. A nutritional goal within the CSHP was to instruct students about nutritional balance. The site school encouraged parents to bring cupcakes on birthdays as long as healthy choices were also provided to the students.

The third emerging theme of the faculty and staff's perception of the CSHP emphasized the staff wellness program. Four of the five interview participants attributed achievements to the Weight Watcher's™ program. The school principal discussed the active involvement and commitment of the faculty and staff members, commenting that the CSHP also incorporated other health modifications in addition to the weight loss program. The staff wellness program

created a fitness exercise room, which offered options to meet everyone's health needs.

According to the school principal, faculty and staff attendance improved during the CSHP. The principal focused on the importance of taking care of the adults in the building so each faculty or staff member would be better able to take care of the students. The discussion led to the question three.

Question III: Qualitative Data.

The third research question of what are the perceived positive and negative impacts of the CSHP on the school principal, the teachers, the nurse, the counselor, and the parent integrated the following topics: (1) areas of the CSHP that seemed to work well and why, (2) areas of the CSHP that did not seem to work well and why not, and (3) level of fit between CSHP activities and other professional responsibilities. Five emerging themes for the topic areas of the CSHP that seemed to work well and why included the following: (1) the physical education program, (2) the staff wellness program, (3) the nutrition education program, (4) the nursing EPSDT program, and (5) the counseling programs.

The first emerging theme emphasized success of the CSHP in the area of physical education. Each of the five interview participants attributed success to the CSHP. Topics of discussion focused on the purchasing of physical equipment, an organized "interwoven" curriculum, and the option for students to select the physical activity.

Staff wellness, the second emerging theme of the topic areas of the CSHP that worked well, was considered successful by three of the five interviewees. The school principal attributed "buy in" as a contributing factor. Parents, teachers, students, a well diversified school wellness council, business and community organizations, and district and individual school level

administrators were all supportive of the CSHP. The principal elaborated that celebrating school accomplishments publicly contributed to the CSHP success.

The third emerging theme of areas of the CSHP that worked well was the nutrition education program. The value of the program was indicated by three of the five interview participants. Participants attribute nutrition education success to the collaborative partnership between the CSHP and the Mississippi State Cooperative Extension Department.

The nursing EPSDT program was the fourth emerging theme of areas that worked well. Participants attributed success of the program to the commitment to employ a school nurse and a nursing assistant. The CSHP health goals focused on preventive health to decrease health concerns, such as the obesity rate within the state.

Areas of the CSHP that worked well included the fifth emerging theme, the CSHP counseling program. Interview participants attributed program success to the support from community organizations and churches, collaborative efforts of colleges and universities, and the local school district for promoting a strong, nurturing CSHP with emphasis on social, emotional, and psychological health of students.

The second topic which emerged from the research question of what are the perceived positive and negative impacts of the CSHP on the school principal, the teachers, the nurse, the counselor, and the parents was the areas of the CSHP that did not seem to work well and why not. The following three themes materialized including an organized health curriculum, parental involvement, and communication efforts.

The first theme, the need for a more organized health curriculum was discussed by two of the five interview participants. The nutrition and health educator recently retired and the interview participants were unsure if the program would be continued with the Mississippi State

Cooperative Extension Service. Concerns were expressed that teachers during the next school year will be required to assume more responsibility for gathering health resource materials. Teachers need a more organized health curriculum in addition to the basic curriculum health resource guide provided by the Mississippi Department of Education.

The second theme, parental involvement, was expressed as an area of the CSHP that did not seem to work well. One of the five interviewees cited that many parents were involved but the program would insure sustainability if every parent was actively involved in CSHP.

Communication efforts, the third theme, were discussed as an area of the CSHP that did not seem to work well. One interviewee stressed the importance for faculty and staff members to have daily or weekly communication with parents. One interviewee stated that improvements in consistent communication between home and school would be like a “building block,” where communication goes to the next level.

The third topic, level of fit between CSHP activities and other professional responsibilities, incorporated the theme of time. Four of the five interview participants discussed the responsibilities of the CSHP in relation to time. The school principal stated that CSHP responsibilities were manageable but the grant added responsibilities during year two which were often overwhelming. Unlike other health champions in the school, the principal had many responsibilities that extended beyond the typical school day. The school counselor approached time from a different perspective. According to the school counselor, due to “unknown factors” which may occur overnight, visits to individual classrooms were often cancelled or rescheduled. Caring for student acute needs required immediate attention and made scheduling time for individual classroom visits difficult.

Question IV: Qualitative Data.

