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Perceptions of Non-Traditional Programs within Missouri School Districts

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Perceptions of Non-Traditional Programs within Missouri School Districts

by

Cherie L. Norman

June 2015

A Dissertation submitted to the Educational Faculty of Lindenwood University

in partial fulfillment of the requirements for the degree of

Doctor of Education

School of Education

Perceptions of Non-Traditional Programs within Missouri School Districts

by

Cherie L. Norman

This Dissertation has been approved as partial fulfillment
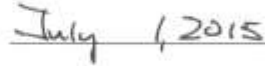
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Lindenwood University, School of Education

_____   _July_ _1, 2015_

Dr. Dennis Cooper, Dissertation Chair   Date

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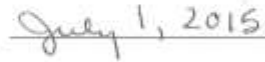
Dr. Kathy Grover, Committee Member   Date

_____   _July 1, 2015_

Dr. Rebecca Bernard, Committee Member   Date

Declaration of Originality

I do hereby declare and attest to the fact this is an original study based solely upon my own scholarly work at Lindenwood University and I have not submitted it for any other college or university course or degree.

Full Legal Name: Cherie LaRae Norman

Signature: ~~Cherie LaRae Norman~~ Date: 7/1/15

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Abstract

The purpose of this study was to analyze perceptions of Missouri public school administrators regarding twenty-first century learning skills in choice and innovative schools, and to report the research-based best practices those schools are using with students. For this study, qualitative data were collected through a questionnaire and then coded for analysis (Fraenkel et. al, 2014). The questionnaire, used to elicit information from 10 administrators of Missouri public schools housing a choice or innovation program, was the anchor of the research design. The results of this study indicated choice and innovative schools are incorporating a combination of current research-based practices in programming. The significance of this research is the reference, made available to educators, of current research-based practices being used to accommodate the changing needs of students in classrooms across the United States (Livingston, 2013).

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Chapter One: Introduction

The history of the United States public educational system dates to the mid-seventeenth century when religious schools were first introduced (Thattai, 2001). Since the inception of public education in the United States, people have discussed educational reform (Thattai, 2001). Today, educators find the world moving at a fast pace, a pace which students are able to maintain through technology (Robinson, 2011). Richardson (2015) stated educators have to embrace the new ways in which students are learning. There are numerous variables to finding success in public school in the United States (Jensen, 2009). Reform is at the forefront of the minds of educators and legislators, yet time is standing still while students move forward with educators following at a slow pace (Robinson, 2013b).

Background of the Study

Hundreds of years ago, the people of the United States of America saw a need to educate the young (Apollon, 2013). Most learning and teaching was done in the home (Apollon, 2013). According to Dominique Apollon (2013), wealthier families would provide private tutors in their homes to teach the children. Apollon (2013) stated the Puritans were the first to acknowledge children needed to learn to read, write, compute math, and have core values instilled from an early age.

Apollon (2013) wrote public education in the United States stems back to 1647 when the General Court of Massachusetts Bay Colony decreed every town of 50 families would be required to have one elementary school and every town of 100 families would be required to have one Latin school. The end goal of Massachusetts Bay Colony was to

ensure Puritan children would learn to read the Bible and be able to understand basic information about the Calvinist religion (Apollon, 2013). The idea of a free public education for children expanded when the Founding Fathers were writing the Articles of Confederation in 1776 (Fife, 2013). Fife (2013) stated Thomas Jefferson had a vision that America, as a democratic society, should educate children with a free public education. Thomas Jefferson had a two-track system in mind, the labor track and the learned track (Fife, 2013). Thomas Jefferson was once quoted as saying "By having two tracks we will be raking the geniuses from the rubbish" (as cited in Fife, 2013, p. 45). Apollon (2013) accounted the Confederate Congress passed the Ordinance of 1785, which essentially created the community school concept known today.

The Northwest Territory was surveyed and sold, and then each township was divided into six square miles on each side, or 640 acres of land (Apollon, 2013). Each township had 36 sections and every 16th section of land was dedicated to a public school; thus the community school concept was born (Apollon, 2013). Apollon (2013) stated Jefferson believed by educating the young; the United States of America would be able to fend off the forces of tyranny throughout history.

Fife (2013) discussed the purpose of the New York Public School Society, formed by wealthy businessmen in 1805 was to provide education for children. New York Public Schools followed the Lancastrian model, in which one master taught hundreds of students of all ages at the same time (Fife, 2013). The master taught using rote lessons to older students who in turn taught the lessons to younger students (Fife, 2013). This Lancastrian model of school emphasized discipline and obedience, which was exactly what businessmen wanted in factory workers (Fife, 2013).

Fife (2013) stated Massachusetts passed a law in 1827 making public school, of all grades, free of charge for all students. By the 1830s southern states had put laws in place forbidding slaves to be taught to read or write (Fife, 2013). Even with those laws in place, approximately 5% of slaves learned literacy skills (Fife, 2013).

Between 1820 and 1860 the United States made major shifts in how and where citizens went to work (Apollon, 2013). Apollon (2013) stated family farms were being industrialized, causing family farmers to go to the city to find work, typically factory work. Industry-type jobs were on the increase in America, and so was the immigrant population (Apollon, 2013). Factory owners and businessmen looked to public schools to produce future employees who were job-ready, skill-ready, obedient, and docile to help move the country forward (Robinson, 2013b). This was the beginning of the Industrial Revolution (Apollon, 2013).

In 1851, Massachusetts passed the first compulsory education law to ensure an education for the children of poor immigrants (Apollon, 2013). Horace Mann led the charge for the state to educate the young (Fife, 2013). The people of Massachusetts wanted to make sure children were civilized, obedient and restrained so they would make good factory workers (Robinson, 2013b). Fife (2013) discussed state leaders believed uneducated workers could cause upheaval in the workplace. Fife (2013) stated from 1657 through the mid-1800s the United States' school system was established primarily based on the need for community schools and schools taught children the ways in which to be better factory workers.

In his discourse on educational history, Fife (2013) discussed the next 100 years when educators dealt with laws and lawsuits regarding the rights of students in public

schools. The court cases included *Plessy v. Ferguson*, dating back to 1896 regarding

racial segregation in public schools; schools were to be separate but equal. Fife (2013)

pointed out in 1905 the United States Supreme Court ruled Chinese immigrants had the

right to a free public education. In 1954, the *Brown v. Board of Education of Topeka*

decision reversed the 1896 ruling regarding segregation. Educational segregation was

abolished based upon the argument separate was not always found to be equal in public

schools and all children, no matter their race, deserved the same quality education.

In the United States, the public education system is solely run by government

entities (Watson, 2011). Individual states, rather than the federal government, have the

primary authority over public education (Watson, 2011). Watson (2011) stated every

state developed a department of education and enacted laws regarding employment,

school finance, student attendance, and curriculum design in schools. Today, local

districts oversee the administration and day-to-day operations of schools (Watson, 2011).

There are a few state government entities have overriding jurisdiction concerning health

and safety (Watson, 2011). Watson (2011) discussed public schools in Missouri relies

heavily on local property taxes to meet the majority of school expenses. Therefore,

schools across America tend to reflect the educational values and financial capabilities of

the communities in which they are located (Watson, 2011). Watson (2011) shared

wealthier communities have a larger tax base and more funds funneled into their school

budgets, while poorer communities have limited revenues to educate their children.

By the middle of the twentieth century, most states took a more active regulatory

role than in the past (Watson, 2011). States consolidated smaller school districts into

larger districts with common practices and procedures (Watson, 2011). In 1940, there

were over 117,000 school districts in the United States, but by 2000 the number had decreased to just over 15,000 due to consolidation measures (Watson, 2011). State legislatures have also taken more responsibility for financing education (Watson, 2011).

Conceptual Framework

Educating America's young has been a topic for debate since the seventeenth century (Apollon, 2013). School reform has been discussed among legislators and educators alike in the United States (Livingston, 2013). Hartman (2008) described the awakening in the late 1950s when the Soviet Union's government launched Sputnik into outer space and United States citizens realized how far technologically behind the U.S. was compared to other countries. The concerns students were not being as well educated as students in other parts of the world continued into the late 1970s and early 1980s (Hartman, 2008). Thus, the *A Nation at Risk* report was published and caused panic regarding education in the United States that continues to exist today (as cited in Hartman, 2008).

Twenty-first century schools are no longer bound by traditional classroom practices (Livingston, 2013). Livingston (2013) stated the internet is a source, a tool, for students and educators that not only allows instant access to information, but also provides online learning opportunities for unlimited global learning for students. Livingston (2013) also stated with choice and innovation being implemented across the United States students and educators are able to redesign education and make teaching and learning more personal for students. In addition, Livingston (2013) posited schools and teachers are not obsolete. Students still benefit by meeting in classes where teachers

provide personalized coaching and instruction when students struggle with online learning (Livingston, 2013).

The current educational system was designed based on the thinking of the Industrial Revolution or the assembly line approach (Robinson, 2011). Robinson (2011) stated, "The rise of industrialism influenced not only the structure of mass education, but also its organizational structure" (p. 57). Schools were designed to give students knowledge, provided by the teacher, not to allow students to be innovative, independent thinkers (Wagner, 2012). Wagner (2012) a researcher for Harvard Innovation Education explained education is growing exponentially. Wagner (2012) explained today knowledge is free, just like the air. Wagner (2012) stated there is no competitive advantage today in knowing more than anyone else, because the world does not care about knowledge gained; rather the world cares about what is done with knowledge.

Wagner (2012) conducted a two-year study focusing on interviews with business executives, college professors, community leaders, and recent graduates to help define what it takes for Americans to be competitive in today's global workforce. Wagner (2012) found a set of competencies all graduates need to exhibit to be successful in the work force. The competencies Wagner (2012) identified include the following:

1. Critical thinking and problem solving abilities (the ability to ask the right questions)

2. Collaboration across networks and leading by influence

3. Agility and adaptability

4. Initiative and entrepreneurialism

5. Accessing and analyzing information

6. Effective written and/oral communication

7. Curiosity and imagination (p. 17)

Furthermore, Wagner (2012) discussed the current educational system has become obsolete. The entire educational system is in need of a complete makeover, not just an overhaul. The United States ranks behind 16 other countries in the ability to read including Poland, Estonia, and South Korea (Kenny, 2012). Mathematics rankings are even lower with the U.S. falling behind Slovenia, Hungary and Taiwan (Kenny, 2012). The United States also has bragging rights for having some of the largest achievement gaps in the world (Kenny, 2012).

Statement of the Problem

A student does not need to know all of the answers, but should understand how to find all of the answers (Robinson, 2011). Achieving a more effective education will involve a major shift in thinking and current policies regarding traditional classrooms (Robinson, 2011). In 1970, the United States had one of the highest graduation rates in the world (Robinson, 2013b). At last count the United States had one of the lowest graduation rates ranking 23rd out of 28 countries surveyed (Robinson, 2013b). Although *A Nation at Risk*, No Child Left Behind, and now the reauthorization of the Elementary and Secondary Education Act (ESEA) have been enacted, there is still lack of change or shift in the way of educating children (Robinson, 2013b).

Students are currently educated in the manner in which the educational system was designed during the Industrial Revolution (Robinson, 2011). Attention Deficient Hyperactivity Disorder (ADHD) is on the rise in young children, which could be due to a correlation between boredom at school and this disorder (Robinson, 2011). The industrial

and institutional nature of America's schools has not changed with the Information Age (Robinson, 2013b). Government leaders need to address the structures of America's schools in order to meet the needs of today's students (Robinson, 2013b).

Purpose of the Study

The purpose of this study was to gain insights into school choice and best practices in education today (Spector, 2011). Sir Ken Robinson (2011) stated the end goal is to help all students achieve to the highest level of learning and be global thinkers who problem solve. School choice should bring about improved academic performance, which includes increasing student engagement and efficient production for school districts (Axelson & Flick, 2011). The current system of community schools may no longer be an option for parents as they seek to find the best educational opportunities for their children, due to the disconnect between recent research in the area of student engagement and the basis on which our current educational system was founded (Robinson, 2011). Providing competition among schools, similar to competition among businesses will force every school to perform on a higher level (Robinson, 2011).

A choice school or program in Missouri is an innovative school which requires parents to apply for their child's admittance to attend the program (Missouri Department of Elementary and Secondary Education, 2015). Innovation refers to a school or classroom in which non-traditional practices are used (MODESE, 2014). In an innovation school or classroom there is no application process and innovation programs typically are in neighborhood community schools. The purpose of this study was to discover what relationship exists between choice or innovation schools and twenty-first century skills and student engagement.

Research Questions

The following research questions guided this study:

1. According to administrators, what is the perception regarding skills necessary for the twenty-first century?

2. According to administrators, what is the perception regarding student engagement with the implementation of their innovation programs?

Significance of the Study

The information gained from this study may aid educators and school boards when planning to address skills needed by students in the twenty-first century and beyond. The research focused on schools which already have choice or innovation programs in place and are demonstrating student success based on the program's standards of measure and on increased overall student engagement. According to Spector (2011) the educational system has been commonplace for several decades. With the introduction of technology, teachers have changed the manner in which they create and deliver lessons and instruction, but have not made the paradigm shift to teach children about technology (Spector, 2011). Children are vastly different than they were just a few decades ago (Robinson, 2011), and the variety of instructional platforms used for teaching have increased. With life experiences for children being so vastly different, educators struggle with educating students in classrooms (Axelson & Flick, 2011). Educators need to address individualized educational plans as part of school reform changes (Axelson & Flick, 2011). School choice and innovation programs may provide an effective platform for individualized educational plans (Robinson, 2011).

Definition of Key Terms

   Accountability. Accountability is the notion people (e.g., students or teachers) or an organization (e.g., a school, school district, or state department of education) should be held responsible for improving student achievement (EdSource, 2013).

   Advanced placement. Advanced placement involves a cooperative educational program between high school students and institutions of higher education that offers high school students the opportunity to complete college-level courses and earn college credit (EdSource, 2013). In addition, many college admission officials favor students who have completed advanced placement coursework and have taken the exams (EdSource, 2013).

   Alignment. Alignment is the manner in which assessment, curriculum, instruction, textbooks and other instructional materials, as well as teacher preparation, professional development, and systems of accountability all reflect and reinforce the educational program's goals and objectives (EdSource, 2013).

   Attention deficit disorder (ADD). Attention deficit disorder (ADD) is any of a range of behavioral disorders occurring primarily in children, including such symptoms as poor concentration, hyperactivity, and impulsivity causing children to have poor attention at school (U.S. National Library of Medicine, 2013).

   Attention deficit hyperactivity disorder (ADHD). Attention deficit hyperactivity disorder symptoms include difficulty staying focused and paying attention, difficulty controlling behavior, and hyperactivity (over-activity) (U.S. National Library of Medicine, 2013). These symptoms can make it difficult for a child with ADHD to

succeed in school, get along with other children or adults, or finish tasks at home
(Medicine, 2013).

Benchmarks. Benchmarks are marking points of a specific level of student
achievement expected of students at particular ages, grades, or developmental levels
(EdSource, 2013). Benchmarks can be used as checkpoints to monitor progress in
meeting performance goals within and across grade levels (EdSource, 2013).

Blended-learning. The term blended-learning generally applies to the practice of
using both online and in-person learning experiences when teaching students (The
Glossary of Education Reform, 2013).

Charter schools. Charter schools are schools operated independently under a
performance agreement with a school district, a county office of education (COE), or the
State Board of Education (EdSource, 2013). Charter schools are funded on a per-pupil
basis, freed from most state regulations that apply to school districts and COEs, usually
able to hire their own teachers and other staff, and subject to closure if they fail to meet
their promises for student outcomes (EdSource, 2013).

Differentiated instruction. Differentiated instruction is also referred to as
individualized or customized instruction (School Wise Press, 2008). The curriculum
offers several different learning experiences within one lesson to meet students' varied
needs or learning styles (School Wise Press, 2008).

