# The Effect of School Based Intervention Processes on Secondary School Graduation Rates 

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# The Effect of School Based Intervention Processes 

 on Secondary School Graduation Ratesby

Ben H. Yocom

August, 2012

A Dissertation submitted to the Education Faculty of Lindenwood University in partial fulfillment of the requirements for the degree of

The Effect of School Based Intervention Processes on Secondary School Graduation Rates
by

Ben H. Yocom

This Dissertation has been approved as partial fulfillment
of the requirements for the degree of

Doctor of Education
Lindenwood University, School of Education


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## Declaration of Originality

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


## Acknowledgements

I wish to thank the members of the committee: Dr. Sherry DeVore, Dr. Terry Reid, Dr. Jason Anderson, and Dr. Dennis Cooper. Each of these individuals showed great wisdom, guidance, and support throughout this process. I would like to thank each secondary school administrator who provided insight on various intervention processes. I would like to thank my beautiful and loving wife, Michelle. My children also supplied support; thank you Drake and Brynna, you two are definitely my inspiration! Lastly, I would like to mention my sincere appreciation for my parents. They instilled my commitment to education at an early age, and I can only hope that this project will bring them pride.


#### Abstract

The focus of this research is in the area of academic interventions and their effect on graduation rates in secondary schools in Missouri. In light of the regulations within the No Child Left Behind Act of 2001 and its accountability requirements for schools, this study is important and timely in order to provide valuable examples of effective intervention processes. The research approach adopted in this dissertation was a mixed methods approach; therefore, quantitative analysis was utilized during a statistical comparison of secondary schools in Missouri and a review of trends from a survey distributed to all secondary school principals in Missouri. Qualitative analysis was completed by interviewing five secondary school principals by using a predetermined set of questions. The responses were coded and analyzed to determine the trends, perceptions, and attitudes surrounding intervention processes. The findings from this research were inconclusive that the use of academic intervention processes directly increases the graduation rate for secondary schools in Missouri. The primary reason behind inconclusive findings is the lack of specific, long-term data pertaining to the use of academic intervention processes, as secondary schools have been using systematic academic intervention processes for less than 10 years. Although the data were inconclusive, previous research has supported the use of interventions. The goal of school administrators and teachers is to implement strategies to meet the educational needs of students. Academic intervention processes may serve as a viable strategy for this goal to be achieved.


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## Chapter One: Introduction

A tenth grade student disclosed to a secondary Math teacher, "I do not understand this Math assignment, and it is due tomorrow. The teacher replied, "I am sorry, but I explained the content thoroughly today, and I do not have time to go back to teach the same material." This brief scenario is very common in schools. Students do not understand material, and teachers feel restricted by time.

Academic intervention processes allow students opportunities to learn material with assistance from teachers. Several initiatives, laws, and theories support systematic, academic intervention process. The mandates associated with the No Child Left Behind (NCLB) Act of 2001 were addressed by school officials and educators through stricter accountability measures to assure proficiency targets are met. To provide students with appropriate learning opportunities, school districts have developed Comprehensive School Improvement Plans (CSIP). The Professional Learning Communities (PLC) model and Response to Intervention (RtI) have been implemented to establish systemic, intervention processes.

## Background of Study

Since the implementation of NCLB, public schools across the nation have made significant adjustments to the overall functionality of their institutions. The underlying purpose of NCLB was to increase accountability and close the achievement gap within public schools. Within the accountability portion of NCLB, each state was required to submit an accountability plan, which outlined how benchmarks would be achieved (Erpenbach, Forte-Fast, \& Potts, 2003).

In Missouri, schools attempting to adhere to NCLB must create a CSIP in which goals, objectives, and timelines are identified that will serve as a framework for growth and progress. The CSIP serves as the guiding force around all school improvement efforts (Tucci, 2009). The CSIP is a comprehensive document and includes whole-school benchmarks and standards; consequently, the CSIP should include school-specific plans known as building improvement plans (BIP). A general CSIP goal could be to establish and instill an academic intervention process, while each specific BIP will detail the specific processes at each level (Tucci, 2009). The CSIP and BIP specifically align the mission and vision of the school district to the academic intervention process (Hinkle \& Kinney, 2008).

As educators in public schools begin to create their respective, specific BIP, it is important to begin with the end in mind (Lewis, Madison-Harris, Muoneke, \& Times, 2010). School administrators must form committees and teams to begin collaborating about the mission and vision for each school (McEnery \& Hillestad, 2005). Once the mission and vision have been created, the teams will begin creating and identifying attainable goals with action steps. This process is a vital component in the school improvement process (Johnson, 2005).