The fourth research question of how has the implementation of the CSHP in this context impacted the school district's health education and efforts to improve school health integrated the following two topics including: (1) the impact of the CSHP on the school district agenda and on school health reform, and (2) recommendations for future improvements of the CSHP. The one emerging theme of four of the five interview participants was the school district's commitment. According to the participants, the proactive decision to implement CSH district-wide has positively influenced many areas of CSH including the nursing, nutrition, and counseling programs. The 100% "buy in" from school officials also impacted the school health initiative. School officials, faculty and staff members often share success stories at state conventions and meetings. The three year CSHP at the rural north Mississippi elementary school was the foundation for school health reform within the school district, several years before the state of Mississippi mandates school health legislations.

The second topic of the research question, how has the implementation of the CSHP in this context impacted the school district's health education and efforts to improve school health, is recommendations for future improvement of the CSHP. The following four emerging themes include: (1) school health training, (2) nurses in every school, (3) better communication with students, and (4) expansion of the CSHP: personal commitments.

The first emerging theme recommendation focused on SHI training. The school principal encouraged all school level administrators become familiar with the CSHP and the CDC's School Health Index. Becoming familiar with the SHI will assist administrators to educate faculty and staff about critical school health issues such as asthma and diabetes.

The second emerging theme focused on the recommendation to have nurses in every school. The school nurse recommended that schools provide quality health care and health education to all students, faculty and staff. With this goal in mind, the CSHP school nurse submits data files monthly with the state nursing department to track the need for future school nurse legislation.

The emerging third theme focused on the school counselor's aspirations to expand existing counseling programs within every school in the district. The counselor also emphasized the importance communication about programs offering social, emotional, and psychological services.

The expansion of the CSHP was the fourth theme. Expansion both within the school and developments outside the school district were suggested. The teacher and parent discussed taking a more active role in CSHP. The teacher suggested organizing an after-school program for faculty and staff. Desiring continued and expanded interest in school health, the parent offered to visit other school districts interested in the coordinated school health program.

Implications of the Research Study

The collaborative efforts of the Mississippi Department of Education and the John D. Bower Foundation have "prepared the way" for schools to implement a Coordinated School Health Program.

Data gathered from the interviews indicated the principal and the counselor considered time as a factor. The amount of time devoted to the CSHP was a concern for the school principal. As a first year administrator, the school principal stated the CSHP responsibilities were manageable, but the grant added implementation responsibilities which were often

“overwhelming.” As the school health coordinator, the principal stated that after the first year of the CSHP, the time factor decreased. Since the responsibilities of a school principal extend beyond the typical school day, a possible solution would be to have an alternate school health coordinator such as the food services or physical education director, the school nurse, or the school counselor serve as the school health champion. Another possibility would be the assistant principal and a department chair share the CSHP coordinator’s responsibilities.

Time was also a factor for the school counselor. Unscheduled and “unknown” factors hindered the regularly scheduled classroom visits. In addition to the mental health representatives assisting in the CSHP, another option would be to utilize the services of the local Junior Auxiliary, whose mission is to serve the school age child, as an additional resource. Motivational programs and speakers would be an asset to the counseling program.

Interview data also indicated a concern of the lack of health resources available to the teachers. Even with community representatives assisting in the CSHP, teachers were concerned about the amount of time required to plan and implement the new health curriculum within the classroom. A tobacco educator would be an excellent resource for the teachers and improve the area of health education within the CSHP. The Mississippi State Office of Tobacco Control tobacco educators could scheduled visits to each classroom and have interactive lessons on the affects of tobacco products on the body. In addition to the students receiving services, the local community was also impacted in regard to tobacco education and the implementation of smoking policies within the community.

Finally, this research indicates the collaborative efforts of the school district. In an effort to become more pro-active and positive to improve school-wide discipline, the school district implemented the Positive Behavior Intervention and Support Program in the kindergarten

through fifth grades. Once again various community businesses donated time and resources. The school counselor praised the CSHP for impacting the overall school environment through the united endeavors of school and community.

Recommendations for Future Research

As staggering health statistics and the increasing incidences of obesity plagues students, the need for continued research is crucial. Case studies mirroring the three year CSHP conducted at one rural north Mississippi elementary school will tell the story of the CSHP process and impact of the efforts to address the health of students. Comparable research studies may contribute to the knowledge of school health programs within the state and the literature on school-based health initiatives.