Flipped classroom/instruction. A flipped classroom or instruction is a form of
blended-learning (The Glossary of Education Reform, 2013). Flipped instruction refers
to the ability for students to use technology to receive instruction away from a school

setting in order to free up time for more personalized-learning while at school with the teacher (The Glossary of Education Reform, 2013)

Innovation program. Innovation is the process of making changes to something established by introducing something new (The Glossary of Educational Reform, 2013). Innovation applied to radical or incremental changes to the educational process is an innovation program (The Glossary of Education Reform, 2013)

Inquiry-based learning. Inquiry-based learning includes a wide variety of educational and instructional techniques focused on student questions and connecting what is taught in school to real-world issues, problems, and applications (The Glossary of Education Reform, 2013).

International baccalaureate (IB). International baccalaureate (IB) programs include a set of examinations intended to qualify successful candidates for higher education in any of several countries (International Baccalaureate, 2013).

Intervention. Intervention is the means by which school personnel assist students whether due to low performance or high performance (Western Washington University, 2012).

Magnet school. A magnet school focuses on a particular discipline, such as science, mathematics, arts, or computer science (School Wise Press, 2008).

MakerSpace. A makerspace is a dedicated area in a school where students can gather to create, invent and learn using a variety of media (Kroski, 2013).

Non-traditional education. Non-traditional education is an educational program that caters to the needs and abilities of children at each stage of their development (Northwoods Montessori, 2013).

Personalized-learning. Personalized-learning includes a diverse variety of educational programs, learning experiences, instructional approaches, and academic-support strategies intended to address the distinct learning needs, interests, aspirations, or cultural backgrounds of individual students in a classroom (The Glossary of Education Reform, 2013).

Project-based learning. Project-based learning is a systematic teaching method that engages students in learning important knowledge and twenty-first century skills through an extended, student-influenced inquiry process structured around complex, authentic questions and carefully designed products and learning tasks (Buck Institute for Education [BIE], 2011).

Scientific-based research. Scientific-based research involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to educational activities and programs (EdSource, 2013).

Student engagement. Student engagement has come to refer to how involved or interested students appear to be in their learning and how connected they are to their classes, their institutions, and each other (Axelson & Flick, 2011).

Twenty-first century learning. Twenty-first learning includes a broad set of knowledge, skills, work habits, and character traits educators, school reformers, college professors, employers, and others deem to be critically important to success in today's world (The Glossary of Education Reform, 2013)

Limitations of the Study

The study was limited to schools in Missouri that have choice or innovation classrooms, or are choice or innovation schools. Building administrators of choice

schools and programs in Missouri public schools completed the questionnaire. Missouri

schools were limited on the number of choice classes and programs that have been

adopted in other school districts throughout the United States. The schools in Missouri

considered choice or innovative are those that are research based and are typically

purchased programs; for example, the IB program, online educational platforms including

the learning management system (LMS), and character education programs (MODESE,

2014).

Although choice and innovation are not new terms in education, finding these

types of programs both building-wide and in classes within buildings can be very

difficult. There are numerous countries ahead of the United States regarding student

achievement and success in school (Wolk, 2011). Currently, one of the United States

barriers is with legislators who believe the educational system is strong and only needs to

be ratcheted up to keep the pace with other countries (Wolk, 2011). It is difficult to bring

about sweeping changes in schools when there is so much resistance; the traditional

public school culture is deeply embedded in all generations of society today (Wolk,

2011).

There are 10 choice or innovation classrooms identified in Missouri, by the

Missouri Department of Elementary and Secondary Education (MODESE). However,

there are numerous charter and magnet schools in St. Louis and Kansas City that offer

choice and innovation programming for students (MODESE, 2014). Those schools have

freedom from the bureaucracy faced by public school districts and can offer a wide

variety of choice and innovation easily through MODESE statutes (MODESE, 2014).

Summary

The educational system educators currently work under has been around for numerous decades (Robinson, 2013a). Since the inception of public education in 1647 educators have continuously been trying to change the models of school (Apollon, 2013). Reformers are always striving to make public education more effective, with higher accountability, and higher standards with a focus on the needs of students (Robinson, 2013b). Richardson (2015) stated twenty-first century schools should not be bound by traditional libraries as the only means of gaining knowledge. Although the forefathers could not have predicted what schools might have looked like in today's society, over 350 years ago reflection and change were occurring in America's schools (The Glossary of Education Reform, 2013). In the classroom, creativity has been taken away from educators and students (Robison, 2011). Creativity is essential for students to be productive in jobs in the future (Robinson, 2011). Robinson (2011) stated, "The aim is to enable students to be more effective in handling future problems and objectives; to deepen and broaden awareness of the self as well as the world; and to encourage openness to new ideas" (p.67).

Chapter Two includes a review of literature organized into similar themes regarding twenty-first century learning skills, student engagement and the numerous topics which impact those two critical areas of study. The methodology used for the study is described in Chapter Three of this dissertation. Analysis of the data and a summary of the findings are detailed in Chapter Four and Chapter Five.

Chapter Two: Review of Literature

Educators understand the need to continually improve upon current practices. There is not one correct way to teach or to learn, and one size does not fit all in education. This is a pivotal time in education, similar to the Industrial Revolution time period, when a free public education system was being established (Robinson, 2011).

Educational Misconceptions

The word free in public education is a misconception (Robinson, 2013a). The word free is costing the tax payers billions of dollars each and every year, yet a Gallop poll shows 50% of American voters are dissatisfied with the current public education system (University of Southern California [USC] Rossier, 2011). Sir Ken Robinson (2013a) stated the current educational model was built on the premise of the Industrial Revolution, yet society is currently in the Information Age and schools have failed to keep the pace. Teachers are still teaching from basal reading books, first introduced at the turn of the nineteenth century (Fife, 2013). Although the books are now in color and the stories are more modern, teachers are still using a traditional reading model in some school districts across this country (Fife, 2013).

The United States is outspending other countries by billions on education (USC Rossier, 2011). In 2011, the United States spent a record $809.6 billion for education while countries like Japan, Germany, the United Kingdom, France and Brazil spent $160.6 billion to $114.0 billion for education (USC Rossier, 2011). In comparing United States' students to students in other countries, on literacy competencies, the United States ranks third out of a total of 12 countries including Finland, Russia, the United Kingdom, Australia, Canada, France, Denmark, Japan, Korea, Brazil, and Mexico (USC Rossier,

2011). In mathematic competencies, the United States' students ranks tenth when compared to the same countries and in science competencies, the United States' students ranks ninth when compared to the same 12 countries (USC Rossier, 2011).

Legislators increase the educational budget, thinking more money will solve the problem (Ravitch, 2010). Statistics show in the school year 1999-2000 the United States was spending approximately $9,292 per pupil per year and within a 10 year period the amount increased to $11,184 (Institute of Education Sciences, 2013). Those averages are based on total expenditures for public elementary and secondary schools in the United States amounting to $638 billion in 2009-2010, or about $12,743 per public school student (Institute of Education Sciences, 2013). These expenditures include $11,184 per student in current expenditures for operation of schools; $1,182 for capital outlay; and $376 for interest on school debt (Institute of Education Sciences, 2013). Expenditures are reported in constant 2011-2012 dollars, based on the Consumer Price Index (Institute of Education Sciences, 2013).

The current educational system dictates the age appropriate for a student to begin school across the United States. Missouri state statutes indicate a student must be age five on or before August 1 to qualify for kindergarten (MODESE, 2014). Sir Ken Robinson (2011) stated age does not always constitute readiness, and not all students age five are intellectually ready to begin school. Educators across America struggle with how to teach in a single classroom, especially with children at such various levels of experience and knowledge (Robinson, 2011). Students in a school are similar to a widget being made in a factory; students start school at age five and are pushed through the educational process for 13 years (Robinson, 2011). The system does not fail every child,

in every state, in the United States; children are learning in spite of the schools they

attend (Wolk, 2011), and they learn by life experiences as well.

There have been few educational changes throughout the past several decades.

The Soviet Union's launch of Sputnik spurred America to pass laws requiring change in

education (Wolk, 2011). Those sweeping changes had little effect on public schools and

America's educational system has struggled ever since that time period (Wolk, 2011).

The most recent wake up call for America has been the tracking data on student test

scores which have been on a steady decline with little explanation as to why this is trend

is occurring with students (Wolk, 2011). Educators and leaders struggle with how to

bring about school reform; society is so entrenched with the culture of schools that major

change would bring about major resistance from taxpayers (Wolk, 2011).

Schools are the very institutions taxpayers expect to educate children (Wolk,

2011). Public schools are not just for white affluent students; public schools are for all

children in America (Wolk, 2011). If the schools expected to educate children cannot

fulfill that mission, then those schools should be replaced with new institutions designed

to complete the task (Greene, 2011).

Most legislators are misdiagnosing the problems with education; they believe if

the system steps up a few notches and receives additional funding current failures will be

fixed (Greene, 2011). The legislators reject the argument the current system is obsolete

and out-of-step with the Information Age (Greene, 2011). Nothing short of radical

reform will do anything to come close to fixing the educational crisis in this country

(Berends, Cannata, & Goldring, 2011).

Federal Laws

President Barack Obama (U.S. Department of Education, 2010) stated in a presentation regarding The Blueprint for Reform in the reauthorization of the Elementary and Secondary Education Act (ESEA):

Every child in America deserves a world-class education. Today, more than ever, a world-class education is a prerequisite for success. America was once the best educated nation in the world. A generation ago, we led all nations in college completion, but today, 10 countries have passed us. It is not their students are smarter than students in the other countries. It is these countries are being smarter about how to educate their students. And the countries that out-educate us today will out-compete us tomorrow (p. 5).

President Barack Obama continued to state during his presentation:

Reforming our schools to deliver a world-class education is a shared responsibility–the task cannot be shouldered by the nation's teachers and principals alone. We must foster school environments where teachers have the time to collaborate, the opportunities to lead, and the respect all professionals deserve. . .This effort will also require our nation's best thinking and resources – to support innovative approaches to teaching and learning; to bring lasting change to our lowest-performing schools; and to investigate and evaluate what works and what can work better in America's schools (U.S. Department of Education, 2010, p. 5).

President Obama (2010) stated instead of educators labeling failures, successes will be rewarded. Instead of a snapshot of data, America will recognize progress and growth and

instead of investing in the status quo in education, America needs to reform public schools to accelerate student achievement (U.S. Department of Education, 2010).

Federal-Level School Improvement

Three decades of legislators have made the argument about school choice, vouchers, magnet schools, charter schools, and open enrollment districts (Jennings, 2010). With the federal government's NCLB, the nation has been forced to look at achievement and growth only through the lens of quantitative scores and data (Jennings, 2010). No Child Left Behind also brought about teachers who teach to the test and do not teach what children need to learn, thus showing fallacy in the test itself (Ravitch, 2010).

Although there are many Americans who dislike the NCLB legislation, it may be the largest catalyst for educational improvement in decades (Medlin, 2012). The NCLB legislation brought about a sense of competition among schools, districts, and states (Medlin, 2012). Greene (2011) stated competition in schools is valuable and implementing voucher systems, charter schools, magnet schools, and choice schools would be similar to the free market system.

The number of choice programs and schools is increasing throughout the United States (Hill, 2010). Currently, 43 states have voucher systems or some type of school choice in place (Berends et al., 2011). Many parents are becoming discontent with current practices in public education across the nation (Hill, 2010). Researchers have data showing many traditional schools are failing (Hill, 2010). Choice schools' data are not impressive yet, but Hill (2010) expressed over time choice schools will prevail in helping students succeed.

National School Issues

A report released in the fall of 2009 stated 75% of Americans would not qualify to serve in the United States military due to the lack of graduation, criminal records, or inability to serve for physical or mental deficits (Wolk, 2011). The price society will pay for failing schools and students will have an astronomical effect on the future (Wolk, 2011). The United States is experiencing the largest number of drop outs in history (Robinson, 2011). In 2011, Robinson stated 30% of entering ninth-grade students will drop out of high school by the time the students are in twelfth grade. Educators and parents cannot blame students for the underachievement; the problem is with the system in place in education (Robinson, 2011).

Hattie (2015) stated the problem with education does not actually rest all on education; poverty in America is partially to blame for the demise of public education. According to Jensen (2009), students who grow up learning how to handle appropriate emotional responses to everyday situations tend to have better behavior in schools. Students who grow up in poverty have a social dysfunction about school performance and appropriate response to failure in school, which can lead to catastrophic failure in school or dropping out (Jensen, 2009). Jensen (2009) stated children are hard wired by the time school begins, knowing the fight or flight reaction often causes educators to believe students are being disrespectful or non-compliant. Instead, fight or flight is often a mindset that comes from a poverty situation, a basic life skill learned by students to cope (Jensen, 2009). Certainly poverty is an issue facing the United States and is another variable in the plight of public education (Jensen, 2009).

Jensen (2009) stated there are three relational ideals educators should consider when dealing with behaviors from poverty students in class. According to Jensen (2009) the ideas are:

Educators have a need for reliable relationships with students. Students want the safety of a primary safe and reliable relationship. Students would prefer parents, positive friends, and teachers, but they'd take an "iffy" friend if no one else were available. The relationships that teachers build with students form the single strongest access to student goals, socialization, motivation, and academic performance. For your school to foster high achievement, every student will need a reliable partner or mentor.

Educators strengthening peers socialization for students. Socialization is the drive for acceptance that encourages students to imitate their peers and join groups, from clubs to cliques to gangs. Students want to belong somewhere. Evidence suggests that it is peers, not parents, who have the greatest influence on school-age students. If your school aims to improve student achievement, academic success must be culturally acceptable among your students.

Educators quest for importance and social status. This is the quest to feel special. Students compete for attention and social elevation by choosing roles that will distinguish them (e.g., athlete, comedian, storyteller, gang leader, scholar, or style maverick). Kids are very interested in what other kids do, whether others like them, and how they rate on the social scale. Every student will need to feel like the "status hunt" can just as well lead to better grades as better behaviors. (p.106)

Jensen (2009) stated educators can have a misconception about student behavior leading to worsening the issue rather than having an understanding about hardwiring.

Emotional and physical disorders can cause students to fail in school (Robinson, 2013b). Robinson (2013b) stated students are bored with rote memorization for standardized testing. The fact attention deficit disorder (ADD) and attention deficit hyperactivity disorder (ADHD) are on the rise in the United States is alarming (Robinson, 2013). According to the National Center for Disease Control ADHD and ADD rates have risen from 6.9% to 9% in children ages five through 17 between 1998 and 2009 (McMillen & Bhargava, 2012). The rate is much higher for school age boys than for girls, with 12.3% of boys and only 5.5% girls diagnosed with ADD or ADHD in 2009 (McMillen & Bhargava, 2012).

Dr. Timothy Fong, a psychiatrist known for research with children exhibiting symptoms of ADD and ADHD stated children playing video games are engaged (McMillen & Bhargava, 2012) Their brains are stimulated when playing video games, but students are not eager while in school (McMillen, 2012). Dr. Fong did not find video games were causing children to exhibit ADD or ADHD symptoms nor that mental illness is on the rise due to the violence in video games (McMillen & Bhargava, 2012).

Parents around the country, who have children with the diagnosis of ADD or ADHD, are on the lookout for schools that meet their children's needs (Cambell, 2013). One such school in Lawrence, Ohio focuses on the child as a whole, regardless of a medical diagnosis of ADD or ADHD, using the approach of the three As: acceptance, affirming and accountable (Cambell, 2013). The curriculum is hands-on and in alignment with the ways children learn through the five senses (Cambell, 2013). It is

important for parents of children who struggle in school to take an active role when trying to resolve problems (Sprinkle, 2013). Parents need to have a good understanding of how their children learn and how they react in social settings (Sprinkle, 2013). Not every school, even the community school is a good fit for every child (Cambell, 2013).

Kinesthetic classrooms are being utilized to help students with attention issues, not just for students diagnosed with ADD or ADHD (Cambell, 2013). These rooms are being set up with exercise balls instead of traditional chairs, exercise bicycle desks, floor pillows and treadmills (Griss, 2013). Experts are finding students who are glued in a seat all day tend to be dissociated to the learning; there is a measured decrease of oxygen supply to their brains (Griss, 2013). When students have the ability to move around it increases their ability to learn (Griss, 2013).

Mac (2014) stated a teacher can improve the attention span of a student by attempting the following list of suggestions:

Give a general overview first. Let the student(s) know what will be learned and why it is important in life.