A common mistake among administrators is to individually decide which areas need improvement; unfortunately, this process has proven to be extremely ineffective. Staff buy-in and commitment are most often achieved through consensus building and collaboration (Hinkle \& Kinney, 2008). The most common way to obtain consensus is to identify teams and committees representing each department or grade level within the school (Johnson, 2005). Specific student achievement enhancement strategies are birthed
within the specific goals and action steps defined by the leadership committee (McEnery \& Hillestad, 2005). Systematic intervention processes are typically conceived within the BIP goals and action steps (Birky, Shelton, \& Headley, 2006).

A systematic intervention process is a routine procedure for schools to identify and assist students who are struggling and to enrich those who are excelling. This process is designed to help students achieve the mandated state standards (United States Department of Education [USDOE], 2007). Academic interventions are comprised "[of] two components: additional instruction that supplements the general curriculum and student support services to address barriers to improved academic performance" (The University of the State of New York, 2000, p. 4).

Intervention processes clash with traditional academic logic (Cantar \& Klotz, 2006). It is important to note that the reasons teachers may resist this type of initiative would be informative to decision makers. According to Intervention Central (Anonymous, 2010), seven reasons have been identified by administrators and teachers:

1. Lack of Skills. Teachers lack the skills necessary to successfully implement academic or behavioral interventions in their content-area classrooms (Fisher, 2007; Kamil et al., 2008).
2. Not My Job. Teachers define their job as providing content-area instruction. They do not believe that providing classwide or individual academic and behavioral interventions falls within their job description (Kamil et al., 2008).
3. No Time. Teachers do not believe that they have sufficient time available in classroom instruction to implement academic or behavioral interventions (Kamil et al., 2008; Walker, 2004).
4. No Payoff. Teachers lack confidence that there will be an adequate instructional pay-off if they put class wide or individual academic or behavioral interventions into place in their content-area classroom (Kamil et al., 2008).
5. Loss of Classroom Control. Teachers worry that if they depart from their standard instructional practices to adopt new classwide or individual academic or behavior intervention strategies, they may lose behavioral control of the classroom (Kamil et al., 2008).
6. 'Undeserving Students.' Teachers are unwilling to invest the required effort to provide academic or behavioral interventions for unmotivated students (Walker, 2004) because they would rather put that time into providing additional attention to well-behaved, motivated students who are 'more deserving.'
7. The Magic of Special Education. Content-area teachers regard special education services as 'magic' (Martens, 1993). According to this view, interventions provided to struggling students in the general-education classroom alone will be inadequate, and only special education services have the power to truly benefit those students. (p. 1)

The perceptions of different stakeholders directly involved in the intervention processes have varied from state to state (Bailey, 2010). In 2007, a study was conducted in Massachusetts to examine the progress of the intervention processes and the attitudes of several administrators and teachers within three of the state's schools: one middle school and two secondary schools (McQuillan \& Salomon-Fernandez, 2008). McQuillan
and Salomon-Fernandez (2008) shared the response of one teacher in reference to the perception of forced interventions:

Teachers should be held accountable for the performance of our kids, but we're not solely responsible for the underperformance of students in this school. There are a multitude of problems... they have to overcome before they get to my classroom. It's not an excuse for what they're not doing, it's just reality... Many of our kids live on their own....Many of them live in shelters. I have immigrant kids living in apartments with no parents, working full-time, often taking care of younger siblings. These are just some of the problems. (p. 13)

Several types of intervention processes and programs are prevalent in secondary schools. There are different purposes for these intervention processes. Some are designed to address the needs of students with disabilities; others are designed to address the needs of students who are failing and at-risk of dropping out of school (Burns, Christ, \& Ysseldyke, 2005).

## Conceptual Framework

The conceptual framework guiding this study was derived from the Professional Learning Communities (PLC) model. Additionally, the Response to Intervention (RtI) model and effective schools research were used to further examine the intervention processes. The PLC model serves as a vehicle for schools to seek best practices and ensure learning for all students (DuFour, Re., DuFour, Ri., \& Eaker, 2005). There are four guiding questions within the PLC process:

- What do we want students to learn? (Planning and pacing instruction)
- How will we know if they have learned it? (Collect data)
- What do we do if they do not learn it? (Intervention)
- What do we do if they do learn it? (Enrichment) (Rentfro, 2007, p. 1)

These questions serve as the guide to all activities within successful PLCs (DuFour et al., 2005).

The PLC framework allows teachers and administrators many opportunities to seek the best instructional practices (DuFour, 2004). The PLC contains three primary themes: the school must develop a shared and collective mission, essential values, and common goals (LaFee, 2003); the school must support "collaborative teams that work interdependently to achieve common goals; and... [the school must] focus on results as evidenced by a commitment to continuous improvement" (Rentfro, 2007, p. 1).