Recommendations for further data driven research in the area of health services provided to students will provide essential information for future nursing legislation. The CSHP health program requires the school nurse archive monthly student health data with the state nursing department. The CSHP data driven research will provide documented evidence of the health services provided within the school and the possibility of future nursing legislation.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Allensworth, D. D., & Kolbe, L. J. (1987). The comprehensive school health program: Exploring an expanded concept. *Journal of School Health, 57*(10), 409-412.
- Brener, N. D., Kahn, L., McManus, T., Stevenson, B. & Woolsey, S. F. The relationship between school health councils and school health policies and programs in US schools. *Journal of School Health, 74* (7), 130-135.
- Caillavet, S. (2008). Why coordinated school health. Symposium conducted at the meeting of the John D. Bower Foundation: 2008 Mississippi Healthy School Conference, Philadelphia, MS.
- Cooper, P. B. (2003). Our journey to good health: A Mississippi educator details what his district does to connect healthy bodies to strong minds. *American Association of School Administrator, 60* (1), 20-26. doi: _0286-2732177_ITM
- Creswell, J. W. (2008). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Davey, B. M., Harrell, K., Stewart, J., & King, D. S. (2004, June). Body weight status, dietary habits, and physical activity levels of middle school-aged children in rural Mississippi. *Southern Medical Journal, 97* (6), 571-577.
- Department of Health and Human Services, Center for Health Statistics. (2003). National Center for Health Statistics. Health, United States. Washington, DC: U. S.
- Derry, V., Aggeloussis, N., & Petraki, C. (2004, winter). Health-related fitness and nutritional practices: Can they be enhanced in upper elementary school students? *Physical Educator, 61* (1), 35-45.

- Dorosty, A. R., Emmett, P., Cowin, I.S., & Reilly, J. J. (2000, May). Factors associated with early adiposity rebound. *Pediatrics*, *105* (5), 1115-1118.
- Evan, W. D., Finkelstein, E. A., Kamerow, D. B., & Renaud, J. M. (2005, June). Public perceptions of childhood obesity. *American Journal of Preventive Medicine*, *28* (5), 496.,
- Franks, A. L., Kelder, S.H., Dino, G. A., Horn, K. A., Gortmaker, S. L., Wiecha, J. L., Simoes, E. J. et al. School-based programs: Lessons learned from CATCH, Planet Health, and Not-On-Tobacco. *Preventing Chronic Disease*, *4*(2). April, 2007, Retrieved from http://www.cdc.gov/pcd/issues/2007/apr/06_0105htm
- Gall, M. D., Gall, J. P., & Borg, W. R. (2003). Educational research: An introduction (7th ed.). Boston, MA: Pearson Education, Inc.
- Gibbs, W. W. (2007). Obesity: An overblown epidemic? *Scientific American*, *May 23, 2005*.
- Glesne, C. (2006). *Becoming qualitative researchers: An introduction*. (3rd ed). Boston, MA: Pearson Education, Inc.
- Greenberg, J. I., Cottrell, R., & Bernard, A. L. (2001). Baseline data on coordinated school health programs in the state of Ohio. *American Journal of Health Studies*, *1* (6).
- Holtkamp, K., Konrad, K., Buller, B., Heussen, N., Herpertz, S., & Herpertz-Dahlmann, B., et al. (2004). Overweight and obesity in children with attention-deficit/hyperactivity disorder. *International Journal of Obesity*, (28), 685-689.
- Horowitz, M., Shilts, M. K., & Townsend, M. (2004). Eatfit: A goal oriented intervention that challenges middle school adolescents to improve their eating and fitness choices. *Journal of Nutrition Education and Behavior*, *26*, 43-44.
- John D. Bower Foundation. (2008). *J. D. Bower school health network evaluation report*.
Kolbo, J.

- Johnson, J., Deshpande, C. (2000, February). Disciplines preparing students as productive citizens for the challenges of the 21st century. *School Health, February 01, 2000.*
- Keim, N. L., Blanton, C. A., & Kretsch, M. J. (2004, September). America's obesity epidemic: Measuring physical activity to promote active lifestyle. *Journal of the American Dietetic Association, 104(9), 1398-1409.*
- Kimm, S. Y., & Obaarzanek, E. (2002, November). Childhood obesity: A new pandemic of the new millennium. *Pediatrics, 110 (5), 1003-1007.*
- Kolbo, J. R. (2008). John D. Bower School Health Network: 3rd Year Evaluation Report. The Bower Foundation, Ridgeland, MS.
- Larson, K. L. (2003, October). Physical educators teaching health. *Journal of School Health, 73 (8), 291-292.*
- Lovelady, D. H. (1997). *Teaching the USDA food guide pyramid using Mississippi's Pyramid Pursuit, curriculum versus textbook and commercially prepared materials.* Retrieved from Dissertation Abstracts International. (9729783)
- Marshall, T. A., Lichtenberger Gilmore, J. M., Profit, B., Stub, P. J., & Levy, S. M. (2005). Diet quality in young children is influenced by beverage consumption. *Journal of the American College of Nutrition, 24 (1), 65-75.*
- Mississippi Department of Education. (2008). Healthy Schools Mississippi. Retrieved from http://www.healthyschoolsms.org/ohs_main/initiatives/Bower.htm
- Mississippi Department of Education: Office of Healthy Schools. (2008). State of Health in Mississippi .Retrieved from http://www.healthyschoolsms.org/docs/state_of_health_in_mississippi.doc