Learning must be based on the student's interests.

Involve the student's interests. Devise interesting activities.

Use examples that capitalize on assignments.

Ensure that your style of presentation is enthusiastic and interesting.

Use game formats to teach and/or reinforce concepts and material.

Use concrete objects to assist in keeping the student's attention.

Incorporate movement into lessons. (p. 7)

According to Mac (2014), the ideas from teachers stem from twenty-first century learning goals.

Educators must find what is engaging to students; educators are no longer just teachers, but mentors as well (Robinson, 2010). The human mind is constantly responding to information being received; according to neurologist-turned-teacher Dr. Judy Willis (2010), the brain's job is to protect the owner from perceived threats. If a child is bored in school, then the child's brain is probably functioning properly (Willis, 2010). Schools today are very stressful, full of mandated standardized testing and preparation to get students to the point of taking those tests (Willis, 2010). Standards do not educate students, standards do not improve teachers, and standards are merely a framework of educational expectations and objectives (Wolk, 2011). Teachers and administrators are stressed over school performance and funding, and rightfully so in today's world (Willis, 2010). It is more likely today a high school student will drop out than their parents just a few years ago (Willis, 2010). Willis (2010) explained a recent survey of high school students regarding drop out revealed boredom is the number one cause, because material is not interesting or the material is not relevant to them in their lives. Most children have determined that dropping out is an option for them by fourth or fifth grade (Wolk, 2011). Dropping out is caused by failure in school (Wolk, 2011). Basically children who struggle to read from a very early age are likely to drop out of school (Wolk, 2011). Dropping out has a significant impact on America's economy, longevity and sustainability (Wolk, 2011).

According to Robinson (2011), there are two concepts to consider when thinking about school reform; innovation and imagination. Robinson (2011) stated that

imagination is the root basis for creativity, the ability to retrieve information that is not in a current state of thinking. Creativity causes the imagination to begin working, and innovations are implementing those new ideas into real-life (Robinson, 2010). Creativity exists in every person, although for some it is deep rooted and takes time to get to the surface in order to use (Robinson, 2011). Creativity can be used across the curriculum in all subject areas including, math, reading, science, history, health, and physical education (Robinson, 2011). According to Robinson (2011), being creative is not always allowing your mind to run wild; rather creativity is about original thinking, taking the information, refining, testing, and implementing for real-world applications.

Student engagement is at an all-time low with the removal of art, music and physical education in some districts (Willis, 2010). For children of all ages the school experience is not about worksheets; it is about the aesthetic experience and the visual presentation (Robinson, 2013b). Instead of trying to keep technology outside the school house doors, educators should be welcoming it with open arms (Teachnology, 2012). School districts should be funneling money into technology (Robinson, 2010). School budgets need to be reevaluated based on current student needs (Teachnology, 2012). Funding for text books should be reallocated and replaced with technology (Teachnology, 2012).

It is a difficult task for legislators to solve educational problems when they cannot agree on what the problems are in the United States (Hill, 2010). Trying to fix a broken system is not the answer to solving educational issues in the United States (Greene, 2011). Accountability is a good thing; it brings about change in the educational system (Medlin, 2012). Yet, standardized testing scores are on the decline at the same rate ADD

and ADHD are on the rise (Robinson, 2013a). Student engagement needs to increase

(Willis, 2010). New standards in education need to make learning real, especially

through connections to real world situations using technology (Willis, 2010).

The phrase student engagement has come to refer to how involved or interested

students appear to be in their learning and how connected they are to classes, institutions,

and each other (Axelson & Flick, 2011). Students who are engaged in school are more

likely to learn, retain knowledge, find the school experience rewarding, graduate, and

pursue higher education (Marks, 2000). Efforts to increase student engagement have

been a common theme for school reform over the past two decades (Greene, 2011).

Student engagement is a vital factor in a student's overall school experience; it brings

about a logical relationship to the student's achievement, and it is part of human

development (Marks, 2000). Students learn best by paying attention to people and

surroundings, putting together meaningful and enjoyable moments of time as part of the

process of socialization (Marks, 2000). Engagement implies a sense of belonging to the

group and an acceptance of the group and of the goals of the schooling (Marks, 2000).

Teacher-led learning and instruction will have a place in every classroom on

every level for years to come, but educators must understand if students are only listening

and not actively engaged, then the students are not cognitively challenged and retention

of information will not exist (Dorsey, 2013). The field of education has exploded with

new learning on brain research, learning styles, and technology; it is beyond what

educators can keep up with professionally (Hill, 2010). Every teacher is assigned

students who learn in numerous ways, and it is imperative when teachers plan to consider

all those learning styles so no student is left out of the educational process (Dorsey,

2013). Kendall Dorsey (2013) stated teachers must plan no down time for any students. Students must be interacting in order for the information to be retained (Dorsey, 2013). Student engagement is not a natural occurrence; rather engagement is a result of very careful, specific, effective planning on the teacher's part (Marzano, 2010). It is a challenging time for educators to keep every student cognitively engaged on high levels of thinking (Dorsey, 2013). Dorsey (2013) noted some key processes for educators to consider as they plan engaging lessons for students as follows:

Evaluation: Have students assess before and after an individual response. Before the response, you might prompt them with "Who thinks they know the answer?" or "Alright, listen closely and see if you agree."

After the response, you could ask, "Is that correct?" or "Do you agree?"

Questioning: Keep them thinking, inquiring and wondering.

Surveying: As opposed to asking one student, ask everyone the same question. This may require more of a multiple-choice method: "Which one do you believe is correct? Why?"

Individual white boards: Again, as opposed to asking one person, ask everyone to write and display an answer. This is a great way to ensure everyone is thinking about the topic; it's also great formative assessment.

Call and response: Having students repeat, chant, sing or choral read is a high-energy way to engage everyone.

Find a core: Build a lesson or presentation around a problem, issue or situation's likely to engage all students.

Peer discussion: Rather than asking one student a question, have students discuss the problem, issue or situation while you monitor the accuracy of their discussion.

Building schema: How can real life be applied to this discussion? What connections can be made? Have students discuss this as a class or with a partner.

Students can complete guided lessons or scavenger hunts by having students look for or find certain pieces of information in order to synthesize meaning at the end. This could be as simple as fill-in-the-blanks notes, guided questions throughout the lesson, or actual built-in clues kids have to figure out to construct meaning.

Note making: Give students the opportunity to synthesize their thoughts in a meaningful way to build understanding. Use a graphic organizer to help them put thoughts together and build meaning as new information is presented. (This method requires a lot of upfront teaching and modeling.)

Divide and conquer: Assigning students to small groups or stations can help eliminate idle time, as any quick mini-lesson would be focused in a small-group setting while others are doing meaningful tasks.

Eliminate whole-group discussions: Before entering into such an experience, ask yourself if there's a better way for students to use an inductive or more inquiry-based experience to gain the same knowledge in a more meaningful way. (p. 2)

Dorsey (2013) stated this is one step in many to begin planning for twenty-first century learners.

Robert Marzano (2010) studied student engagement and found when students can answer the following questions in the affirmative then engagement is considered high level: "How do I feel, am I interested, is this important and can I do this?" (p. 12). When the student answers about feelings he or she must consider three variables: the amount of interest or excitement in the lesson or activity; the teacher's demeanor in which he or she is presenting the lesson or activity; and the perception of how the teacher and peers are accepting of the student (Marzano, 2010). The teacher must take into consideration using game-like activities to enhance the students' engagement, initiating friendly controversy within the class to create higher order thinking among students and using unusual information in the lesson or activity to create curiosity to motivate the students, thus leading to higher student engagement (Marzano, 2010).

As the student answers whether or not the lesson or activity is important he or she is analyzing individual goals (Marzano, 2010). Most educators make an assumption a student's individual goals and academic goals overlap, which is not always the case with students (Marzano, 2010). If a student can make a real-world connection with the lesson or activity, there may be a chance the individual goal and academic goal will link, thus increasing the student's engagement in the lesson or activity (Marzano, 2010). As the student answers the question regarding his or her ability to do the lesson or activity presented by the teacher there are only two possible choices (Marzano, 2010). The first choice is the student is confident in his or her ability to complete the task with success which in turn leads to a higher level of student engagement experienced by each individual student (Marzano, 2010). Conversely, when the student realizes he or she does

not have the skill set required to complete the task the engagement level drops off, in some cases to zero engagement (Marzano, 2010).

An educator or administrator looking at student engagement in the classroom would first look for positive body language from students, indicating students are paying attention to the teacher or peers (Axelson & Flick, 2011). Do the students have a consistent focus, and are they able to maintain a long timeframe with the lesson or activity without being interrupted or distracted (Misseijer, 2010)? Are the students expressing thoughtful ideas in the lesson or activity, and are they being reflective in their thinking with the information (Misseijer, 2010)? Are the students showing confidence to begin the task without approval by the teacher, or are they actively participating in a group-based activity (Misseijer, 2010)? Do the students seem to be having fun, do they appear excited about the learning taking place, and is there interest and enthusiasm on their part with the lesson or activity (Misseijer, 2010)?

Another level of checking student engagement encourages educators and administrators to have conversations with students about learning (Misseijer, 2010). The observer is looking for students who can engage the teacher or other peers with questions, general knowledge or clarity (Misseijer, 2010). Students engaged can describe the purpose of the lesson or activity, describe the meaningfulness of the knowledge they are obtaining and pinpoint the challenges they are facing (Misseijer, 2010). Highly engaged students should also be able to connect their learning to complex problem solving, rigorous thinking, or questioning about the subject (Misseijer, 2010).

In every classroom there are three dimensions of engagement at all times with every student, including intensity, breadth, and consistency (Marks, 2000). Helen Marks

(2010) stated intensity is the student's own level of engagement, whether it is high or low. Marks (2010) also explained breadth is the ability of the educator or administrator to rank the class as a whole on the engagement level, asking is the class 100% engaged or are 50% disengaged at the point of checking. Consistency is the level at which the engagement is held throughout the lesson, with the best lesson or activity at a high level of engagement throughout the entire timeframe, and less desirable being high in the beginning of the lesson or activity and waning to low by the end of the time period (Marks, 2000).

Educators recognize students are not always fully engaged or participating in lessons (L'Anson, 2014). L'Anson (2014) stated educators must design lessons differently in order to increase student engagement. L'Anson (2014) found 10 ways in which educators can aid students with increasing student engagement as follows:

Create an emotionally safe classroom by encouraging respectful interactions among staff to students, student to staff and student to student. Allow students to express themselves without fear. Failure is a normal part of the learning curve. Students who feel emotionally safe have freedom to explore, debate, problem-solve, and practice. Emotionally safe classrooms allow students to harness higher-order thinking skills.

Create an intellectually safe classroom by beginning each class with an activity that 95% of the class can complete on their own. Activities like this get the lesson started with everyone on board; feeling confident and ready to participate.

Cultivate appropriate intermediate steps, especially when it comes to project-based learning, building in appropriate intermediate steps can help manage the process with the extra guidance students may need. As opposed to assigning the project with a week's deadline and cutting the students lose from there, a teacher may decide to create a few steps to do together so that everyone is on board. For example, interviewing an adult may seem intimidating at first, but if the brainstorming and other critical pieces are researched and outlined together as steps, it can make tackling this project a lot more manageable and enjoyable for the students.

Practice journal or blog writing to communicate with students using the last five minutes of class time to reflect, review, and summarize can prove to be incredibly helpful in reaffirming what students have already learned and also provides an opportunity to get some additional clarity on the points where they are still struggling. Encourage students to reflect on the day's lesson via their journal or blog. You may also choose to respond to journals with comments to continue the conversation and encourage those reflections.

Create a culture of explanation instead of a culture of the right answer. Create a challenge that can be solved in three different ways and encourage students to find all three solutions. This practice helps engage students to think critically and thoughtfully observe different approaches to arrive at solutions. Helping them to practice seeing solutions from different viewpoints cultivates creativity, awareness, and tolerance.

Teach self-awareness about knowledge to students. Encourage students to be honest and self-reflect about their understanding before moving onto the next lesson. For example, try creating a formative assessment for each lesson with 3-5 questions to gauge student understanding. The questions can reflect what was taught and also incorporate another component: how the student is feeling about their grasp on the concept. Encourage each student to rate their understanding from 1-3. By helping students to take greater responsibility for their understanding, they will be more apt to take initiative as soon as they feel they need more clarification on the concept.

Use questioning strategies that make all students think and answer in most classrooms when a question is asked, the same reliable hands will raise each time. This issue leads to inattention in the classroom. Another method to everyone participating is to ask a question and have all students give an answer at the same time. By gauging students frequently using this method, you will have everyone participating in their learning processes.

Practice using the design process to increase the quality of work like the work of professionals like engineers and artists use the design process to continually refine their work and arrive at their final masterpiece. They often start with a sketch or rough draft and submit it for feedback and continuously refine their ideas based on constructive criticism. By encouraging this process to be used by your students, the quality of their work can improve a lot more than being graded on the initial effort.

Market your projects ad make sure students understand exactly why they are participating in a learning activity or engaging in a specific concept is crucial to building trust in their learning environment. Engaging in authentic tasks that help students grow in their lives, job, and relationships increase participation and ownership of the learning process.

Give specific feedback often is supportive and helpful in the student's learning process. Providing specific feedback grounded with evidence enables students to make informed decisions on how to refine their work. They also get a clear understanding of where they stand with their teacher, fostering confidence and safety in their learning environment. (p.2)

L'Anson (2014) stated lessons must move beyond rote learning and lower level comprehension, and must move into a deep knowledge of higher level thinking skills.

Sir Ken Robinson (2013a) questioned why educators are still educating children like the Enlightenment period in society. One major concern he pointed out is educators are still "batching" children based on their ages, not based on skill set or readiness for school (Robinson, 2013b, p. 59). Kindergarten entrance age is based on state legislators voting on a specific date on the calendar by which children have to be born in order to start kindergarten (Dorsey, 2013).

School readiness used to be determined by the apple or coin test, checking a child's ability for delayed gratification and the ability to have abstract reasoning (Fife, 2013). Would a child choose money over fruit (Fife, 2013)? During the fifteenth and sixteenth centuries, Germany gave parents the right to determine readiness for school; children had to be able to act rationally in order to attend school in the Middle Ages in

Europe (Fife, 2013). Yet in America today children are deemed ready to start

kindergarten by an arbitrary date on the calendar, when a state declares children are old

enough to be able to handle the demands of school (Education Commission of the States,

2013).

Parents have an option regarding when to start their children in kindergarten

(Boyd, 1997). Although students cannot start before the cutoff date, parents can hold a

child back from starting at that time (Boyd, 1997). Missouri's kindergarten enrollment

age is five years old by August 1 of each year (MODESE, 2014). When a parent

intentionally holds a student back from starting the kindergarten year, it is commonly

known as redshirting; a practice some parents use to ensure their child is older and larger

in stature for sports in the future (Boyd, 1997). Six percent to 9% of all kindergarteners

have a delayed entry into kindergarten, and those percentages are even higher in affluent

communities around the country (Boyd, 1997).

Friedrich Froebel, the founder of the first kindergarten in Germany in 1840,

would be appalled by what we call kindergarten today (Fife, 2013). Froebel envisioned

the early learning experiences as an extension of Jean-Jacques Rousseau's statement,

"Reading is the plague of childhood. Books are good only for learning to babble about

what one does not know" (as cited in Fife, 2013, p. 167). Letters and numbers were not

allowed in Froebel's kindergartens; the materials to be used in the German kindergartens

would have been handmade by the teachers and would have consisted of blocks and

games (Fife, 2013). Kindergarten was introduced to the United States in the late 1800s

by Elizabeth Peabody (Apollon, 2013). Peabody began to have children play with blocks

which had letters and numbers on the sides (Apollon, 2013).

According to Keith Boyd (1997) there are certain skill sets that need to be in place before a child starts kindergarten, regardless of a child's age. Those skills include the following:

Motor Skills

Can your child jump? Hop? Skip?

Can your child handle snaps, buttons, and zippers?

Can your child tie her own shoes?