A focus on learning must also be a common understanding among all stakeholders within the educational organization. This way of conducting school drastically differs from the traditional emphasis on teaching. Teachers would focus on stellar lesson plans, great classroom settings, and beautiful textbooks. These items should only receive focus if they enhance the learning process. Stakeholders must focus on instructional results rather than the instruction itself (Jessie, 2007).

A critical component of the PLC model is the implementation of systematic, consistent interventions when students are failing. The intervention component is birthed from the third pivotal question: What do we do when students do not learn? Intervention processes are based upon the assumption that schools, as a whole, cannot wait for students to fall far enough behind to fail (DuFour, 2004). Instead, schools should create systematic intervention processes to provide targeted assistance for specific students. The RtI model supports this ideal through the pyramid of interventions, offering
additional learning opportunities to all students. The students are placed in various tiers based on their specific needs (Protheroe, 2004). The pyramid description comes from the expectation that the amount of students needing intense assistance should be smaller than the amount of students needing minimal or no assistance (Buffum \& Mattos, 2008).

The PLC model and the RtI pyramid of interventions have essentially the same outcome and premise. RtI is a process that assists educators in identifying struggling students (Hale, 2006); the process was conceived based on the information within the President's Commission on Excellence in Special Education (U.S. Department of Education Office of Special Education and Rehabilitative Services, 2002). The initial purpose was to assist educators in determining services for students with specific learning disabilities; therefore, RtI extends the concepts outlined in the Individuals with Disabilities Education Act (IDEA). As a special education practice, RtI gives students the opportunity to receive instruction and assessment before entering special education. This would provide a solid starting point for future educational measurement and observation (Barnett, Daly III, Jones, \& Lentz, 2004).

RtI consists of a three-tiered systematic process for students to receive instruction and assistance (Wedl, 2005). The tiered model provides options for students and teachers. Typically, Tier Three is designed for students who are severely struggling with foundational, fundamental skills and need intense individualized instruction. Tier Two consists of interventions for students who display the necessary skills but cannot understand specific details about various skills, and Tier One is designed for students who possess the understanding of the material and may need enrichment or possible introduction of future topics (Brice, A., Brice, R., \& Miller, 2006).

In 1966, the Coleman Report concluded that schools do not make a difference; however, effective schools researchers argued that schools do make a difference and are effective in the overall academic achievement of students (Lezotte, 1997). The effective schools research provides the following significant component within academic interventions: frequent monitoring of student progress. Systematic academic interventions align with frequent monitoring; whereas, infrequent monitoring produces too much risk in allowing failure of students. Coupled with the notion that schools do make a difference when providing frequent monitoring of student performance (Lezotte \& Snyder, 2011), the effective schools research is appropriate as a framework for this study.

## Statement of Problem

The current intervention processes espoused by prominent authors will require educators to make a change in educational culture. The idea of intervention processes does not mesh with traditional educational thinkers (Buffum \& Hinman, 2006). Therefore, intervention processes require pertinent stakeholders to change from traditional practices of school functionality to new practices that focus primarily on student learning (Muhammad, 2009).

NCLB requires each school to develop and implement a comprehensive improvement plan, including an academic plan (Kavale \& Spaulding, 2008). Oklahoma, a western neighbor to Missouri, developed a two-year comprehensive plan which includes specific interventions and sanctions as outlined in NCLB. The Oklahoma Department of Education (2008) defined their plan with nine components. Specific to this research study is component number seven: Academic interventions and Extended

Day/Year Opportunities (Oklahoma Department of Education, 2008). The Oklahoma Department of Education (2008) defined a tiered system of support as a procedure involving numerous tasks: responsive instruction, needs assessment practices, and results-based intervention activities. The belief is that schools will improve their quality of instruction and provide each student the best opportunity to academically succeed, while identifying students with various disabilities (Corbett, 2011).

In year two of the school improvement process, Oklahoma schools developed a plan to offer Supplemental Educational Services (SES) (Dufrene, Duhon, Freeland, Gilbertson, Noell, \& Witt, 2004). This included, but was not limited to, academic interventions. An intervention process specific to the needs of the students was an essential component of the improvement plan. If schools fail to meet the standard in seventh grade Communication Arts, then a segment of the intervention process is dedicated to increasing achievement within Communication Arts (Corbett, 2011).

Intervention processes instill a learning-for-all philosophy. Since this type of thinking is uncommon among traditional teachers, typically, the implementation of academic intervention processes is delayed (Horowitz, 2005). Teachers must prepare differentiated instruction strategies to meet the specific learning needs of each student (Fuchs, Mock, Morgan, \& Young, 2003; Willoughby, 2005), and this type of instruction does not fit the traditional teaching mold. Intervention processes and differentiated instruction practices have numerous commonalities, and teachers must evaluate and possibly adopt a wide variety of instructional strategies.