Mississippi Department of Education: Office of Instructional Programs and Services. (2005).

Mississippi's Accountability System. Retrieved from

<http://www.mde.k12.ms.us/Extrel/pub/MAS:pdf>

Mississippi Department of Health. (2008). Childhood Asthma. Retrieved from

http://www.healthyschoolsms.org/health_education/contacts_resources_data.html

Mississippi Healthy Students Act of 1972/ Physical Education/Comprehensive Health Rules and

Regulations/Nutrition Standards. Retrieved from

<http://www.healthyschoolsms.org/MsHealthyStudentsAct.org>

Molaison, E. F., Kolbo, J. R., Speed, N., Dickerson, E. & Zhang, Lei (2007). Prevalence of

overweight among children and youth in Mississippi: A comparison between 2003 and

2005. The Center for Mississippi Health Policy. Retrieved from

<http://www.mshealthpolicy.com/documents/CAYPOS2003v2005Dec07.pdf>

Montague, M. C. (2003, May-June). The physiology of obesity. *ABNF Journal*, 14 (3), 56-60.

National Center for Chronic Disease Prevention and Health Promotion. (2008). Healthy Youth !

Asthma. Retrieved from <http://www.cdc.gov/HealthyYouth/asthma/index.htm>

National Center for Chronic Disease Prevention and Healthy Promotion. (2008). Healthy youth!

Childhood obesity. Retrieved from

<http://www.cdc.gov/HealthyYouth/childhoodobesity/index.htm>

Nihiser, A., Lee, S. Wechsler, H., McKenna, M, Odom, E., Reinold, C., et al. (2007).

Body mass index measurement in schools. *Journal of School Health*, 77(10). Retrieved

from <http://www.ashaweb.org>

O'Rourke, T. W. (2005, March). Promoting school health-an expanded paradigm. *Journal of*

School Health, 75 (3), 112-114.

Patton, M. Q. (2002). *Qualitative research and evaluation methods*. (3rd ed). Thousand Oaks, CA: Sage.

Pearlman, D. N., Dowling, E., Bayuk, C., Cullinen, K., & Thacher, A. K. From concept to practice: Using the school health index to create healthy school environments in Rhode Island elementary schools. *Preventing Chronic Disease*. Retrieved from http://www.cdc.gov/pcd/issues/2005/nov/05_0070.htm

Penman, A. D. (2005, February). *The changing distribution of body mass index in the Mississippi adult population, 1990-2003: Implications for public health policy*. Retrieved from *Dissertation International*. (1427153)

Stake, R. E. (1995). *The Art of Case Study Research*. Thousand Oaks, CA: Sage.

The Center for Disease Control and Prevention. (2008). *Prevalence of overweight among children and adolescents, 2001 [Data file]*. Retrieved from <http://www.cdc.gov/nchs/pressroom/01news/overweight99.htm>

U. S. Department of Health and Human Services, Centers for Disease Control and Prevention. (2004). Make a difference at your school. Retrieved from <http://www.cdc.gov/HealthyYouth/KeyStrategies>

U. S. Department of Health and Human Services, Centers for Disease Control and Prevention and Health Promotion. (2002). Behavioral Risk Factor Surveillance System Summary Prevalence Report. Retrieved from <http://www.cdc.gov/pdf/2001prvrpt.pdf>

Wechsler, H., McKenna, M. L., Lee, S. M., & Dietz, W.H., (2004, December). The role of schools in preventing childhood obesity. *National Association of State Boards of Education, The State Education Standard*, 4-12.

Weiller, R. M., Pigg, R. M., & McDermott, R. J. (2003, January). Evaluation of the Florida coordinated school health program pilot schools project. *Journal of School Health, 73* (3) 3-8. doi:10.1111/j.1746-1561.2003.tb06551.x

Weiss, R. S. (1994). *Learning from strangers: The art and method of qualitative interview studies*. New York: The Free Press.