Can your child use the toilet by herself?

Can—and does—your child wash her own hands?

Social Skills

Does your child help do simple tasks, jobs, or chores around the house?

Can your child participate in group activities?

Will your child (at least sometimes) share with others?

Does your child have one or two close friends?

Does your child make friends easily?

Can your child express her needs clearly to adults other than you?

Can your child control her own behavior much of the time?

Can your child function in a social setting without constant supervision?

Cognitive Skills

Does your child know the names of at least eight colors (red, orange, yellow,

green, blue, purple, black, and white) and five shapes (circle, oval, triangle,

rectangle, and

square)?

Can your child distinguish among different sounds?

Can she recognize similar sounds?

Does your child know some simple songs by heart?

Can she join in when you teach her a new song?

Can your child listen and follow a story line and then retell it in her own

words?

Can your child follow instructions when she's learning a new game or you're

introducing a new activity? (Boyd, 1997, pp. 4)

 Kindergarten readiness is critical to the success of young children (Boyd, 1997).

Fredrick Burk, the first president of what would eventually become the California

State University at San Francisco, a teaching-training college, stated, "Could any system

be more stupid in its assumptions, more impossible in its conditions, and more

juggernautic in its operations?" regarding age-grading students in school (as cited by

Bunday, 2013). Born-on date is just a number on the calendar, not a statement of

developmental milestones (Robinson, 2013a). Students should master certain milestones

in order to enter the kindergarten classroom (Robinson, 2013b). Burk offered this

comment in a speech in 1912:

It is constructed upon the assumption a group of minds can be marshaled and

controlled in growth in exactly the same manner military officer marshals can

direct the bodily movements of a company of soldiers. In solid unbreakable

phalanx the class is supposed to move through all the grades, keeping in lock step.

This lock step is set by the 'average' pupil-an algebraic myth born of inanimate

figures and an addled pedagogy. The class system does injury to the rapid and

quick-thinking pupils, because these must shackle their stride to keep pace with

the mythical average. But the class system does a greater injury to the large

number who make slower progress than the rate of mythical average pupil. . .They

are foredoomed to failure before they begin (as cited by Bunday, 2013).

Burk had insight into the inability for teachers to educate students on so many different

levels in the classroom (Bunday, 2013).

The term non-graded typically makes parents think their children will not be

receiving a grade card for work at school (Ellis, 1997). Non-graded actually refers to the

classrooms without a grade-level designation; typically teachers in a non-graded setting

loop with the class for up to three years, and the span of ages in the room can be three to

four years in range (Ellis, 1997). More work is created for teachers using the traditional

graded system; teachers are expected to differentiate instruction based on a student's

academic level for the entire class of students (Ellis, 1997). The non-graded model is

obtained with less resistance in the middle school and high school settings where classes

are already divided up among subjects; thus a dropping of the grade level would be only a

minor shift in thinking for secondary educators and parents alike (Ellis, 1997).

Jeffrey Fouts (1997) argued the following points regarding non-graded versus

graded programs:

- Chronological age and mental age do not always correspond.

- Children are able to work at different developmental levels without
  obvious remediation.

- Children are able to work at different developmental levels without obvious remediation, thus avoiding the social or emotional damage typically caused by retention.

- Students stay with their teacher for more than one year providing for continuity of learning.

- Age and achievement differences are accepted as normal by children.

- The increasing diversity of contemporary society is more easily accommodated by non-graded programs.

- Non-graded grouping can lead to more positive student attitudes and behavior, with no loss of academic achievement.

- Non-graded programs are more in keeping with the way children in naturalistic settings spontaneously group themselves for play and projects. (Ellis, 1997, p. 8)

Non-graded programs avoid many of the drawbacks of traditional practices, such as retention and acceleration issues (Ellis, 1997).

Schools throughout the United States have embarked on adopting the same type of learning standards; there are fewer standards than the most recent state standards, fewer standards per grade level, but a deeper understanding for students on each strand is expected (Livingston, 2013). The standards are written in a precise format and clearly defined (Livingston, 2013). The new standards focus on all students having the skills necessary for success in the global economy (Livingston, 2013).

Although learning standards are a powerful tool toward improving the current educational system, they are not the only answer (Livingston, 2013). School reform

means a redesign in the way in which educators teach students in America (Livingston, 2013). According to author Dr. George Wood (1992), redesigning schools means a reform in teaching, technology and a move away from the one-size-fits-all approach to teaching students. Dr. Wood (1992) also stated educators need to design personalized educational platforms to create multiple opportunities to teach students in order for learners to be truly successful.

Schools are meant to be places where children grow to their potential (Wood, 1992). Schools are designed to help students learn to read, write, compute mathematic problems, be critical thinkers, cooperate with others, love others and learn all core content areas (Wood, 1992). Educators should be producing students who are ready to become productive citizens (Wood, 1992). Educators should also be producing students who are insightful, compassionate, problem-solvers, creative, and wise (Wood, 1992). This type of education is going on all over America in public schools using choice and innovation and rethinking the traditional classroom in order to educate their students (Wood, 1992). Wood (1992) discovered schools and districts are rethinking curriculum, the physical layout of classrooms, how to utilize space within school buildings, the scheduling of the day; are employing compassionate and dedicated teachers; and are involving parents in the success of students.

School reformers have proposed a wide array of innovations in classrooms involving student engagement to help increase the overall satisfaction of students in education (Marks, 2000). Most reform initiatives involve funding from some level (Hill, 2010). How much and what is the cost Americans put on the educational system? School choice and innovation should be on the forefront of our nation's mind, not

funding (Hill, 2010). Choice education is simply the avenue though which other reforms

can occur in public education (Greene, 2011). School choice puts decisions about a

child's education back in the hands of the parents, and by removing the community

school factor, parents can decide which options are a best fit for their children (Greene,

2011).

According to Wolk (2011) there are numerous power centers stifling educational

reform. Those include:

The State. Public education is a government institution. The states'

constitutions give them the ultimate responsibility for and authority over the

system. State policymakers must approve the adoption and funding of any

significant departure from the status quo. Legislatures and state departments of

education enact laws and regulations that define the context in which education is

delivered in the state.

School Boards. The states delegate to locally elected or appointed school

boards the daily control and oversight of the public schools. School boards hire

the superintendents and approve hiring of administrators and teachers. They

negotiate contracts with the unions and approve the district budget. In some

cities, mayors and city councils have more influence on a school's school boards.

Superintendents. The superintendent is the CEO of the district charged

with its daily management (including curriculum and scheduling), development of

plans and objectives, hiring of principals, supervision of personnel, formulation of

the budget, relations with the community and more.

The Principal. The principal is the chief operating officer of the individual school with duties similar to those of the superintendent but at a building level. Commensurate with district policies and the union contracts, principals usually have some responsibility for choosing teachers and overseeing them. They submit budgets to the superintendent and are responsible for the disbursement of the funds allocated.

Parents. For the most part, parents limit their involvement in education to PTA or PTO activities and making sure their children conform to school policies related to such matters as homework. Although seldom, parents can act collectively or assertively, parents can exert significant influence on schools or districts if they become upset with policy or procedure.

The Public. People in general are apathetic about schools and education. In opinion polls, they acknowledge importance of education and profess to support it, though they may grumble and complain when test scores of individual schools are published in the local newspaper. Voting in school elections is the largest voice the public has on education.

The Federal Government. The federal government has a disproportionate influence in public education. Only about 7% of the education dollar comes from the federal government. Although the United States Constitution mentions no federal responsibility for education, a host of laws over the decades have wrought major changes in schools, education, the obligation of schools to special-needs students, the rights of students and other important issues.

Lobbyists. Education also has its share of lobbyists, though nothing

comparable to the number in health care or energy. (Wolk, 2011, pp. 177-178)

Wolk, (2011) reported some states have lost more control with special interest groups

than others.

Missouri Public Schools and Statutes

The Missouri School Improvement Program (MSIP) began in 1990 and is now in

the fifth version as of 2013 (MODESE, 2014). The MSIP 5 is the state's school

accountability system to review and accredit public school districts in the state

(MODESE, 2014). The Missouri Department of Elementary and Secondary Education

(MODESE) works on behalf of educators to prepare every child in Missouri for success

in school and in post-secondary education or career readiness (MODESE, 2014). The

MODESE has set high expectations for schools, and has provided a clear vision with few

high- impact goals in order to narrow the focus to achieve school system improvements

(MODESE, 2014). The MSIP 5 goals include the following (MODESE, 2014):

1. Articulate the state's expectations for student achievement with the
   ultimate goal of all students graduating ready for success in college and
   careers

2. Distinguish performance of schools and districts in valid, accurate and
   meaningful ways so districts in need of improvement can receive
   appropriate support and interventions, and high-performing districts can
   be recognized as models of excellence

3. Empower all stakeholders through regular communication and transparent
   reporting results

    4. Promote continuous improvement and innovation within each district

      (MODESE, 2014, p. 2)

The Missouri learning standards include clearer, fewer and deeper learning expectations for English language arts and math, and include literacy standards in other subjects (MODESE, 2014). These standards help ensure all Missouri students learn basic and higher-order skills, critical thinking and problem solving (MODESE, 2014). The Missouri learning standards are relevant, include real world applications and reflect the skills and knowledge students need to achieve goals (MODESE, 2014). The MODESE emphasizes a shared approach to educating a child including the student, parents and educators (2014). These standards are in place to narrow the focus in order to help high school students prepare for post-graduation career or college readiness (MODESE, 2014).

According to MODESE (2014) teachers across Missouri and the MODESE staff developed learning-based standard units to align with the Missouri learning standards that teachers have access to utilize in their classrooms. The learning units include kindergarten through twelfth grade teaching strategies, activities, supporting resources and formative and summative assessments (MODESE, 2014). Districts and schools can choose to use the units as written or revise them to fit specific needs (MODESE, 2014). The learning standards are in place to obtain Missouri's goal of being a top 10 state in education by the year 2020 (MODESE, 2014). According to the MODESE (2014), The Top 10 by 20 initiative goals for 2014-2015 are as follows:

Objective 1: By 2020, student achievement will rank among the top 10 states.

National Assessment of Educational Progress (NAEP) increase

Data: Proficiency rates increase

MAP below basic decrease

Objective 2: By 2020, all students will qualify for entrance into postsecondary education or training.

Data: College and career readiness assessments increase

Graduation rates increase (p. 2)

Part of the Top 10 by 20 plan requires the MODESE to compute an Annual Performance Report (APR) score for each school in Missouri (MODESE, 2014). This overall APR score is comprised of sub scores for each of the MSIP 5 Performance Standards in academic achievement, subgroup achievement, college and career readiness, attendance rate and graduation rate (MODESE, 2014). The status, progress, and growth model are used to calculate a comprehensive score used to determine the accreditation level of a school district (MODESE, 2014).

The MODESE reports on the Top10 by 20 for the state (MODESE, 2014). As of 2014, Missouri is ranked 39th in grade four math, 32nd in grade eight math, 26th in grade four reading and 26th in grade eight reading, according to National Assessment of Educational Progress (NAEP) with students scoring at or above proficient (MODESE, 2014). All four reporting areas showed a growth from the 2011 data (MODESE, 2014). Schools have an independent ranking and the school district has an overall ranking (MODESE, 2014). The status ranking and information has four levels a school and district can achieve as part of this state accreditation (MODESE, 2014):

- 2020 Target status represents a level of performance approximately equivalent to the projected 2020 performance of the top 10 states on the corresponding NAEP.

- On Track status represents levels of increasing performance expectations with a goal of 75% proficient by the year 2020 – if basic achievement is worth 300 points and proficient achievement is worth 400 points, an MPI of 375 would result from 75% of students scoring at Proficient and 25% scoring at basic. Current performance is compared to this target; a linear trajectory is requires equal annual progress increments to reach the 2020 target.

- Approaching status represents a level of performance equal to 100% basic if each score at the basic level yields 300 points.

- Floor status represents a level of performance less than 100% basic if each score at the basic level yields 300 points (MODESE, 2014, p. 4)

Dr. Doug Reeves (2013) researched the 10 highest-performing states and compared them to the bottom 10 performing states in the United States. In the report, Dr. Reeves (2013) focused on summarizing the dissimilarities among numerous states according to their national rankings. Reeves (2013) outlined leadership and policy strategies as measured by the NAEP scores. Those differences outlined were reported on the MODESE website (Reeves, 2013):

- Quality of Standards: Top 10 state standards were more specific and content-oriented than the Bottom 10. The switch to the Common Core Standards means the standards themselves will no longer be a differentiator among states. The lesson on the report is this: States have to implement standards with clarity and specificity in order to have a clear

advantage over those that merely adopt the documents but have no such deep implementation.

- Writing: All of the Top 10 states have annual state-required writing exams. Although many Bottom 10 states also have writing exams, an important difference is many of the Top 10 states, which include Massachusetts, Vermont, Virginia, Maine, Connecticut, Minnesota and Wisconsin, rather than merely administering a writing assessment, require students to incorporate writing into other subjects, including science, social studies, and mathematics.

- Early Childhood Education: Nine out of the Top 10 have in common mandatory kindergarten and extensive Pre-K publicly-provided education. Seven of the Bottom 10 states have state-funded Pre-K programs, although not all of them meet the criteria for quality in standards, curriculum, and support services set by the Institute for Early Education Research.

- Governance Structure: Top 10 States have appointed chief state school officers while the Bottom 10 states are more likely to have elective chief school officers.

- Policy and Leadership: There are specific policy and leadership strategies states can employ to maximize the value of scarce resources of money, classroom, time, and leadership attention.

There are significant geographical differences within the top five and bottom five states in performance (Reeves, 2013). The top five are found in the northeast and the bottom five are located in the southern part of the United States (Reeves, 2013). The top 10 states

spend on average $12,950 per student as compared to the bottom 10 states that report spending on average $10,060 per student (Reeves, 2013). The top 10 states have approximately 5% of students with limited English proficiency while the bottom 10 states report approximately 8% of their population has limited English proficiency (Reeves, 2013).

Reeves (2013) reported five outcomes from his study regarding the top 10 and bottom 10 performing states in education which are posted on the MODESE (2015) website. The lessons from those outcomes, according to Reeves (2013), are:

- Allocate financial cuts judiciously: Most states are going through financial crisis and budget cuts are necessary. The research shows the top 10 states hold funding of education in their state in high regard and very few are willing to make any cuts to the funding for education in their state when compared to the funding and budget cuts of the bottom 10 performing schools.

- Maintain an emphasis on student writing: Although many state budgets no longer allow for funding a state level writing assessment, many of the top 10 performing states still have districts assess this performance standard for students. Although not typically assessed, Common Core Standards have a dramatic increase on informational writing in every grade, kindergarten through grade twelve.

- Depoliticize educational policy: Leadership should be stable, steady and data driven and remain out of the political arena according to the top 10 performing schools.

- Implement the Common Core Standards with rigor, clarity, and specificity: Another lesson learned from the top 10 performers is implementing the Common Core Standards without rigor, clarity and specificity will cause the state to be a Bottom 10 performer.

- Help local schools and districts monitor implementation of instructional strategies: All schools need to have in place a manner in which to monitor the student's progress (which should already be in place) with effective monitoring of instructional and leadership strategies. States should have a firm grasp of what makes up a student's success, all variables. (p. 4)

Reeves (2013) stated Missouri needs to have standards for the right reasons, have multifaceted assessments, and start a push for technology and support.

In 2014, Missouri reported 887,641 students enrolled in pre-kindergarten through twelfth grade (MODESE, 2014). There are currently 520 school districts with enrollment ranging from 20 to 26,000 students in each of those school districts (MODESE, 2014). The three largest school districts include Kansas City, Springfield, and St. Louis (MODESE, 2014). According to MODESE (2014), both Kansas City and St. Louis have charter schools within their district's boundaries. Kansas City received an unaccredited status by the state of Missouri in the 2013 school year (MODESE, 2014). Thirty-nine percent, or 9,992 students in the Kansas City School District attend charter schools (MODESE, 2014). The St. Louis School District received a provisionally accredited status by the state of Missouri in the 2013 school year (MODESE, 2014). St. Louis School District has 34%, or 11,470 students, attending charter schools within that

school district (MODESE, 2014). Normandy and Riverview Gardens are the remaining

unaccredited school districts in the state of Missouri (MODESE, 2014).