Another vital concern within the implementation of an intervention process is staff resistance to change. Resistance to change is the action taken by stakeholders when
they feel threatened by the proposed change (Maurer, 1996). This critical factor must not be taken lightly by school leaders. If the reform or change movement is not carefully prepared and planned, the initiative may fail. Stakeholders must be given the opportunity to present opinions and give input (VanDerHeyden, 2006). Without this, reform movements rarely succeed.

In order for stakeholders to truly adopt a change, they must take ownership of the process. Teachers who are expected to blindly accept the change are less likely to fully commit to the type of change needed to effectively implement an academic intervention process (Hjelle, 2001). Changing a traditional school culture, the development of specific improvement plans as outlined by NCLB, the need for differentiated instruction, and the resistance of pertinent stakeholders to change present as current issues requiring examination. As the research is more prevalent when identifying intervention strategies for young learners, gaps in research addressing the use of intervention strategies at the secondary level are apparent.

## Purpose of the Study

The purpose of this study was to explore the reasons public secondary schools implement or do not implement school-based interventions. Additionally, the purpose of this study was to evaluate the effectiveness of intervention processes in relation to graduation rates. Data from public secondary schools in Missouri using intervention processes were examined to determine if the implementation of interventions caused an increase in graduation rates.

## Research Questions

Three fundamental questions were posed for this research:

1. According to public secondary school principals, what are the reasons secondary schools choose to implement academic intervention processes?
2. According to public secondary schools principals, what are the reasons secondary schools do not implement academic intervention processes?
3. What is the effect of academic interventions on graduation rates in public secondary schools that implement intervention processes and public secondary schools that do not implement intervention processes?

## Definitions of Key Terms

For the purposes of this study, the following terms are defined:
Effective schools movement. This is a period of time that began in 1966 and was focused on learning for all students (Lezotte, 1997).

Individuals with Disabilities Education Act (IDEA) of 2004. This Act changed many sections of the original Individuals with Disabilities Education Act. The changes were made to reflect new ideas around learning disabilities (USDOE, 2009a).

No Child Left Behind Act (NCLB) of 2001. This is based on stronger accountability for results, more freedom for states and communities, proven education methods, and more choices for parents (USDOE, 2009b).

Professional learning communities (PLC). A professional learning community consists of team members who regularly collaborate toward continued improvement in meeting learner needs through a shared curricular-focused vision (Reichstetter, 2006).

Response to intervention (RtI). This is an alternative method, other than IQ tests, for identifying learning disabilities. Introduced in the reauthorization of IDEA in

2004, RtI is a three-tiered process that provides academic support to students before referring for special education evaluation (Morin, 2009).

## Limitations and Assumptions

The following limitations and assumptions were identified:

1. The sample in this study was limited to secondary public school principals in Missouri.
2. Since the instrument used in this study was a survey, it was assumed the responses of the participants were offered honestly and without bias.
3. The idea of specific, documented intervention processes is relatively new at the secondary level.
4. A preponderance of thought exists that interventions are a direct result of special education initiatives.

## Summary

In this chapter, background information relating to academic interventions, specifically RtI and within the framework of the PLC model, was presented. Due to the impact of NCLB, resulting in increased accountability, graduation rates are scrutinized; therefore, appropriate strategies must be in place to assure students receive instruction based on their individual needs.

The purpose of this research was to explore the reasons public secondary schools implement or do not implement school-based interventions. Additionally, the purpose of this study was to evaluate the effectiveness of intervention process in relation to graduation rates. Three research questions were posed to guide the study. Several key terms were defined, as well as limitations and assumptions.

In Chapter Two, a review of relevant literature was presented. The main themes included current intervention processes, the PLC model, RtI, and effective schools research. The research design, population and sample, instrumentation, data collection, and data analysis were detailed in Chapter Three. An analysis of the data was described in Chapter Four, and the conclusions and recommendations for further research were presented in Chapter Five.

## Chapter Two: Review of Literature

Currently, secondary students face many challenges: preparation for postsecondary education, preparing for career placement, and dealing with an ever-changing global economy (Association for Career and Technical Education, 2006). Unfortunately, secondary students are receiving less positive influence from their parents, and schools are left to fill this void (DePlanty, Coulter-Kern, \& Duchane, 2007). There are three primary areas which cause secondary-school students difficulty in preparing for the next step in their respective lives: low socio-economic levels, increasing pressure to drop out of school, and an overall lack of career preparedness (Jensen, 2009).

Students who attend public schools with high socio-economic levels tend to score better on standardized tests, attend more prestigious universities/colleges, and academically perform at a higher level during their secondary school experience (Center on Education Policy, 2007). Frankly, schools with a large amount of financial resources provide students more opportunities to participate in better academic programs (Blank, Jacobson, Melaville, \& Pearson, 2010). As a result of NCLB and the reauthorization of IDEA, the need to implement intervention strategies for all students emerged, and a culture of doing anything possible to achieve student learning has become paramount. For schools with successful student achievement statistics (Tough, 2009), establishing this culture is critical and is a task school leaders must tackle when implementing new initiatives.