LIST OF APPENDICES

Appendix A

School Health Index Blank Scorecard-Center for Disease Control and Prevention

	Low		Medium		High
	0- 20%	21- 40%	41- 60%	61- 80%	81- 100%
Module I School Health and Safety Policies and Environment					
Module II Health Education					
Module III Physical Education and Other Physical Activity Programs					
Module IV Nutrition Services					
Module V Health Services					
Module VI Counseling, Psychological, And Social Services					
Module VII Health Promotion for Staff					
Module VIII Family and Community Involvement					

Appendix B

John D. Bower School Health Network Evaluation Plan
2005-2008 Data Collection Form

Coordinated School Health Component	Objective(s)	Related Programs and Activities	MOUs Established
Health Instruction	Increase student participation in Health Education	<i>Family Nutrition Program Mississippi State University Extension Service</i>	<i>Mississippi State University Extension Service</i>
Implementation Dates and Timelines of Programs and Activities	Person(s) Responsible	Data Collection Timeline	Data to Report (Measurable indicators)
<i>August 2005 - May 2008</i>	<i>Principal will continue to provide what is necessary to maintain the program.</i>	School to collect and submit data by June 29	<i>100% of fourth and fifth grade students have participated in the program in the following school years 2005-2006, 2006-2007, and 2007-2008</i>
Comments:			
<p>FNP is a federally funded program with the following broad objectives for the program participants: To learn nutrition principles, such as how to use the Dietary Guidelines and My Pyramid, good meal management and food safety practices, how to use good food shopping strategies to cut costs, and the skills needed to enhance family meals. Students are taught using the Organ-Wise Guys puppets and readily accessible items for physical fitness, such as water bottles filled with sand. Students attend health education class for 45+ minutes one day per week</p>			

Coordinated School Health Component	Objective(s)	Related Programs and Activities	MOUs Established
Physical Education	Increase student participation in Physical Education	<i>SPARK Elementary Physical Education Program - Sports, Play and Active Recreation for Kids - SPARK is a research-based physical activity/ nutrition program.</i>	
Implementation Dates and Timelines of Programs and Activities	Person(s) Responsible	Data Collection Timeline	Data to Report (Measurable indicators)
<i>January 2007 - May 2008</i>	<i>Certified PE instructor will be responsible for implementing the SPARK curriculum and for planning lessons consistent with state standards during the academic year. Instructor will also be responsible for supervising the PE instructional assistant.</i>	<i>School to collect and submit data by June 29</i>	<i>100% of fourth and fifth grade students received Physical Education during the 2005-2006 and 2006-2007 school years. Students average 50 minutes of physical education each week. Students participated in PE one day each week. Forty minutes was the average percent of time during PE class that students were physically active. In 2007-2008, students attended two 45-minute classes of PE per week.</i>

Comments:

Peaceful Playgrounds is a project that is being worked on at this time with the school PTO and Junior Auxiliary in an effort to provide teachers with an easy to use lesson plan each week to use with students during a daily mandatory recess. "The playground is an essential part of any school and every community. Children spend many hours of their day occupying themselves with what the playground has to offer. The nearby neighborhood may enjoy both its appearance and its utility." "The Peaceful Playgrounds Program distributes students evenly throughout the playing area and fields. With colorful markings and plenty of equipment, the objective is to engage the maximum number of students in healthy, often educational, purposeful play." Quotes from www.peacefulplaygrounds.com/benefits. In the 2007-2008 school year students were involved in more outdoor activity than before. Students had access to the Peaceful Playgrounds areas plus a newly sodded playground area across the entire back campus. This nearly \$10,000 project was carried out by a concerned parent who worked with the school and community to improve the play area for students.

Coordinated School Health Component	Objective(s)	Related Programs and Activities	MOUs Established
Health Services	Increase student access to medical care	<i>EPSDT School Nurse Program - provides primary health care, first aid, emergency care and preventive health services (screenings and in-services) are available to all students and staff in this school.</i>	
Implementation Dates and Timelines of Programs and Activities	Person(s) Responsible	Data Collection Timeline	Data to Report (Measurable indicators)
<i>In 2005-2006, the school had a full-time assistant who provided first aid and determined if the district RN should be called. Health services have been in place since August 2006 when the school attained a full time EPSDT nurse. In the 2007-2008 school year the school continued to have the use of 1 RN and 1 nursing assistant.</i>	<i>Director of Nursing for EPSDT nurse</i>	<i>School to submit data by June 29</i>	<i>In 2006-2007, the nurse provided services to 6840 students and 339 staff members including 3039 medications dispensed 314 parent contacts completed 97 EPSDT screenings. In addition, services for 1686 students through Height/Weight/BMI, vision screenings, and asthma education. 1 nurse and 1 nursing assistant: 663 students for the 2006-2007 SY. In 2007-2008, the nurse provided 7695 student visits and 391 staff visits, dispensed 2339 medications, made 1625 parent contacts and completed 160 EPSDT screenings. In addition, she provided services for 2199 students through the following services. August - Height/Weight/BMI; October - Lion's Club Vision Screens; November - Flu Shots; December - Vision Research; April - Height/Weight/BMI; and May - Puberty Education.</i>