The prosperity of a community is dependent upon the quality of education within

that community (MODESE, 2011). Public schools are the single-most foundational

element of a community's economic success or lack of success (MODESE, 2011). Now

more than ever there is a demand for schools to perform to a higher standard, produce

students with more capabilities, and prepare intelligent and upstanding citizens for the

future (MODESE, 2011). The MODESE is committed to protect the educational

standards set forth by Missouri (MODESE, 2011).

Under Missouri law, school districts have the freedom to explore choice and

innovation. The Instruction--Materials and Subjects, Mo. Rev. Stat. §§170-230-231,

(2012) requires the following:

Inspection by the public of instructional materials, research and experimentation

programs or projects.

§170.231. The school board of each school district shall provide all public

school instructional material intended for use in connection with any public

school classroom instruction, or any public school research or experimentation

program or project, shall be available for inspection by any person. For the

purpose of this section, "classroom instruction" shall mean any public school

instruction involving teachers and students or peers and students; "research or

experimentation program or project" shall mean any public school research or

experimentation program or project designed to explore or develop new and

unproven teaching methods and techniques. (U.S. Department of Education, 2013,

p. 5)

The MODESE provides districts the autonomy to embark on choice and innovation as

long as the school or district follows the Missouri learning standards (2015).

The Information Age and Twenty-First Century Learning

As a whole, educators need to rethink the fundamental operations of each and

every classroom in America (Resnick, 2006). The teacher should not be seen as the

"giver of knowledge," instead, he or she should be viewed as the facilitator of knowledge

(Resnick, 2006, p. 2). America needs to take a more entrepreneurial look at the manner

in which students learn and teachers teach; educators should focus on themes and projects

that go across all curricular subjects (Resnick, 2006). Reform in education needs to

include having students of all ages work on projects and activities together, enabling

them to gain knowledge from one another (Resnick, 2006). Resnick (2006)

recommended dropping the bell system and allowing students to work on their projects

for extended periods in order to deepen their thinking until there is a lull in engagement

before starting again the next day.

Computers were created for the business person to use at work (Resnick, 2006).

Educators need computer hardware and software designed for students, rather than

teaching students to adapt to the business computer (Resnick, 2006). In the twenty-first

century, students have electronics in their hands beginning at a very early age thus

putting the adults in their lives years behind them on the technology learning curve

(Rosebrough, 2011). The amount of knowledge children have about technological

devices is astounding (Rosebrough, 2011). Outside of today's classroom, students are

using more finger-based learning than brain-based learning due to increased use of

technology (Rosebrough, 2011). But what does it all mean? Educators are on a different

kind of mission in order to educate today's students. Educators must embrace the digital

age and learn how to put meaning behind the information at both students' and educators'

finger tips (Rosebrough, 2011).

During the course of the past few decades, technology has changed so rapidly

schools have been unable to keep up the pace of purchasing new equipment, not to

mention training teachers to implement new technology in their classrooms (Kloper,

2011). Educators need to welcome technology into the classroom, instead of having rules

in handbooks prohibiting technology in school buildings (Kloper, 2011). Technology is

here to stay, and educators need to embrace and begin to learn what students already

know about the devices they carry every day (Kloper, 2011).

Educators need to be conceptualizing and experimenting with new technologies

and how to implement those into the classroom setting (Kloper, 2011). The world is

changing and educators may be doing students a disservice by not incorporating games,

simulations and social networking into curriculum (Kloper, 2011). Student engagement

is the key to student success, and nimble use of technology is a twenty-first century

learning skill the next generation's work force will need (Axelson & Flick, 2011).

When students are using technology as a learning tool, to support learning, while

communicating with one other, they are actively learning, and student engagement is high

(Kloper, 2011). Not only does the role of the student change, the role of the teacher

changes as well (Kloper, 2011). The teacher takes on the role of facilitator in a

technology-rich classroom, supporting students as they seek to find information, and

learn to communicate appropriately with each other in an electronic format (Kloper, 2011).

There are many educational terms used in today's academic settings: project-based learning; collaborative learning; passion-based learning; flipped learning; personalized-learning; twenty-first century learning; inquiry-based learning; student-centered learning; mobile learning; cooperative learning; lifelong learning; and deeper learning (Richardson, 2015). What do all of these have in common? Learning is the common factor no matter what adjective is used (Richardson, 2015). According to Seymour Sarason, "Productive learning is where the process engenders and reinforces wanting to learn more. Absent in wanting to learn, the learning context is unproductive" (as cited in Richardson, 2015, p. 10). Albert Einstein was quoted as saying, "In the early twentieth century, I never teach my pupils; I only attempt to provide the conditions in which they can learn" (as cited in Richardson, 2015, p.11).

Blended learning is a concept which, at least in part, includes student usage of technology (Christensen, 2012). Modality one, by definition, includes students receiving some learning through online technology, while still attending a school full day and accessing teachers for most of the instruction (Christensen, 2012). Students in level one have some content set by the teacher, yet with time have some autonomy with control over the pace and eventually over the content (Christensen, 2012). Modality two involves more technology and less instruction from a teacher (Christensen, 2012). According to Christensen (2012), students in modality two have the opportunity to work from home completing online course-work, although these students do still attend at least part time in a school and have less instruction from teachers than in modality one.

Modality three, according to Christensen (2012), integrates all of a student's course or subject work to provide a connected learning path for students in which all of the course or subject work is blended.

Blended learning, while in the classroom, has four models of implementation (Horn & Staker, 2015). The first model, station rotation, includes small and whole group instruction in a traditional model, lab rotations, individual online learning where students practice skills necessary for advancement, and modeled and independent reading to support a student's reading instruction (Horn & Staker, 2015). Also included in this model is flipped classroom, where students preview or work on online portions of a lesson before direct or follow-up instruction by a teacher. According to Horn and Staker (2015), the flex model has technology and online learning at the center of instruction. Students in this model are more flexible and the learning is customized to fit the students' learning goals (Horn & Staker, 2015). Horn and Staker (2015) stated the teacher and students are in a school setting where the teacher facilitates and activates student learning. Flex learning is on-site at a school except for online homework opportunities (Horn & Staker, 2015). The amount of face-to-face time varies in each blended-learning classroom (Christensen, 2012). The term flex for this model defines the roles in the classroom for teachers and students (Horn & Staker, 2015). The third model in blended learning, which according to Horn and Staker (2015) is a la carte model. In the a la carte model a student takes online learning exclusively (Horn & Staker, 2015). The teacher for the a la carte model serves as the online instructor, with the student or teacher rarely ever attending the school site (Horn & Staker, 2015). A la carte is on an individual basis, and some students utilize this model while others attend classes in the school setting (Horn &

Staker, 2015). The enriched virtual model offers face-to-face instruction and learning with the teacher in a school setting and online course work in order to complete a portion of student learning (Horn & Staker, 2015). According to Horn and Staker (2015), the same teacher typically serves both onsite and online for students.

According to a recent study regarding enthusiasm about school for kindergarteners through seniors in high school, 95% of kindergarteners love school, 37% of freshmen surveyed love school and when those freshmen become seniors it rebounds to 45% of students surveyed love of school (Richardson, 2015). Educational reformers need to shift their thinking from standards-based, right answers, artificial problems, individual learning, and privacy to a passion for learning, inquiry, authentic problems, social learning settings, and transparency in learning and grading (Richardson, 2015). This is the most disruptive moment ever in education, but the most amazing time to be a learner (Richardson, 2015). Richardson (2015) also stated schools are the most important institutions in America's communities, learning with technology is not an option, and educators are behind the technology curve compared to students.

Project-based learning allows students deeper learning of content according to the Buck Institute for Education (BIE) (2015). Buck Institute for Education (2015) stated student engagement is the one skill set needed for twenty-first century learners. According to BIE (2015) the following are skills project-based learning helps to instill in students:

> Project-based learning makes school more engaging for students. Today's
>
> students, more than ever, often find school to be boring and meaningless. In PBL,

students are active, not passive; a project engages their hearts and minds, and provides real-world relevance for learning.

- Project-based learning improves learning. After completing a project, students understand content more deeply, remember what they learn and retain it longer than is often the case with traditional instruction. Because of this, students who gain content knowledge with PBL are better able to apply what they know and can do to new situations.

- Project-based learning builds success skills for college, career, and life. In the 21st century workplace and in college, success requires more than basic knowledge and skills. In a project, students learn how to take initiative and responsibility, build their confidence, solve problems, work collaboratively, communicate ideas, and manage themselves more effectively.

- Project-based learning helps address standards. The Common Core and other present-day standards emphasize real-world application of knowledge and skills, and the development of success skills such as critical thinking/problem solving, communication in a variety of media, speaking and presentation skills, and collaboration with others. PBL is an effective way to meet these goals.

- Project-based learning provides opportunities for students to use technology. Modern technology – which students use so much in their lives – is a perfect fit. With technology, teachers and students can connect

with experts, partners, and audiences around the world, and find resources and information, create products, and collaborate more effectively.

- Project-based learning makes teaching more enjoyable and rewarding. Projects allow teachers to work more closely with active, engaged students doing high-quality, meaningful work, and in many cases to rediscover the joy of learning alongside their students.

- Project-based learning connects students and schools with communities and the real world. Projects provide students with empowering opportunities to make a difference, by solving real problems and addressing real issues. Students learn how to interact with adults and organizations, are exposed to workplaces and adult jobs, and can develop career interests. Parents and community members can be involved in projects. (p.1)

According to BIE (2011), project-based learning should no longer be the dessert, or the fun part of the lesson; instead projects should be the main course.

Hundreds of classrooms across the United States are transforming room design (Pearlman, 2014). Since the influx of student-learning, project-based learning, and MakerSpaces, schools have answered the call by experts to redesign existing spaces to meet student needs on a twenty-first century level (Pearlman, 2014). Pearlman (2014) stated educators are turning rows of desks and chairs into collaborative learning spaces to enhance the learning process for students from kindergarten through twelfth grade. According to Pearlman (2014), MakerSpaces should reflect the design adults utilize to enhance the creative process. MakerSpaces allow educators to redesign classroom spaces

into collaborative learning spaces (Pearlman, 2014). Pearlman (2014) wrote students are learning more than ever before by tinkering, playing, experimenting, expressing, and collaborating. MakerSpaces are based on research regarding how students learn best outside of the classroom and are forcing educators to review this type of learning for students in a school setting (Pearlman, 2014). According to Pearlman (2014), this model starts with student interest first and then standards are matched to the interests, which is the opposite design process of traditional classrooms and educator planning. Pearlman (2014) stated students need a nurturing environment, in order to foster interests and projects, and to enhance the educational process.

A traditional classroom has been defined as one where the passing of knowledge is from an expert voice to a novice learner (Lodge, 2012). The methods of delivery have changed very little in the past several decades (Lodge, 2012). Educational institutions follow the structure of Industrial Revolution factories (Lodge, 2012). It should be obvious to all educators technology will play a critical role in the success of the Information Age paradigm shift in education (Reigeluthm, 2012). Technology will enable improvements in student learning, eventually at a lower cost per student per year than current budget projections (Reigeluthm, 2012). One key to a school district's success will be the implementation of a learning management system (LMS) for faculty and student use (Reigeluthm, 2012). An LMS serves as a learner tool and a centrally located data collection center for teachers, administrators, students, and parents (Reigeluthm, 2012). The LMS will allow teachers to customize information for students based on individual needs and to facilitate learning opportunities for students (Reigeluthm, 2012). This type of system requires drastic changes in the ways educators'

view teaching, learning, planning and implementing for the purposes of instruction (Reigeluthm, 2012).

Digital citizenship instruction should take place every year starting with the youngest students (Davis, 2015). One expert listed the top nine Ps all students must know to be safe on a computer and to exhibit twenty-first century technology skills appropriately (Davis, 2015):

- Passwords. Students must be taught the manner in which to create a safe password using letters, both capital and lower case numbers and/or symbols.

- Privacy. Students must understand how to protect private information on the computer.

- Personal information. Students must be able to create login questions or identifying questions without give away too much personal information.

- Photographs. Students must understand why pictures have unwanted information in them, like an address in the background.

- Property. Students must understand all copy right laws; those laws still apply for internet usage and the creation of items on the internet.

- Permission. Students must understand how to get permission to use work off the internet.

- Protection. Students must be able to have an understanding of the terms viruses, malware, and phishing in order to maintain both their hardware and software.

- Professionalism. Students must be able to distinguish between personal engagement on the computer and also the professional engagement required as a student. Those need to be kept separate.

- Personal Brand. Students must understand their typing is their voice on the computer or smart phone. Students must understand tone can be read into anything typed and you need to be careful about word choice in private messages to others. (p.4)

Davis (2015) stated digital citizenship is a critical component of making computerized learning successful.

Summary

Numerous experts throughout this country as well as many other countries are researching how best to educate children in today's world (Fife, 2013). There is not one platform leading the way to a paradigm shift in education; rather, there only exists the notion change must occur and it needs to have already happened (Robinson, 2013b). Experts as well as most educators understand the shift must occur from teachers as the givers of knowledge to teachers fostering a love of learning (Richardson, 2015). It stands to reason technology will be a part of the paradigm shift (Richardson, 2015). Schools have every right to make the shift now, still adhering to the state learning standards and standardized tests required by the state or federal government (Richardson, 2015). Robinson (2011) stated, "Education is not only a preparation for what may come later; it is also about helping people engage with the present" (p 59). Robinson (2011) discussed education must be personal for students or the education students are receiving is nothing.

What is more important is not whether or not technology is making us stupid, but if current educational systems need to shift from teaching students what to think to a model of teaching students how to think (Lodge, 2012). Margaret Mead made this argument regarding a shift in educational thinking years before the invention of Google, yet the educational policies governing our classrooms are slow to assimilate information (Lodge, 2012). Technology is not making any of us stupid, but rather allows us to not think as hard as people used to think in order to learn information (Lodge, 2012). According to Lodge (2012), the time has come in public education for every student to have a digital device twenty-four hours a day. Digital devices are a small price to pay for the enhanced learning which will occur in classrooms across America (Lodge, 2012).

The methodology of the study will be specified in Chapter Three. In Chapter Four of this study, the results from the research will be shared. The findings, conclusions and recommendations follow in Chapter Five.

Chapter Three: Methodology

The Missouri Department of Elementary and Secondary Education reported only a few districts in which there is tracking of choice or innovation occurring (MODESE, 2014). With MSIP 5 in place, districts have the right to educate students in the manner which best fits the students using Missouri learning standards (MODESE). Educational reformers hold value in student-centered learning (Hill, 2010).

Research Design

This study was conducted to determine the perceptions of building administrators in Missouri public schools who work in choice schools or innovation programs or schools for kindergarten through twelfth grades. The perceptions of the administrators were elicited through an interview process. The term choice school or innovation program refers to an educational program that caters to the needs and abilities of children at each stage of their development (Northwoods Montessori, 2013). A non-traditional approach employs teaching methods that are a unique complex of philosophy, psychology, educational theory, and instructional materials (Northwoods Montessori, 2013). A school or a classroom may be considered a choice offering by the school district which means the programming is non-traditional and students are selected for the program through and application process. An innovation program, which offers non-traditional programming, may or may not be a part of a choice school or classroom offering. Some community schools in Missouri are becoming innovative in nature, and no application is required to attend, unlike a choice site.

Upon approval of the research project by the Lindenwood IRB (see Appendix A), a phone call was made to each administrator selected for the interviews (see Appendix B)

in order to obtain contact information to present them with the informed consent document (see Appendix C). When the consent information was, a phone interview time was scheduled, and the interviews were held with each of the 10 Missouri administrators. The interview data and the audio recordings were kept secure at all times. The interview questionnaires (see Appendix D) were reviewed only by the researcher for common themes and were coded in order to assign meaning to answers among administrators of choice or innovation schools or programs taking part in the study (Frankel, et al., 2014). The qualitative data were then organized into coded themes for discussion points in Chapter Four.