This study was limited by the lack of substantial, long-term data from intervention processes at the secondary level. This proved to be the most difficult hurdle to overcome, as many leaders and principals have not implemented the process. For the purpose of this
study, the intervention processes derived from the PLC model, the effective schools movement, and RtI procedures were examined. These initiatives instill various characteristics that specifically call for intervention processes or theories that support the idea of intervention processes. The research questions offered an opportunity to address the reasons why intervention processes are used, the reasons why they are not used, and how graduation rates are impacted by the use of intervention processes at secondary schools in Missouri.

## No Child Left Behind

The implementation of NCLB in 2001 and the revamping of the IDEA in 2004 have caused many schools to rethink their current educational practices. Within that rethinking, schools have adopted intervention processes to reach the benchmarks outlined by NCLB. Academic intervention processes were birthed in elementary special education practices; however, secondary schools have begun implementing intervention processes as well (Bollman, Gibbons, \& Silberglitt, 2007). Other than addressing the requirements within NCLB, secondary schools have sought to implement academic interventions to increase academic achievement, decrease the dropout rate, and increase the graduation rate (Friedman, 2010). Martin (2008), a principal at Thomas B. Doherty High School in Colorado Springs, Colorado, stated:

The challenge we face with NCLB accountability issues is how to meet the needs of all students. RtI provided us with a mechanism to expand our PLC work and answer pivotal questions: What do you do when students don't learn and what do you want them to know? What do you do if students already know what you want them to learn? Whatever it takes became our focus. (p. 5)

Essentially, schools are held accountable when students are not achieving and intervention processes assist schools in reaching those goals. Schools that deliver Title I services but fail to meet the expectations outlined in NCLB must implement interventions that support the overall mission and vision of the school district (NCLB Requirements, 2009) and decrease the achievement gap between low-income students and other students.

Typically, Title I services are utilized in the elementary levels and specify primarily literacy remediation (McNeil, 2012). The federal government provides additional funding to local schools to meet the needs of low-income students. If the funding is spent incorrectly, states must repay the monies; consequently, this has caused many states to increase their respective stipulations and regulations to be more stringent than the federal government (Junge \& Krvaric, 2011).

Intervention processes are valuable tools that can be implemented to enhance students’ educational experiences (Bradley, Danielson, \& Doolittle, 2007). The NCLB legislation forced schools to adopt specific intervention methods. Intervention processes present numerous opportunities for students to receive additional instruction and assistance and offer a specific time for students and teachers to focus on learning and skill development.

## Establishing a Culture of Learning

Intervention processes require a culture of student-centered practices focused specifically on assisting students with various skills depending on the needs of the individual student (Gay, 2010). A one-size-fits-all approach to education is not
acceptable. Schools must build their respective initiatives around the needs of the community and students (Plank, Schneider, \& Sykes, 2009).

Ideally, most schools wish to prepare students to be productive members of society; therefore, adopting instructional practices that meet the needs of the local community is an absolute necessity (Gatto, 2009). A school in a rural setting must cater various instructional practices to the nuances of a rural community; conversely, a school in an urban setting must evaluate the community's needs and provide specific educational opportunities to meet those needs (Reynolds, 2010). Obviously, the core curriculum within a school does not vary depending on the characteristics of the community, but schools can provide some elective courses that meet the needs of the local community. It is vital that the academic intervention processes established to assist students in the core areas also assist struggling student in the elective areas as well (Fitzell, 2011).

Any time a school decides to implement a large systematic change to the traditional functionality, it must educate the public (Fulton \& Leech, 2008). Schools are a product of communities and to some extent, funded by the local communities, as well (Alderman \& Taylor, 2007). Informing the community of the proposed systematic change is extremely necessary as to the success or failure of the implementation. School leaders should utilize the local media, hold public meetings, and speak to patrons individually about the upcoming change. Community support is crucial, and community support will not exist without community knowledge. Informing the patrons about a prospective change will make the transition smoother and easier (Moses \& Saenz, 2008).

Educational practices. Historically, the act of teaching was the predominant focus of educators. A traditional educational environment lends itself to dependence solely on the students to be responsible for their learning. Conversely, changing the culture to modern educational thinking shifts the focus to learning and a shared responsibility for learning (Galvin, 2007). Unfortunately, teachers may tend to feel that this is an unfair expectation. Understanding the potential resistance to change may greatly assist secondary school leaders who must adhere to stakeholder feedback related to the implementation of academic intervention processes (Fuchs \& Deshler, 2007).