Comments:

Plans for the 2007-2008 school year include having more students who already qualify for a Medicaid screenings serviced, as well as assisting students who are inactive with Medicaid in becoming current so they can be screened. The nurse will also be responsible for providing one in-service per month to teachers during a regularly scheduled faculty meeting. In 2007-2008, the nurse's number of EPSDT screenings increased. The nurse was not able to provide training each month; however, she was more available for questions from teachers and she did provided asthma education training for all staff.

Coordinated School Health Component	Objective(s)	Related Programs and Activities	MOUs Established
Nutrition Services	Increase student access to nutritional meals	<i>National School Breakfast and Lunch Program.</i>	
Implementation Dates and Timelines of Programs and Activities	Person(s) Responsible	Data Collection Timeline	Data to Report (Measurable indicators)
<i>Breakfast and Lunch Program fully implemented.</i>	<i>Food Service Director</i>	School to collect and submit data by June 29	<i>In 2006-2007, 69% of students participated in the breakfast and lunch program. In 2007-2008, 61% of students participated in the breakfast and lunch program.</i>

Comments:

The staff and PTO are working together to make the cafeteria a more pleasant dining experience for students in the effort to increase participation in the school's breakfast and lunch programs. In 2007-2008 school year, School Breakfast and School Lunch weeks were celebrated with stickers and pencils for the students and t-shirts for the cafeteria staff.

Coordinated School Health Component	Objective(s)	Related Programs and Activities	MOUs Established
Counseling and Psychological Services	Increase student access to counseling and psychological services	<i>Counseling and psychological services are provided by the school counselor and the full-time Life-Help counselor</i>	<i>Life-Help School-Based Services</i>
Implementation Dates and Timelines of Programs and Activities	Person(s) Responsible	Data Collection Timeline	Data to Report (Measurable indicators)
<i>August 2005 - May 2008</i>	<i>School counselor and Life-Help counselor</i>	<i>School to collect and submit data by June 29</i>	<i>During 2006-2007, there were 107 student contacts for guidance and counseling. Six reports were filed with DHS. In the 2007-2008 school year, there were 223 student contacts for guidance and counseling. In February 2008, GUES experienced a student suicide. School and community grief counselors and pastors worked with staff, students, and parents for weeks and months to follow.</i>
Comments:			

Coordinated School Health Component	Objective(s)	Related Programs and Activities	MOUs Established
Counseling and Psychological Services	Decrease juvenile arrests and arrest rates	<i>same as above</i>	
Implementation Dates and Timelines of Programs and Activities	Person(s) Responsible	Data Collection Timeline	Data to Report (Measurable indicators)
<i>same as above</i>	<i>same as above</i>	School to collect and submit data by June 29	<i>There were no juvenile arrests of students in 2005-2006 or 2006-2007 or 2007-2008.</i>
Comments:			
The counselor and Life-Help counselor will be responsible for providing one in-service per month to teachers during the regularly scheduled faculty meeting. These counselors will also work together to provide one character education lesson per month for teachers to sign up for their students to participate in.			

Coordinated School Health Component	Objective(s)	Related Programs and Activities	MOUs Established
Healthy School Environment	Improve compliance with MDE standards for a healthy school environment	<i>School Health Committee has written health and safety policies. We have a full time security guard and a resource officer is on-call during school hours.</i>	<i>Safe Security and the local Department</i>
Implementation Dates and Timelines of Programs and Activities	Person(s) Responsible	Data Collection Timeline	Data to Report (Measurable indicators)
<i>Security guards have been in all district schools for more than 10 years. In the 2006-2007 school year, the school added one school resource officer. His primary focus is the middle school and high school, but he is on-call for the elementary schools as well. In the 2007-2008 school year an additional school resource officer was added at the middle school. There are plans to add a third officer for the upcoming school year.</i>	<i>The assistant principal is the coordinator of the SHC. The school has a resource officer and a truancy officer.</i>	<i>School to collect and submit data by June 29</i>	<i>100% compliance - no recommendations made by MDE in the 2006 audit.</i>
Comments:			