Research Questions

The following research questions guided this study:

1. According to administrators, what is the perception regarding skills necessary for the twenty-first century?

2. According to administrators, what is the perception regarding student engagement with the implementation of their innovation programs?

Population and Sample

The population included all Missouri public school administrators, kindergarten through twelfth grade, who currently work within schools housing choice or innovation programs according to the MODESE. Ten participants were selected randomly from the population using a computer-generated sampling. Those participants selected were located throughout the state in all regions. The administrators were each asked the same set of 10 questions, and all 10 administrators answered all 10 questions on the semi-structured questionnaire (John Robert Wood Foundation, 2009). The responses from the

administrators were then used to focus on common themes and terminology so coding

could be used in interpretation of the qualitative data.

Instrumentation

Administrators questioned were sent electronic consent forms (see Appendix C)

to establish participants prior to the collection of information (see Appendix D). The IRB

Committee of Lindenwood University approved the consent form and questionnaire. The

questionnaire was used to gather data from administrators of schools within Missouri that

are involved in choice and innovation programs.

The questionnaire's focus was to obtain general knowledge of administrators'

perceptions regarding student engagement within the choice program. The questionnaire

also elicited information regarding twenty-first century learning for students in the

program and perceptions about traditional versus non-traditional programming for

students. The semi-structured interviewed process was used to gather the qualitative

data. Ten opened-ended questions that required statement answers from the participants

were given to each administrator in the study (see Appendix D). During the interview

process, follow-up questions were asked by the researcher for clarity of responses from

the administrators. Some interviews were held face-to-face, while some were held over

the phone due to location in the state. Interviews were both scripted and audio-recorded

for accuracy purposes. All participants were given the informed consent form, which

was signed prior to the interview.

Data Collection

The researcher made contact with administrators who work with choice or

innovation schools within the state of Missouri's public school system via electronic mail

requesting a phone interview. Administrator participants were given a written consent

form before participating in the study. The information gathered as part of the study was

kept confidential in a locked cabinet at all times during the research and writing process

of the dissertation and will be kept secure for three years after publication, before being

destroyed securely. Building administrators were not identified at any point during the

study.

Administrators who chose to participate in the interview were asked to

communicate one-on-one with the researcher to complete the interview questions

regarding student engagement in their classrooms (see Appendix D). The researcher

obtained permission to record the interviews for research purposes only, and will destroy

recordings upon completion of the dissertation. The researcher took notes on the

interview questionnaire, in addition to recording the conversations in order to fully

analyze the information gathered.

The qualitative data collected were reviewed for any overarching themes within

the various types of choice and innovation programs in Missouri public schools regarding

student engagement and twenty-first century learning. A focus was on levels of student

engagement and whether levels increased, remained the same, or decreased according to

the building administrator, after the choice program was implemented. Administrators'

perceptions regarding strategies for teaching twenty-first century skills were noted.

Data Analysis

The data collected through the interview questions were analyzed for trends and

common themes among the 10 administrators. Fraenkel et. al. (2014) suggested when

working with qualitative data the researcher uses the following points to check for

validity and reliability:

- Check one informant's descriptions of something against another

  informant's descriptions of the same thing. The researcher asked

  clarifying questions when educational terms were used to cross-check one

  participant's use of the term with another participant.

- Learn to understand, and where appropriate, speak the vocabulary of the

  group being studied. The researcher used current research based terms

  during the interview process.

- Write down the questions asked in addition to answers being received on

  the questionnaire. The researcher wrote down any clarifying questions

  asked of the interviewee.

- Document the source of remarks whenever possible and appropriate. The

  researcher labeled each interview using a series of markings to identify

  male or female and divisional level of the school.

- Use audio recordings when possible and appropriate. The researcher

  audio recorded the interviews to ensure accuracy in reporting information.

  (p. 458)

This process allowed the researcher to be as accurate as possible utilizing qualitative data

(Fraenkel et al., 2014).

Descriptive Statistics

According to Fraenkel et al., (2014), researchers must utilize a qualitative

component "in order to obtain a more holistic impression of teaching and learning"

(p. 430). Due to the numerous variables in looking at choice or innovation within schools

research would be inconclusive without qualitative data. The researcher noted the

number of times the various twenty-first century learning skills were described and the

types of activities administrators felt increased student engagement as each administrator

was interviewed (see Table1).   Common terminology and definitions as well as the skill

sets were noted throughout the research and coding.

Ethical Considerations

Interviews can lead interviewees to reveal and share too much about their lives

thus leaving the interviewee vulnerable (Fraenkel et al., 2014). The researcher provided

each participant with an adult consent form (see Appendix C), which outlines the extent

of the research project. The participants had no risks associated with this project, and

privacy has remained secure. The researcher has maintained secure documentation on

post-work from the initial interviews.

The subjects in this study were all Missouri public school administrators.

According to Fraenkel et al., (2014), when using the qualitative research design, the

researcher must be aware of ethical considerations. Lindenwood University requires

Institutional Research Board approval before any research can take place for a project.

The researcher made contact with each subject by phone, obtained contact information,

sent the consent form and scheduled an interview time with the administrator. After the

consent was received, the questionnaire was sent electronically to the administrator in

advance of the scheduled interview.

This study was conducted using qualitative data to determine the perspectives of

Missouri public school administrators on student engagement and twenty-first century

learning skills within their choice or innovative schools or programs. There were no data collected that were sensitive in nature or that could cause harm to any administrator participating. Confidentiality and the withholding of administrator identification were maintained throughout the entire data collection process.

A participant can have access to the results of the data collected by reviewing this dissertation through the Lindenwood University Library. The sole purpose of the study was to obtain administrators' perceptions regarding working in choice or innovation schools or programs in determining overall student engagement and twenty-first century learning skills.

Summary

This study was conducted in May 2015. Identification of the administrators was completed in January 2015, using the MODESE website and a phone call. Once a school was selected, the administrator was identified and contacted to begin the process of obtaining consent to conduct an interview. The questionnaire was forwarded electronically prior to the phone interview. The participant was not identified as he or she completed the interview. Anonymity of administrators was maintained all times throughout the gathering and analysis of data.

The questionnaires were evaluated and read for common themes and characteristics for both student engagement and twenty-first century learning skills. Information gained consisted of qualitative data on twenty-first century skills and student engagement in the classroom. The data from this study may inform educators who wish to evaluate whether a choice or innovation school or program would improve their school's programming.

The methodology of the study was detailed earlier in this chapter. Specifically, the research questions, description of the sampling method, data collection, and data analysis procedures were described. In Chapter Four of this study, the description and results of the data from the questionnaires are specified. The findings, conclusions, and recommendations are found in Chapter Five.

Chapter Four: Analysis of Data

The purpose of this study was to determine the perceptions of Missouri administrators regarding their work with school choice and innovation programs or schools. There are currently numerous types of schools in Missouri (MODESE, 2014). Some of those include charter schools, magnet schools, and private schools, which are drawing students away from failing public school districts in Missouri (MODESE, 2014). Public schools throughout the United States are seeking information about reinventing schools and are searching for ways to educate students in this technologically connected society (Richardson, 2015). Money will not fix the problem, computers will not fix the problem, accountability will not fix the problem; rather, a complete rethinking and reevaluating of the institution of school is the only answer to prepare America's children for the future (Richardson, 2015).

Research Questions

The following research questions were posed for this study.

1. According to Missouri public school administrators, what is the perception regarding skills necessary for the twenty-first century?

2. According to Missouri public school administrators, what is the perception regarding student engagement with the implementation of their programs?

Analysis of Qualitative Data

This chapter was designed to present data gathered from administrators regarding student engagement and twenty-first century learning in their choice or innovation programs or schools. The results presented are from 10 administrators in Missouri public

schools from all regions across the state. The information provided was analyzed by coding similar themes and characteristics in responses to answers on each question while looking for trends in the information in order to gain a better understanding of administrators' perceptions regarding choice and innovation in their own Missouri public schools.

Administrator question one. All administrators responded. Please describe to me the type of choice and/or innovation program you have at your school. How do you feel about the educational opportunities your students received by attending a choice program/school?

There was a wide variety of choice and innovation programs in schools included in the research. Programs included International Baccalaureate, Science Technology Engineering and Mathematics (STEM), Conservation Education, Character Education, Technology Education, Online Learning Education and Project-Based Learning Education.

According to an administrator, The International Baccalaureate (IB) schools on the elementary level, called Primary Years Program are building-wide programs. Every classroom throughout the building is a part of innovative methodologies in teaching. With the IB middle schools and high schools, students schedule into IB classes and the program is not building wide, but instead a part of the overall school. International Baccalaureate schools focus on students becoming global thinkers, becoming problem solvers beginning in kindergarten, and serving others. One administrator stated the program is recognized worldwide by the IB, and there are currently 3,500 schools in 146 countries. The administrator went on to say the International Baccalaureate began in

1968 with a group of innovative teachers at the International School of Geneva,

Switzerland. The goal was to have continuity with students between the ages three to 19

in school programming. Throughout all divisions students focus on learner profiles,

learning their strengths and improving their weaknesses. These learner profiles include

the following: balanced, communicator, caring, inquirer, open-minded, risk taker,

principled, reflective, and thinker. Administrators in IB schools on all grade levels

shared the vision regarding how they felt other programs were catching up to their

advancements. One administrator stated she felt some choice innovation programs had

superseded the IB capacity.

According to administrators, Science Technology Engineering and Mathematics

(STEM) schools focus on those four academic categories. The administrators explained

the curriculum is integrated, meaning reading is incorporated into other core classes. The

STEM focus schools are preparing students for post-high school degrees in universities

and colleges with a STEM focus and programming. Missouri schools at this time only

offer STEM programming for middle school and high school students. There was one

STEM class offered on the upper elementary level in southwest Missouri for the 2014-

2015 school year, according to one administrator.

Conservation Education is another type of innovation program offered in Missouri

according to one administrator. The administrator explained that this type of program is a

hands-on, in-the-field experience for the students who learn through conservation themes

and ideas. The students are expected to complete the traditional curriculum, which is

compacted so the students can be in the field numerous times each month. The

administrator stated that field trips include canoeing, bio-monitoring streams, gun safety

and shooting, archery, bow fishing, pole fishing, hikes, deer clinics, pheasant hunting and eagle watching.

Missouri public schools have several K-12 schools that offer Education as part an innovative approach to education stated one administrator. The administrator explained, one particular program focuses on student leadership and teaches students habits of effective leaders. The students learn to live the habits both at school and at home to improve overall school climate. Administrators report parents are very pleased with the results at home as well. According to the administrator those habits include the following: be proactive, put first things first, think win-win, begin with the end in mind, seek first to understand then to be understood, synergize, and sharpen the saw. Students in these schools track their own successes and become a part of their own learning and academic goals.

According to administrators, Technology Education schools offer students more access to state-of-the-art technology and one-on-one computing. In Missouri this is mainly in the middle school and high school divisions. These innovative schools are offering students a blended-learning approach. Administrators stated teachers and staff undergo numerous hours of professional development in order to offer students a broad range of new technology including both new hardware and new software.

Online Education is a new concept in most school districts in Missouri and is ever-changing according to administrators. This is a brand new way of thinking completely outside the school setting, stated one administrator. Students sign up for online courses and complete those courses on a computer away from the campus setting. Teachers assigned to each class can respond to students, keep up with their assignments,

and provide feedback. Rarely is there ever face-to-face time for teachers and students; however, web cams are sometimes employed for communication. Administrators reported from the comforts of home students can complete many classes online that would take hours of in-school seat time. With schools partaking in this endeavor, waiting lists are forming for almost every class being offered. Administrators stated they are both excited and unsure about the future of what schools will look like based on this type of innovation.

Project-Based Learning (PBL) can be found K-12 in Missouri and is a student-centered type program according to administrators. This type of innovation stems from providing students a greater depth of understanding of concepts, an overall broader knowledge base, improved communication skills, and the ability to work with others, stated one administrator. This type of learning is part of a unit of study that ends with completion of a project. Administrators report students take on leadership roles which will enhance skills and increases their creativity. Project-based learning takes learning one step further than traditional learning; students follow a concept to fruition from learning about the idea to experiencing the idea.

All 10 administrators admitted their schools are still operated like typical traditional programs. Bell-to-bell teaching, block schedules, desks and chairs for students, text books (except the online learning education program), staggered lunch times, grade levels by age group, segregation of all classes (especially for the middle school and high school students switching classes all day, every day), and summer breaks are still the norm. Reading classes are still reading classes with new twists across the board in all divisions, as many are more student-based and student-centered versus the

traditional teacher-driven classroom. The focus in the innovation programs is a shift in thinking about the importance of the student driving his or her program and his or her learning. Learning is personal. Moving away from the teacher-centered traditional classroom, the teacher becomes the facilitator in innovation classrooms nurturing the children toward academic goals. The online learning innovation to traditional educational programming is the single program that takes students out of the classroom and puts them in another setting of the student's choice to learn.

An increase in student engagement was the most discussed topic from the administrator interviews. Administrators reported students have moved from disengaged, inactive listeners to hands-on, active learners in the classroom, and the teacher has taken on the role of facilitator of learning. All 10 administrators have come from traditional programming at some point in their careers. When reviewing the interviews comparing elementary and secondary administrators, the perception for high school and middle school administrators appeared to be that secondary educators will have greater difficulty than the elementary teachers to change within the building, while secondary teachers will have a better grasp of online learning for students. The administrators were all pleased with the innovation in their schools; they all felt their students would be more prepared for the future than students enrolled in traditional schools. The focus on students versus teachers was an overarching theme, and the ability to plan, set goals, track progress, and to think globally were key skills for students by all administrators interviewed.

Many of the administrators responding to the questions discussed the future of students, whether it was elementary moving to a traditional middle school setting, middle school innovation programs which would move into a traditional high school program, or

even high school administrators concerned about the lack of innovation on most college campuses nation-wide. At least allowing students to experience the choice or innovation programs, even if limited, was successful in the opinion of most administrators. Many pondered the idea of having choice and innovation year-after-year for these students and the impact of a K-12 program versus a traditional program.

Administrator question two. All administrators responded. How do you measure your students' success in the choice program/school?

Fifty percent of the administrators questioned stated they no longer focus on standardized test scores. One stated he felt because of standardized testing his children were missing out on almost an entire quarter of learning. One of the administrators referred to his children and stated being advanced in all subject areas just is not enough anymore; he was hoping for a more well-rounded child with the ability to find answers. The other 50% felt their districts placed importance on accountability measures on the state standardized testing, and test scores were still a tool their staff used to gauge success with students. The goals of having 100% of students score advanced and proficient in both reading and math held great value with many of the schools' stakeholders.

Seven of the 10 administrators went into detail about the importance of certain skill sets necessary to be considered successful. They all agreed literacy and math skills remain very important skills to have, and most stated they felt those skills would never change. Right behind those two skills was technology, and it was definitely one of the new and very important twenty-first century learning skills mentioned. Without computer and technology training students will not be prepared for the next steps in their lives (with six of the seven administrators stating college would be the next step). The

administrators all agreed the ability to collaborate with others and problem solve would

be a desired twenty-first century skill. Another important skill would be the ability to

speak more than one language, although only one school in the choice or innovation

programs offers a second language as a part of their programming. Creativity was

another common theme among all of the administrators; most felt the ability to "think

outside the box" was a critical skill to have in order to be successful in the next century.

Several administrators discussed the inability to foresee where education is heading in the

next generation. Would school as we know it today even exist? Another administrator

commented on the fact bullying has become a cyber-issue. One particular administrator

also stated she was unsure about what is next, because school budgets would change with

fewer buildings, fewer teachers, fewer administrators, more technology, and more

technicians. One secondary administrator discussed the need for few teachers in the

future if educators continue along the blended-learning model. A teacher can have more

students and sections when working with online students, he continued to discuss. Many

online courses offer a self-scoring feature, with teachers only having to score any short

answer or essays assigned. Seat space is not an issue if students are doing work from

home, the administrator elaborated during the interview. Schools will be far more

flexible learning spaces; this has been going on for years in the business world, and

schools are just now catching up, the administrator stated.