The dynamic change from a traditional educational culture to a culture of learning is powerful (Coleman, 2008). To effectively justify the need for academic interventions, leaders must provide foundational reasoning, or a model, such as PLC, RtI, and effective schools research to support the logic behind academic interventions (Walker, 2004). These resources display examples of successful intervention processes. Examples can be a useful asset for leaders as they work to implement an initiative (Martens, 1993). Educating the teachers must be an early step in the process, and the education is most effective when presented by someone other than the group's specific leader (Burns \& Gibbons, 2008). Leaders must supply refereed documentation, practical examples, and justify the need when attempting to implement an intervention process.

Differentiated instruction may also instill a powerful dynamic to the intervention process. Identifying various learning styles and needs of specific students could possibly enhance the success rate of intervention processes. The foundational intent of differentiated instruction is to maximize each student's growth and individual success by meeting each student at his/her current level (Eisenhart \& Eschenmann, 2004).

Intervention processes are not present in every school; therefore, understanding why schools have not implemented the process is vital (Boice, Burns, \& VanDerHeyden, 2008). Any successful implementation requires profound research, numerous collaborative meetings of teachers, and a common vision defining the intended future of the school (Hawkins, J., Hawkins, R., Morrison, \& Musti-Rao, 2008). Establishing a culture of learning and meeting achievement standards are challenging tasks. Principals must be willing to take risks and search for ways to increase learning opportunities for students. In schools that currently possess an intervention process, discovering the reasons that support the decision to implement the process is also very important (Gladwell, 2000). Finally, the effect the intervention process has had on the respective school's graduation rate will justify the difficult efforts needed to implement a process of this magnitude.

## Intervention Processes

Multi-tiered instruction is the foundation of every school-based intervention process (Casey, Elswick, Robertson, Williamson, \& Serio, 2011). Intervention processes have evolved from simply screening and identifying potential special education students to a process where all students are given the opportunity to receive remediation or obtain enrichment (Horner \& Sugai, 2009). While interventions are more common at the elementary level, it is critical each secondary school creates an intervention process that fits the goals of the school and the students' specific needs (Lane, 2004).

A crucial segment within each and every academic intervention process is the assessment tool used to determine which tier students will be placed; many practitioners use the term, universal screening tool (Hall, 2009). In secondary schools, universal
assessments are very difficult to find; therefore, many secondary schools are forced to use letter grades (A, B, C, D, F) as the universal screening tool (Hall, 2009). This presents many challenges as every grade does not equate with the same student mastery for each teacher. Unfortunately, this inconsistency allows many students to not get the assistance they desperately need (Cantar, Cowan, \& Klotz, 2008).

Teachers and principals generally move to two resolutions for this particular issue: Establishing a clear, consistent grading procedure where each grade represents the same mastery level for each class and teacher, then using the grades to determine the tier placement for each student; or, developing and identifying a universal screening tool for each specific core area (Bradley et al., 2007). In order for administrators to establish a consistent method of grading, a significant amount of professional development is required. In most cases, teachers are initially astonished at the massive amount of grading inconsistencies (Ah Lim \& Rumberger, 2008). The process of changing the faculty's grading procedures takes a significant amount of time, and administrators wishing to tackle this endeavor must be patient; essentially, changing the grading philosophy of a building means changing the instructional culture of the building, as well (Buffum \& Hinman, 2006).

If schools do not wish to instill a consistent grading procedure, identifying and establishing specific content area assessments is another effective way to adequately place students in the correct tiers (Burns \& Gibbons, 2008). Prior to implementing the intervention process, administrators must meet with the leadership team and begin collaborating on the content specific assessments (Buffum, Mattos, \& Weber, 2012).

First, schools must decide which content areas will be commonly assessed for all students.

NCLB measures schools’ achievements based on Mathematics and Communication Arts proficiencies; therefore, many schools choose to only address these two subjects when creating and implementing an academic intervention process (Buffum et al., 2012). Secondary schools in Missouri must ensure all students take Algebra I prior to graduation; obviously, creating an assessment tool specifically to gauge students’ knowledge regarding specific standards of Algebra would be most logical (Hosp, 2006). After creating the universal assessment for Algebra, all students would take the assessment.

In rare situations, schools will only assess a specific grade or class of students; ideally, this will establish a baseline need (Bartunek, 2007). Schools would then use grades (A, B, C, D, and F) to place the rest of the students. Once the selected group of students has taken the assessment, content specific teachers will score the assessments (Buffum et al., 2012). The resulting scores would then be used to initially place students in the needed tiers.