Coordinated School Health Component	Objective(s)	Related Programs and Activities	MOUs Established
Healthy School Environment	Decrease general health risk behaviors	<i>Same as above</i>	
Implementation Dates and Timelines of Programs and Activities	Person(s) Responsible	Data Collection Timeline	Data to Report (Measurable indicators)
<i>Same as above</i>	<i>Same as above</i>	School to collect and submit data by June 29	<i>During 2006-2007, there were 1,381 total student discipline referrals to the office. 72% of those referrals were male students. 48% of all referrals were 5th grade males. There was one expulsion. In the 2007-2008 school year there were 1,946 total student discipline referrals to the office. 70% of those referrals were male students. 30% of all referrals were 5th grade males. There were no expulsions.</i>
Comments:			
There has never been a juvenile arrest in our school.			

Coordinated School Health Component	Objective(s)	Related Programs and Activities	MOUs Established
Health Promotion for Staff	Improve staff wellness activities and participation	<i>Fitness Room</i>	
Implementation Dates and Timelines of Programs and Activities	Person(s) Responsible	Data Collection Timeline	Data to Report (Measurable indicators)
<i>October 2006 - May 2008</i>	<i>Certified PE instructor</i>	School to collect and submit data by June 29	<i>Twelve staff members use the Fitness Room on a regular basis. 30 staff members have logged in at some point. In the 2007-2008 school year the fitness equipment was moved to the gym due to the need of classroom space. The equipment was not used as much by the staff because of the lack of privacy. Plans for the upcoming year are to move the equipment back to a classroom.</i>
Comments:			

Coordinated School Health Component	Objective(s)	Related Programs and Activities	MOUs Established
Health Promotion for Staff	Decrease staff absenteeism	<i>Fitness Room and Weight Watchers at Work - The district held a health fair for all district staff members at the end of the 2006-2007 school year</i>	
Implementation Dates and Timelines of Programs and Activities	Person(s) Responsible	Data Collection Timeline	Data to Report (Measurable indicators)
		School to collect and submit data by June 29	<i>Of 59 staff members (not including cafeteria staff, janitors or security), a total of 402.5 days were missed due to sickness/illness or need of medical care. Approximately 4% of total days. In 2007-2008, of 59 staff members (not including cafeteria staff, janitors or security), a total of 992.5 days were missed due to sickness/illness or need of medical care. Approximately 9.5% of total days. Of those 992.5 days, 298 days were missed due to 3 maternity leaves and 1 major illness. Minus those absences it would be 6.6% of total days.</i>
Comments:			

Coordinated School Health Component	Objective(s)	Related Programs and Activities	MOUs Established
Health Promotion for Staff		<i>Weight Watchers at Work</i>	
Implementation Dates and Timelines of Programs and Activities	Person(s) Responsible	Data Collection Timeline	Data to Report (Measurable indicators)
<i>January 9, 2007 - September 11, 2007</i>	<i>Principal</i>	<i>School to collect and submit data by June 29</i>	<i>36 staff members participated in the first 12 weeks. 24 continued the next 10 weeks with 5 new members. The next session begins July 9 with 20+ members anticipated. As of June 2008, Weight Watchers still continues. Total pounds lost = 1475.</i>

Comments:

The school staff has complete 2 sessions of WW at Work funded by the Bower Health Grant. July 9th will begin the third session. Participants will pay \$110 for the 10 week session. We are working to provide extra fitness and health avenues for teachers - contacting CURVES fitness gym for women only to see what great deal they can provide for teachers. We will be offering a package deal for teachers only at CURVES to begin in August 2008.

Coordinated School Health Component	Objective(s)	Related Programs and Activities	MOUs Established
Family and Community Involvement	Increase parent and community involvement	<i>Newsletter - <u>G</u>etting <u>Y</u>ou <u>E</u>xcited about <u>S</u>chool Newsletter</i>	
Implementation Dates and Timelines of Programs and Activities	Person(s) Responsible	Data Collection Timeline	Data to Report (Measurable indicators)
<i>August 2007 - May 2008</i>	<i>Assistant Principal</i>	<i>School to collect and submit data by June 29</i>	<i>All students' families will receive the school newsletter each month. It will contain information about health, safety, and parenting.</i>
Comments:			

Coordinated School Health Component	Objective(s)	Related Programs and Activities	MOUs Established
Family and Community Involvement		<i>Family Perspectives Calendar from Premier Agendas</i>	
Implementation Dates and Timelines of Programs and Activities	Person(s) Responsible	Data Collection Timeline	Data to Report (Measurable indicators)
<i>August 2007 - May 2008</i>	<i>Principal</i>		<i>All students' families will receive the Family Perspectives Calendar. It will contain important dates for students and parents as quotes about health and fitness.</i>

Comments:

This is not an area that we have focused on in the past. We are working with PTO and the Health Council to come up with ideas about how to increase family and community involvement. 2007-2008, all families received at no cost the calendar. We also designed and implemented the school webpage. The website has a link for every teacher plus a Health is Academic! button so parents and students can learn about health, fitness and nutrition anywhere they can access the Internet.