Administrators mentioned numerous times 14 reoccurring twenty-first century

learning skills they deemed important and necessary for students to exhibit and have the

ability to use in this century and beyond. The terms used were research based and current

topics being discussed by educators and experts across the United States and other

countries. As stated by Richardson (2015), the term does not hold the meaning, all

educators are discussing learning processes, and name is only a name. What educators do

with the name and method is what counts for students everywhere (Richardson, 2015).

Table 1

Administrator Identified Twenty-First Century Learning Skills

Skill	Occurrence
Literacy	10
Mathematics	10
Technology	10
Collaboration	10
Communication (including foreign language)	9
Creativity	8
Reasoning	7
Innovative	6
Global thinking	6
Self-Directed	6
Flexibility	5
Leadership	4
Civility	3
Principled	2

Six of the administrators discussed the demands on teachers when thinking about

twenty-first century learning. One administrator stated, "More and more expectations are

on the shoulders of our teachers, we are told to take things off, but I just cannot find

really anything to take off with the expectations set so high for schools."

Ten of the 10 administrators interviewed did agree having an innovation program

in their schools, brought students closer to exhibiting the twenty-first century learning

skill set required by society today. The IB school administrators discussed the fact their students live by the learner profiles and many fall into what they would consider twenty-first century skills. The online learning administrator definitely felt by having students take online classes the students would be better prepared for post-graduation education, since many university classes can now be taken online.

The administrators stated all of the skills were difficult to track and grade on the students' behalf. Success is partially measured by the increase in attendance two schools have seen. They deem their success is based on the fact students do not want to miss out on the events in the classrooms.

The seven administrators who discussed collaboration also shared how collaboration has changed, and determining a grade or score is subjective. Standards-based grading is being used in three of the sites. The administrators also felt with all of the changes in their buildings and classrooms, face-to-face interactions were still appropriate, but today's students must have a strong understanding of appropriate social media skills, including emailing, texting, and social media hot spots on the internet.

Behavior was considered a factor for success from six of the 10 administrators. One administrator stated student engagement is so incredibly high there is no time to act out. Students miss out on so much if they are removed from the classroom. She went on to say it was a nice problem to have and a change for her school climate.

Administrator question three. All administrators responded. Tell me about the process the school underwent to become a choice program?

Eight of the 10 administrators stated it was a site or district decision to implement a choice program, and parents were involved in the planning. Initially there was a

meeting of stakeholders mapping out the plan for their schools. All administrators stated there was some resistance from a small portion of their population. School choice within these school districts was considered intra-district, meaning the innovation or choice takes place within a school district and students undergo a variety of selection processes in order to attend. In some cases the innovation or choice program happens to be in the neighborhood community school, thus allowing those students access without an application process.

One school had a very in-depth, lengthy process, according to the administrator, to have choice programming in their district. Stakeholder studies and numerous meetings with students, staff, parents, and community members were held over a course of months and in one case over a year. Fifty percent of the administrators stated the innovation or choice was initiated by their school district with the other 50% stating it was a building idea which was taken to the district level for support. In some cases the administrator stated the school or class had a research-based method they wished to implement and then connected with the school district for support. In some cases the administrator was approached about the innovation. At the first point of interest, committees began to form and meetings began to be held. Staff were made aware of the plans and provided the support necessary to implement the new programming. In most cases, administrators stated support by the district was continuous and on-going for the staff involved in the new programming.

Administrators discussed the need to research the idea and look into successes of schools across the United States that are implementing the programming. All of the administrators shared travel information during their time of inquiry into the innovative

choice process. It was reported countless hours were spent in planning meetings prior to the start of the choice or innovation program.

All 10 administrators would make changes to the way in which the programs began at their sites. The administrators at community schools who implemented an innovation program shared they wish there had been more parent input and community involvement in the planning stages. The administrators discussed reviewing the research-based program with input from stakeholders to make a better fit for the community, both parents and students, instead of a one-size-fits-all approach.

The 10 administrators also discussed the amount of work on their part and the part of the staff. One high school administrator stated, "This process should not be taken lightly." The process of innovation requires a desire on behalf of the staff as well as dedication and long-term commitment. One principal stated that educators say choice and innovation is not a silver bullet answer for reforming the educational system in the United States today. If not done slowly and with assistance, the prior statements would be true, but implementing the process correctly with both professional development and technology support will reduce the chance of failure.

Administrator question four. All administrators responded. Can you describe how being in a choice program or school impacted, or did not impact, your students' future opportunities in school?

All administrators stated the choice or innovation program was implemented to promote enhanced student performance. They went on to discuss the difficulty of tracking students involved in choice or innovation programs and how state standardized testing is currently in the process of such radical change it is very difficult to make

comparisons. One administrator stated, research shows being in a choice or innovation program does not necessarily show better achievement on testing, but it does show students have an overall higher skill set when problem solving, collaborating, computing, engaging, and in the overall learning process. In this particular program students are given voice and choice when it comes to what they are learning. The administrator went on to discuss improvements in behavior and attendance which are indicators of improved achievement. The ultimate goal is to improve outcomes through an alteration of practices with students.

Unfortunately, all 10 of the administrators were in a setting where their students would leave their building or class to attend a school with traditional programming; therefore, data would not be available for accountability purposes. Administrators all agreed kindergarten through twelfth-grade programming would be a next step for students. One administrator stated the attitudes and demeanors of the students were contagious, and mentioned the love of learning, and how sad it would be to send those children to a traditional setting and take those feelings and emotions away from the children again. All 10 administrators stated informally they could see a change in attitudes among students, increased work ethic, better rapport between staff and students and generally happy students who appear to be having fun while learning. Some students already in public education, according to two administrators, will never have the opportunity to experience choice or innovative teaching and learning.

Administrator question five. All administrators responded. What characteristics have you observed about your students that are different now from

when you first started the choice program or school that you believe are directly

related to the choice program or school?

Four of the administrators who are involved in a character education program

stated behavior was not an issue for them now that the program is operating fully. Two

of the schools are based on leadership qualities for staff and students, and two of the

schools or classrooms have student contracts designating the right to remove students

from the specialized program to return the student back to the community school should

poor behavior be an issue. Most schools do not have a strict safety net. These schools

find students who are on-task and interested in what they are learning have fewer

behavior issues.

The word "empowered" was stated in eight out of the 10 responses to the

interview question. Students have a sense of belonging and dedication to the school or

classroom. Teachers and staff in those schools have worked diligently to build rapport

with each other, students, parents and the community. Teachers and staff have also

worked to instill a desire for learning and a strong work ethic in students. One

administrator stated, "Student autonomy, self-directed and self-learners were all key

words used when describing students' behavior exhibited in schools."

Students are now setting goals in one of the elementary schools involved in the

study. No longer is it a secret how the students are performing on benchmarking tests.

Instead, one principal stated each quarter, students record data in a personal data binder

based on current testing scores and then set a new goal to try to achieve the next quarter.

She went on to say students conference quarterly with their teachers regarding academic

and behavioral goals. All of the principals discussed students have more pride in their

schools, and there is a sense of connection to the building itself. In addition numerous staff members report better behavior and caring about the school.

Administrator question number six. All administrators responded. If you were talking to another administrator who was about to start a choice program, what would you tell him or her?

The overriding information shared was regarding pacing. Administrators stated numerous times working through change slowly can result in fewer issues along the way, and also results in less likelihood of failure. Another common topic involved support from the district level for professional development. Administrators are expected to be instructional leaders; but cannot possess all the knowledge possible for this sweeping change. Two administrators discussed having additional staffing to support the choice or innovation program housed at their schools. Both staffing positions were part time, but both administrators considered this to be a factor of the success of the new programs.

Funding and budgets were discussed among all 10 administrators questioned. Each of their particular programs had school district budgetary costs. In some cases not just an initial start-up expense, but on-going expenses to support the programs. One program in particular is partially funded by a corporation, which allows for almost unlimited availability of funds. Two principals discussed the fact if a school district is committed to choice or innovation, then a rethinking of resources and fund allocation is needed. One principal discussed budget regarding the purchase of student and teacher textbooks. The school district has chosen to eliminate the purchase of consumable items for students, limiting textbook purchases and focusing on acquiring technology-based textbooks.

Administrator question seven. All administrators responded. What are your thoughts on the length of the choice or innovation program?

All 10 administrators agreed the length of their programs was too short. For those involved with select classrooms within their buildings the goal was to be school-wide. For those administrators with building-wide programs, the concern was when students finished elementary they would go right back to a traditional setting. On the secondary level, some choice middle schools fed traditional high schools. Three administrators stated it is not a matter of being a choice or innovation school, rather all schools need to get on board with twenty-first century learning skills. Six administrators stated no longer should we ask students to put away cell phones when they have access to unlimited information.

Three administrators stated the length of an innovation program should start in kindergarten for students and not end until they have taken their final class whether it is in high school or a university or college. There is a sense of urgency for administrators and educators, knowing how students learn best; changes have to be in place immediately. Two administrators stated Missouri is already behind other states in the change regarding innovation and choice. Sadly, two of the choice or innovation programs serve students for only one year. After one year the students then return to the traditional community school.

Administrator question eight. All administrators responded. How could the choice or innovation program be improved?

Six administrators discussed the term choice versus innovation in their school. The term choice would require transportation to the site, although most of the schools

represented allowed for student transfer. Some of the schools were community schools that offer innovation as a part of instruction and allow for some transfers within the district. Others were offsite campuses and were solely based on transfer into the program for sustainability. Those same six administrators discussed the ability to transport students receiving free or reduced lunch and how difficult it was for the families of those students. For those families choice was not the proper term, it was only choice for families who could get their children to the program.

Three of the administrators elaborated on the importance of having the right staff in helping make the program successful. One admitted when the program came into his school, some of his staff did not exhibit the proper skills necessary for the newly redefined teaching position. A few teachers left, but others remained making it a difficult situation for other staff and students. Another administrator stated when the programming came into her school, the district had all of the teachers' jobs posted, and teachers had to reapply to remain at their current sites. One principal discussed it has nothing to do with the years of experience of a teacher, but rather his or her ability to change. Sometimes he found less experienced teachers were as difficult to shift as were some of the more experienced, because some individuals are more resistant to change than others.

One middle school administrator spoke about how exciting it was to be named an innovation school, although, it was overshadowed by the fact other students in the same district were not going to have the same opportunity. Systems changes are underway, but some students missed the choice programming during their middle school years.

Administrator question nine. All administrators responded. What are your thoughts on our current educational system, traditional school setting versus the choice program or school?

Eight of the 10 administrators questioned responded with information regarding preparation for college and career readiness. From Washington, D.C. to Missouri to their own school districts there is an expectation schools will prepare students for college and careers. The administrators continued to discuss colleges are the least innovative institutions of education. Traditional practices are being used each day in universities and colleges in Missouri; thus teachers in training colleges are educated in some of the most traditional methods instead of experiencing innovative strategies they can later take into their own classrooms. Several administrators commented college teacher preparation programs are not preparing new teachers for choice schools. First-year teachers are not ready to teach using innovation or choice methods, and new teachers tend to have a very traditional mindset right out of college.

None of the administrators thought his or her program was the cure to the educational crisis in America today. Many discussed having the ability to touch the lives of the children in their buildings. Two discussed the overwhelming task for a superintendent moving a district into twenty-first century learning and how to go about transition without resistance from the community.

The 10 administrators discussed students had more choice in the innovation classrooms; assignments were more project-based with student feedback or student voice incorporated into the assignments. The administrators also discussed the teachers did not take front and center in the classroom. Two of the high school administrators stated this

was a huge shift in thinking for secondary teachers. Students are allowed to have more time for reflection and to expand on their learning; therefore, student schedules are more flexible and are more student-centered. Students are connected to their learning and the learning has true value and meaning in their lives. One administrator stated in his building, teachers are using a more kinesthetic method to teaching. The administrator explained how many of his teachers have an understanding about oxygen to the brain and movement being a part of innovative thought. Students in this particular building are out of traditional seats, and getting physical while learning. Educators in his building are helping students understand more about the manner in which they learn and providing flexible seating for students.

There is relevance in the learning, and students clearly have an opportunity to be reflective and to self-assess as part of their learning process. Six administrators stated funding in their districts would have to change in order to maintain their specialized programming. Not only will the school districts need to reallocate funding, typically there is an initiative for grant writing and corporate community support.

Administrator question 10. All administrators responded. Is there anything you would like to share about the choice program or school that I did not ask you previously?

The most common theme among the 10 administrators was regarding student discipline. Ten of the 10 administrators stated discipline issues were declining, and they believed this was a result of the programs in their schools. One principal stated in her program, it was luck of the draw on getting to attend. The district did not disqualify students due to behavior issues. She went on to say she had concerns about a few

students at the beginning of the school year, but to date there had not been any incidents of the undesirable behaviors the students had exhibited at their former schools.

Administrators reported there was more student and teacher "buy-in" and more rapport among staff as a result of the programs the administrators described. Students were more autonomous in their learning and behavior; therefore, behavior was improved across every grade level. High school principals stated within their buildings, some have split programming of the population. There are students who attend a choice or innovation program or classroom while the rest of the student population attends traditional high school classes. Students attending the choice or innovation program showed a decline of behavior issues, while those students in a traditional setting did not show a decline in incident reports of behavior.

Attendance had increased in six of the 10 buildings studied (MODESE, 2014). Attendance is one of the criteria for accountability in Missouri public schools (MODESE, 2014).

Three of the administrators shared although they are already considered an innovation or choice program, many schools in their district are making system wide changes to better meet the needs of students. One principal spoke about the fact there will be a new way of doing business and no longer will educators single out schools or districts as having choice or innovation programs. She believed those titles would eventually go away.

Findings

Common skill-sets based on information from the 10 Missouri public school administrators ranked as follows when asked the questions regarding traditional

educational opportunities and choice or innovation educational opportunities and how they would define them:

- Voice – All students should have the opportunity to not only learn from others, including the use of technology, but also share their learning with others, including the community. The Information Age we currently live in allows everyone to have a voice, educators need to instill in students along all divisions to use their voice effectively and appropriately.

- Choice – All students should have a voice about what it is they are learning in schools. All students need to be engaged and immersed in an educational setting that allows them to study and research topics of their choice. The end result should not be a student who wants a good grade; the end result should be the student who learned about a topic and is able to present the topic to peers, staff and community members. Technology integration or PBL should not be two of many strategies, but the primary strategies through which the majority of learning takes place. A teacher's job in the current society is to spark interests in students and facilitate student learning along the way until the end goal is reached.

- Time for Reflection – All students should be working hard in the classroom. Researchers have shown all people must take time to reflect in order to connect learning. Reflection time should be built into every class schedule. Students need planned reflection time to think about learning and review next steps. Reflection allows students to have a better understanding of what they are learning. Reflection allows a time to free write ideas, read for pleasure, or

sit in silence. Reflection should be practiced by students, teachers, and administrators.

- Opportunities for Innovation – All students should have time built into their schedule for creativity and innovation. Some of the most common phrases discussed during the administrator interviews were PBL and MakerSpace; fortunately PBL can actually take place in a MakerSpace. Educators should provide time in the schedule when students can put learning into a project, computer presentation or model. The end product for the student's learning should be critiqued and sent back to the student for corrections or additions. Many schools are inviting professional community members to share an expert voice with students.

- Critical Thinkers – All students should exhibit the skill of critical thinking. Teachers must move away from the factory model of education and help students find their own voice when thinking critically about others' work or internet information. Students should be able to think "outside the box" in order to retain the information learned. All students must exhibit the ability to ask questions, to inquire about the world around them, and to find answers. All students must be able to ask questions and challenge answers in a respectful manner.

- Problem Solvers/Finders – All students must be able to work on real world problems and issues which are appropriate for their level of learning and maturity. Upper grade students could even be responsible for finding a problem of interest to them, and then work to find a solution to the problem.

- Self-Assessment – All students need to have the ability to self-assess their learning. Study participants shared information about rubrics for younger students which teachers and students developed collaboratively in all elementary grades. Participants also discussed issues with grade cards being an out-of-date practice; grade cards do not match the type of learning that needs to be taking place in Missouri schools. Portfolios, or collections of student projects, are another option to track the progress of students. Students need to have an understanding of what it is they know and an even better understanding of what it is they need to learn.