In Communication Arts, schools tend to focus the skill assessments on a particular segment within the Communication Arts curriculum. For example, a school's faculty may collaboratively decide to assess the respective reading levels of students, or the specific writing skills of the students (Buffum et al., 2012). If schools decide to develop an assessment to address the entire Communication Arts curriculum, the assessment may be too broad, and the results may display a wide variety of needs (Graham \& Perin, 2007). Schools with a focus on reading stand a higher chance of increasing the reading
skills, whereas schools attempting to address both reading and writing tend to show only minimal gains in both skills (Ash, Kuhn, \& Walpole, 2009).

All schools implementing an academic intervention process at the secondary level must collaboratively decide which skills support the foundational mission and center all assessments and decisions on the specific, selected skills (Buffum et al., 2012). The choice of a universal assessment must be something the school leadership places at a high priority. After all, the universal assessment will serve as a powerful indicator to the success or failure of the intervention process (Buffum et al., 2012).

Academic intervention processes in the secondary school are typically designed in a pyramid (Carta, Dunlap, Fox, Hemmeter, \& Strain, 2010). The philosophy driving the pyramid approach is to assist students and teachers in the progression of the progress (Harris, Lane, Graham, Driscoll, Sandmel, Brindle, \& Schatschneider, 2012). The pyramid serves as a valuable approach when introducing a new intervention process because it offers a great tool for visual learners to begin understanding the process (Kayser, 2009). The pyramid model also allows students and staff to see the progression of students during the process by tracking and moving students through the tiers (Buffum et al., 2008).

RtI is depicted by a three-tiered pyramid of interventions. Tier One is typically the largest tier and at the bottom of the pyramid; Tier One addresses curriculum-based instruction (Buffum et al., 2008). This type of instruction is designed to offer support to students who are passing and mastering the specific content, and any remediation is based on the individual needs of the students (Denton, 2006). Tier Two, the middle of the
pyramid, is designed for students who are mastering the content at an average level; a typical Tier Two Mathematics intervention may follow these six steps:

Instructional explicitness;
Instructional design that eases the learning challenge;
A strong conceptual basis for procedures that are taught;
An emphasis on drill and practice;
Cumulative review as part of drill and practice;
Motivators to help students regulate their attention and behavior and to work hard.
(Fuchs \& Fuchs, 2005, p. 94)
Tier Three is the smallest portion of the pyramid and designed for students who are severely struggling to master the content (Buffum et al, 2008). The ultimate goal within Tier Three instruction is to remediate the existing problems and hinder the severe potential problems by targeting a student's individual weakness during or prior to classroom performance (Ervin, 2010). The pyramid approach serves as a valuable method to conduct an academic intervention process (Fuchs \& Deshler, 2007).

Establishing the right number of tiers or stages of instruction is extremely important to the success of the intervention process (Brown-Chidsey \& Steege, 2005). Schools must first analyze the collective mission of the school and identify/create tiers appropriate to the mission (Marston, 2005). Once the tiers have been identified, teachers and principals then develop instructional methods that best fit the goals of the respective tiers (Bender, 2009).

In 2007, Knight provided several suggestions each secondary school faculty and staff should consider prior to implementing intervention processes:

The stakeholders must decide upon a specific process for targeting students and the pertinent factors students must have to determine who needs intervention. A committee and an accountability plan must be created. The intervention process must be required for students whom are targeted. A specific cost analysis must also be completed prior to implementation. A concise description of each intervention should be included within the intervention plan. The flexibility of the intervention process must also be addressed. It is vital to address the specific intangibles within the intervention process. (p. 39) Intervention processes at the secondary level must be driven by research and guiding principles established from the leadership team (Hess, Jimerson, \& Reschly, 2008). These principles must include the majority of students' academic needs will be met through tier one instruction (Elliot, Kurz, Smithson, \& Wehby, 2009). All students must take part in a universal screening assessment process prior to beginning the actual intervention practices (Albers \& Glover, 2007). The results of the universal screening assessment process dictate students' specific needs, and the needs must be identified prior to beginning the intervention process (Gresham, 2004).

In designing the intervention process, schools will identify the pressing needs and design accordingly. Once the first universal screening assessment takes place, schools then have to begin placing students in the appropriate areas. Involving the teachers in the placement process is extremely pivotal, because the more teachers are involved in where students are placed, the more likely the instruction is effective, which leads to increase levels of student achievement (Lewis et al., 2010). Ideally, the universal screening
process takes place as many times as the school feels it is necessary to adequately assess the students (Brown-Chidsey, 2007).

The original version of RtI specifically focused on academic skill development of special education students (Elbaum \& Vaughn, 2001). As RtI and other academic intervention processes have been recognized in fields other than special education, the need to specifically focus on skill development has also changed (Mather \& Wendling, 2008). Many secondary school practitioners struggle with devoting the large amounts of time necessary for true skill remediation (Taps, 2008). This causes traditional academic intervention specialists great concern. The notion that students must master the basic skills necessary in a specific subject or skill prior to moving to the next skill sets the stage for the strong resistance against skill specific academic interventions (Elbaum \& Vaughn, 2001).