Coordinated School Health Component	Objective(s)	Related Programs and Activities	MOUs Established
All (Overall)	Increase student engagement	<i>All of the Above</i>	
Implementation Dates and Timelines of Programs and Activities	Person(s) Responsible	Data Collection Timeline	Data to Report (Measurable indicators)
<i>All of the Above</i>	<i>Principal</i>	<i>School to collect and submit data by June 29</i>	<i>The school does not offer any clubs or afterschool activities at this time. In the 2007-2008 school year plans were made to develop clubs and build time into the 2008-2009 schedule for clubs/activities.</i>

Comments:

Three of our teachers are working together to begin some before and after school clubs including a writer's workshop, a school newspaper and a healthy hearts group.

Coordinated School Health Component	Objective(s)	Related Programs and Activities	MOUs Established
All (Overall)	Decrease student retention	<i>All of the Above</i>	
Implementation Dates and Timelines of Programs and Activities	Person(s) Responsible	Data Collection Timeline	Data to Report (Measurable indicators)
<i>All of the Above</i>	<i>Principal</i>	School to collect and submit data by June 29	<i>In the 2006-2007 school year, 21 students were not advanced to the next grade. That is 3.2% of all students in grades 4 and 5. In the 2007-2008 school year, extended school year was implemented for the first time. Thirty students who had failed one subject (reading, language, or math) or who were not performing well in one of those subjects were given the opportunity to attend ESY from June 2 - June 29 from 8:00am - 12:00pm. After ESY, only 3 students were not advanced to the next grade. That is 0.4% of all students in grades 4 and 5.</i>

Comments:

ESY was a success program for the students. Faculty comments about the program have all been positive. There were 2 certified teachers and 2 assistants would work with the 30 students in the areas of reading, language and mathematics.

Coordinated School Health Component	Objective(s)	Related Programs and Activities	MOUs Established
All (Overall)	Increase ADA	<i>All of the Above</i>	
Implementation Dates and Timelines of Programs and Activities <i>All of the Above</i>	Person(s) Responsible <i>Principal, and all GUES Staff with the Truancy Officer</i>	Data Collection Timeline <i>MDE to submit data by June 29</i>	Data to Report (Measurable indicators) <i>In the 2005-2006 school year, the average daily attendance was 94%. In the 2006-2007 school year, the average daily attendance was 93.75%. In the 2007-2008 school year, the average daily attendance was 95.63%.</i>
Comments:			

Coordinated School Health Component	Objective(s)	Related Programs and Activities	MOUs Established
All (Overall)	Improve MCT test scores	<i>All of the Above</i>	
Implementation Dates and Timelines of Programs and Activities	Person(s) Responsible	Data Collection Timeline	Data to Report (Measurable indicators)
<i>All of the Above</i>	<i>Principal and all staff</i>	MDE to submit data by June 29	<i>In 2005-2006, the school was a Level 5 school. The school did not meet AYP this year. In 2006-2007, the school was a Level 3 school. The school did meet AYP this year.</i>

Comments:

Additional indicators will be documented through the completion of the School Health Index (SHI) by the end of June 2007 and June 2008.

VITA

Sandra Stroud Howell, daughter of Joy Gillon Stroud and the late Charles Robert Stroud, was born on September 10, 1952 in Grenada, Mississippi. She attended the local public elementary school and graduated from John Rundle High School in Grenada, Mississippi in 1970. Sandra Stroud Howell has been a high school assistant principal for the past five years. Prior to becoming a school administrator, Mrs. Howell was a classroom teacher for 19 years during which she received national board certification through the National Board for Professional Teaching Standards.

Mrs. Howell received a Bachelor's of Science Degree in Secondary Education from the University of Mississippi in 1973, a Master's degree in Curriculum and Instruction from Delta State University in 1990 and an Educational Specialist's Degree from the University of Mississippi in 2004.

Sandra Howell has active affiliation in numerous professional educational organizations and is a member of All Saints Episcopal Church, Grenada. Mrs. Howell is a tennis enthusiast and loves spending time with her grandchildren, Cooper and Macy.