- Connected Learning – All students need to experience a connected learning environment. Although middle school and high school administrators discussed that master schedules were a barrier to innovation, they also stated they are finding ways for teachers across the curriculum to collaborate and make connections from class-to-class for students in order to help students make their learning more connected.

All 10 administrators shared common thoughts and definitions regarding twenty-first century learning skills and student engagement.

Summary

A total of 10 Missouri public school administrators were interviewed for the purpose of collecting data regarding their perceptions of twenty-first century learning skills and student engagement in choice or innovation classrooms. The questions were framed so the researcher could find themes, listed above, among the answers for each question in order to gain insight into their perceptions collectively. The information was

coded for a clear understanding of the views of all 10 administrators and was reported

based on information for each of the 10 questions.

Overall, administrators in all 10 settings thought student expectations were higher

in the choice or innovation programs. Behavior was better, and attendance was showing

improvement in choice and innovation programs. Teacher mindsets have changed; they

no longer perceive themselves as the giver of knowledge, but now facilitate work to

ensure students are learning. Some teachers struggle with this concept, taking on the

mentality students learn using the traditional model. Administrators admitted students

learn in spite of what a teacher does in most cases, but some educators are behind the

times regarding the Information Age, and there is a need for change.

In Chapter Five, a review of the study is presented. Another perspective of the

research questions based on the administrators' interview answers is also included in the

final chapter. The findings of the study, a summary of the study, and recommendations

for future research conclude the dissertation.

Chapter Five: Findings, Conclusions, and Recommendations

A continued controversy exists on how to reform America's public school system; educational innovation means disregarding traditional policies and practices that no longer serve the needs of twenty-first century learners. Technology has to become a tool for students, computers are not the solution to the educators' instructional practices, but the place of technology in education has to be addressed (Richardson, 2015). Educators must increase opportunities for students to be successful today in order for them to be able to lead in the future (Richardson, 2015). No one can predict the future and what it will bring for today's children, but educators need to be sensible and forward-thinking (The Meriti Group, 2009). Children are waiting for educators to catch up to them in technology and the manner in which they learn; they are bored in school and need a boost (The Meriti Group, 2009). Reform is inevitable if public schools are to remain open and educating students. If educators wait for the federal and state government to make changes, students will continue to struggle in schools where reform is on hold. It is just a matter of time, or lack of time, before legislators make up their minds on when and how reform will happen (The Meriti Group, 2009). Arne Duncan (2009), Secretary of Education stated:

> Reforming public education is not just a moral obligation. It is absolutely an economic imperative. It is the foundation for a strong future and a strong society. Education is the civil rights issue of our generation. The fight for quality education is about so much more than education. It's a fight for social justice. It is the only way to achieve the quality that inspired our democracy, inspired women to stand up for their rights, and then inspired minorities to demand their fair share

of the American promise, and it inspires every child to dream. (U.S. Department

of Education, 2009, p. 4)

Arne Duncan stated more reform has occurred in the past few years than any other time

in the recent past and the federal government has not spent additional money to institute

this reform in the United States (U.S. Department of Education, 2013).

Educational reform is not viewed as being as important as the energy crisis or

foreign relations; therefore, education reform is fiercely resisted and put on the back

burner (Wolk, 2011). Researchers have shown parents who send their children to brick-

and-mortar schools prefer their children receive learning from the teacher in the

traditional school setting (Hill, 2010). Technology alone will not be enough to reform

schools (Hill, 2010). Schools are being pressured to buy more technology that is only

used as a tool in the classroom, a supplement to the curriculum (Hill, 2010). The ultimate

goal of innovation is to improve student outcomes through an alteration of practices in

education (Berends, Cannata, & Goldring, 2011). Innovation classrooms, unlike

traditional classrooms, allow students creativity and choice (Robinson, 2013b).

Will Richardson (2015) recently discussed the difference between self-led

learning and teacher-led learning (Richardson, 2015). Richardson (2015) gave an

example of how his son learned to play a video game by watching YouTube videos and

collaborating online with friends. Richardson (2015) went on to say his son learned the

game within a few hours and was a master at the game within a few days. Richardson

(2015) then discussed if his son were learning the same video game in school today, he

would have learned some concepts over weeks in a classroom, with teachers scoring his

advancements on the new learning at every step, thus stifling the learning process for a young mind and making student engagement a moot point (Richardson, 2015).

The first one-to-one classrooms, meaning one student to one computer, were implemented 25 years ago in a women's college located in Melbourne, Australia (Richardson, 2015). There are still educators today who believe one-to-one technology is a cutting-edge innovation (Richardson, 2015). However, 75% of children in the United States have access to a smart phone (Richardson, 2015). Seymour Papert (1993) stated when it comes to thinking about learning, nearly all of us have a school side of the brain, which thinks school is the only natural way to learn, and a personal side which knows perfectly well it is not (Richardson, 2015). Every one of us has built up a stock of intuitive empathic, commonsense knowledge about learning (Papert, 1993).

Review of the Study

The purpose of the study was to analyze perceptions of Missouri public school administrators regarding twenty-first century learning skills and overall student engagement. Common themes emerged from the interviews, allowing for reviewing and consolidating of information into like themes. Educators are experts at using research-based titles for the types of learning or teaching being used. Catch phrases go in and out of fashion in education more than any other profession (Richardson, 2015). In Missouri all of the administrators interviewed had endured the first steps of bringing about choice or innovation into their buildings, whether tailored to classrooms or a building-wide implementation.   Most administrators shared more system-wide changes were occurring in their districts and the pressure was on to maintain being ahead in innovation in order to have the status of a choice school or innovation program.

Findings

In answer to the first research question, concerning perceptions regarding skills necessary for the twenty-first century, the common theme among administrators was that one particular program is not the only answer to school reform. Several programs address the skill set required by today's students. Students today need to be great readers in order to be successful in any endeavor to which they may aspire, according to the 10 administrators interviewed. Students also need to have a strong mathematical foundation. There were 14 recurring skills the participants found necessary for students to be successful in the future. Those are the same skills the business community has identified as important for future employees. Those skills include literacy, mathematics, technology, reasoning, creativity, innovative, communication (including foreign language), collaboration, global thinking, civility, flexibility, self-directed, leadership and principled (Wagner, 2012).

In response to the second research question about perceptions regarding student engagement with the implementation of a choice or innovation program, the researcher discovered all participants had the same perceptions about the transition from non-traditional classrooms. By changing the manner in which teachers operate the classroom, including the physical space, student engagement is increased. However, the administrators also indicated the choice or innovation programs in their buildings were not linked to higher accountability test scores. The administrators commonly stated student engagement is increasing with the use of technology in the classroom, not to mention the other strategies in place to boost student engagement.

Relationship of Findings to Conceptual Framework

The conceptual framework for this study was selected to examine the relevance of

variables in the shaping of the educational system in the United States. Legislators have

created laws based on competition with other countries, United States drop-out rates, and

school accountability. After a two-year study with community leaders, Tony Wagner

(2012), found seven competencies necessary for students to exhibit in order to be

successful in the global setting as adults. Those competencies include the following:

critical thinking and problem solving abilities, collaboration across networks and leading

by influence, agility and adaptability, initiative and entrepreneurialism, accessing and

analyzing information, and effective written and oral communication (Wagner, 2012).

These are comparable to the 14 skills found from the first research question

Recommendations for Future Research

Based on the results of this study, the following recommendations are being

offered:

1. Infrastructure for internet access for all students throughout the state,

especially in rural areas in Missouri.

2. Professional development plans for administrators and teachers regarding

obtaining the skill sets necessary in order to highly engage students with technology,

project-based learning and personalized-learning.

3. Educational reform plans for educators in Missouri public schools, on every

divisional level, in order to educate students using twenty-first century learning skills

involving high student engagement.

Conclusions

The data collected show choice and innovation schools in Missouri have a clear research-based vision that drives the programming. Administrators and teachers meet frequently to guide the development of sustainable programming in order to reform the traditional classroom. Choice and innovation schools offer clear, well-defined curriculum, most based on the Missouri state learning standards. One of the Missouri school choice or innovation programs has developed a partnership with local businesses for financial support, and three have obtained grants or foundational funds to help support the new design of these programs. Team teaching is common among choice and innovation schools and programs in Missouri, with teachers collaboratively planning and executing lessons. Innovative scheduling is being addressed in several of Missouri public school choice sites. A year-long calendar, with frequent shorter breaks, is one concept being implemented in the state. This type of programming for students allows for better rapport between staff and students. In choice and innovation schools, the teacher takes the role of a coach or facilitator of learning rather than the traditional role as giver of knowledge.

Many choice and innovation programs in Missouri have a screening process for selecting students based on the student's leadership potential. The selection process employs a variety of criteria including grades, behavior reporting, and reference letters from teachers, principals and school staff. Other choice and innovation schools are neighborhood or community schools that provide an automatic seat for students in the attendance area, or may offer the option for students to transfer in or out of the program.

Choice and innovation programs require an extensive time commitment by the faculty. Most require a significant investment of resources to develop and support the program. There is on-going, ever-changing reflection and review of the program to fit student needs.

Summary

The purpose of this study was to review the perspectives of Missouri administrators regarding twenty-first century skills and student engagement in choice or innovation schools. New choice or innovation programs throughout Missouri schools were being implemented as this research was taking place. Schools are addressing reform slowly; utilizing Missouri state learning standards while rethinking classroom environments and addressing technology needs for students.

Schools have identified key gaps in educating children for twenty-first century learning skills while maintaining high levels of student engagement. Those gaps are driving the need for professional development for both administrators and teachers. The key to success in implementing new innovation programming is support on the district level. Support was a key factor in most of the administrator interviews, especially in the area of technology. The method of educating students based on the Industrial Revolution model is overdue for system-wide change. As quoted by one administrator during the interview, "Our students are patiently waiting on us as educators to catch up and truly educate them." The title given to the new method with which we are educating students is just a label; learning, authentic learning, is the catalyst for the sweeping change. No longer is it acceptable for students to be completing worksheets in elementary school or listening to lectures day after day on the middle school and high school levels. It is also

unacceptable for students to complete traditional worksheets on their computers. The

time has come for teachers and administrators to ensure students have the proper

furniture, curriculum, grade cards, technology, and programming to be successful.

Appendix A– IRB Approval

LINDENWOOD

LINDENWOOD UNIVERSITY ST.CHARLES, MISSOURI

DATE: April 17, 2015

TO: Cherie Norman
FROM: Lindenwood University Institutional Review Board

STUDY TITLE: [562083-1] Perceptions of Non-Traditional Programs within Missouri Public
                         School Districts
IRB REFERENCE #:
SUBMISSION TYPE: New Project

ACTION: APPROVED
APPROVAL DATE: April 17, 2015
EXPIRATION DATE: April 17, 2016
REVIEW TYPE: Expedited Review

Thank you for your submission of New Project materials for this research project. Lindenwood University
Institutional Review Board has APPROVED your submission. This approval is based on an appropriate
risk/benefit ratio and a study design wherein the risks have been minimized. All research must be
conducted in accordance with this approved submission.

This submission has received Expedited Review based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the study and
insurance of participant understanding followed by a signed consent form. Informed consent must
continue throughout the study via a dialogue between the researcher and research participant. Federal
regulations require each participant receive a copy of the signed consent document.

Please note that any revision to previously approved materials must be approved by this office prior to
initiation. Please use the appropriate revision forms for this procedure.

All SERIOUS and UNEXPECTED adverse events must be reported to this office. Please use the
appropriate adverse event forms for this procedure. All FDA and sponsor reporting requirements should
also be followed.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to the
IRB.

This project has been determined to be a Minimal Risk project. Based on the risks, this project requires
continuing review by this committee on an annual basis. Please use the completion/amendment form for
this procedure. Your documentation for continuing review must be received with sufficient time for review
and continued approval before the expiration date of April 17, 2016.

Please note that all research records must be retained for a minimum of three years.

Generated on IRBNet

Appendix B

Phone Script

(date)

Hello,

My name is Cherie Norman. I am currently conducting research for a doctoral study under the supervision of Dr. Dennis Cooper through Lindenwood University, Missouri regarding choice and innovation in Missouri public schools.

The propose of this study is to review choice programs/classes in the state of Missouri and gain insight into school choice from the perspective of an administrators' regarding student engagement and twenty-first century learning within their school/district. 10 schools have been identified as having choice and innovation within their programming.

I have a ten question interview I would like to visit with you in order to gain input from you regarding the program/class you currently work with and your perception of student engagement, twenty-first century learning as well as overall success of the program.

Being a school administrator, I understand the amount of time spent on the job and want to respect your time. I would like to provide to you the consent form and questions at this point and then schedule a time for the actual interview. (Request contact information at this time). I want to thank you in advance for your time and consideration. I look forward to visiting with you about your program soon. Thank you.

Appendix C

Adult Consent Form

INFORMED CONSENT FOR PARTICIPATION IN RESEARCH ACTIVITIES

Perceptions of Non-Traditional Programs within Missouri Public School Districts
Principle Investigator: Cherie L. Norman   Phone: 417-860-0142 E-mail:
cnorman@spsmail.org
Participant: Contact information:

1. You are invited to participate in a research study conducted by Cherie L. Norman

under the guidance of Dr. Dennis Cooper. The purpose of the study will be to ascertain

the perception of student engagement and twenty-first century learning in choice

schools/programs. This study will focus on administrators throughout Missouri's public

school systems.

2. a) Your participation will involve completing a 10 verbal questionnaire regarding your

experience and perceptions with choice schools/programs.

   b) The amount of time involved in your participation will be an approximate 30

   minute in-person of phone interview.

   Approximately 10 from throughout Missouri Public School Districts will be involved

   in this research.

3. There are no anticipated risks associated with this research.

4. There are no direct benefits for you participating in this study. However, your

   participation will contribute to the knowledge about choice schools/programs and

   may help society.

5.   Your participation is voluntary and you may choose not to participate in this research

   study or to withdraw your consent at any time. You may choose not to answer any

questions you do not want to answer. You will NOT be penalized in any way should you choose not to participate or to withdraw.

6. We will do everything we can to protect your privacy. As part of this effort, your identity will not be revealed in any publication or presentation may result from this study and the information collected will remain in the possession of the investigator in a safe location.

7. If you have any questions or concerns regarding this study, or if any problems arise, you may call the Investigator, Cherie L. Norman at 417-860-0142 or the Supervising Faculty, Dr. Dennis Cooper at 417-327-3044. You may also ask questions of or state concerns regarding your participation to the Lindenwood Institutional Review Board (IRB) through contacting Dr. Jann Weitzel, Vice President for Academic Affairs at 636-949-4846.

I have read this consent form and have been given the opportunity to ask questions. I will also be given a copy of this consent form for my records. I consent to my participation in the research described above.

_____   _____

Participant's Signature   Date   Participant's Printed Name

_____   _____

Signature of Principle Investigator   Date   Investigator Printed Name

Appendix D

Interview questions

1. How do you feel about the educational opportunities your students received by attending a choice program and/or school?

2. How do you measure your students' success in the choice program and/or school?

3. Tell me about the process the school underwent to become a choice program?

4. Can you describe how being in a choice program and/or school impacted, or did not impact, your students' future opportunities in school?

5. What characteristics have you observed about your students are different now from when you first started the choice program and/or school you believe are directly related to the choice program and/or school?

6. If you were talking to another administrator who was about to start a choice program, what would you tell him or her?

7. What are your thoughts on the length of the choice and/or innovation program?

8. How could the choice program be improved?

9. What are your thoughts on our current educational system, traditional school setting versus the choice program and/or school?

10. Is there anything you would like to share about the choice program and/or school I did not ask you previously?

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Vita

Cherie LaRae Norman was born in Springfield, Missouri. After completing a bachelor's degree in elementary education Cherie taught in Springfield Public Schools for 16 years. During her tenure at Wanda Gray Elementary, Cherie pursued two advanced degrees in 1995, a master's degree in curriculum and then a second master's degree in 2008 in administration and leadership. Cherie began her administrative position in January 2009 working at the Kraft Administration Center and then was named principal of Cowden Elementary in March 2009.