At the secondary level, interventions need to be focused on learning content and higher-order thinking skills within separate content areas (Dexter, Hughes, \& Farmer, 2008) and possess a clear and specific goal. The intervention also should tie directly to the mission and vision of the school (Knight, 2007). A specific explanation of each intervention and its relation to the entire intervention process must be presented to the stakeholders responsible for articulating the interventions. Solid research must be displayed to support the interventions as best practices (Knight, 2007).

According to Jenkins and Johnson (n.d.), it is imperative to specify interventions at the secondary school level. This presents a problem when deciding on an adequate universal screening tool (Anonymous, 2008). The data needed to address various
students with a wide variety of needs must also be determined prior to implementation, as well as the timeline the data will be collected and tabulated (Knight, 2007).

Intervention processes provide a powerful resource for educators to utilize during school reform activities (Bradley et al., 2007). As education evolves, the use of intervention processes as a school-wide initiative continues to increase because stakeholders see the advantage of providing additional time for students to learn necessary material during the school day (Burns et al., 2005). Any strategy intended for implementation must be driven by practical examples and foundational research to justify the action (Borman, 2009).

Unfortunately, practical examples of effective academic intervention processes at the secondary school are uncommon. Therefore, administrators and leaders must take ideas from other schools and mold the ideas to the specific needs of their respective school. Teachers are much more likely to buy-in to a reform initiative if they have input during the planning process and are given proof of similar movement's effectiveness (Bambino, 2002).

## Conceptual Framework

The conceptual framework guiding this study was the PLC model. The RtI model and effective schools research were used to further examine intervention processes in secondary schools. The basic foundation of the PLC model originated at Adlai Stevenson High School, in Lincolnshire, Illinois (DuFour, Re., DuFour, Ri., \& Eaker, 2004). PLCs are based around collaborative activities among the staff (McLaughlin \& Talbert, 2006). Within the activities, a certain assumption of collective responsibility is absolutely imperative to the success of the group functioning within the PLC process (Little, 2002).

Structured collaboration has been most effective under the PLC process, as groups must set norms and follow an agenda to maximize production (Christiansen, Goulet, \& Krentz, 2003). Group norms are designed to serve as the behavior protocols among members (Grossman, Wineburg, \& Woolworth, 2001). It is assumed that once the norms are established and agreed upon, the norms are followed throughout all future collaborative meetings and activities (Rentsch \& Zelno, 2003). PLCs serve as the vehicle that drives every instructional decision within a school (Fullan, 2006). A philosophical shift from teaching to learning is the fundamental foundation to the PLC process, and all actions by the members of the community should be centered on improving student achievement (Moore \& Stanley, 2011).

The PLC model is framed around three essential questions: What do we want each student to learn? How will we know when each student has learned it? What will we do if they don't learn it? (DuFour et al., 2005). The first essential question within PLC process is: What do we want each student to learn? This specifically addresses the curriculum within the school. The curriculum is the foundation of all educational practices within public schools (DuFour et al., 2004). The curriculum must be useable plus practical, and the benchmarks and objectives in each subject should be specific and succinct (Marzano, 2004).

The curriculum a school chooses to use must be a working document and not something that is created then never used again until the next program evaluation (Lee \& Ready, 2007). The curriculum serves as the guiding foundation for all instructional practices within a school, and creating the curriculum must be completed vigorously and with the students' best interests in mind (Fenwick, 2010). Once created, teachers and
principals use the curriculum to design effective instructional practices, fundamental common assessments, and to identify adequate resources (Caddick, Putwain, \& Whiteley, 2011).

The curriculum should be easily available and accessible for teachers. Ideally, each course curriculum contains power standards (Reeves, 2000). Power standards must meet three criteria (endurance, leverage, and essential) for the next level of instruction (Ainsworth, 2003). Endurance simply addresses the common themes, or power standards, present across each curricular area. For example, students must display skills in reading comprehension, descriptive writing, and reasoning beginning in primary school and ending in secondary school (Reeves, 2005).

A standard representing a solid leverage component means that student mastery in one standard will assist in student mastery in another standard (Reeves, 2005). This is commonly referred to as the building block philosophy. For example, in Mathematics, students cannot move from one standard to the next sequential standard without first mastering the prior standard (Ainsworth, 2003). Obtaining a solid curriculum, including power standards, addresses the first essential question within the PLC process: What do we want each student to learn?

The second essential question is: How will we know when each student has learned it? This primarily involves the assessment practices within schools. Assessments in schools serve as the ultimate instructional evaluation tool available (Guskey, 2011). Assessment results give a vivid picture of student mastery levels and ultimately, student understanding; therefore, it is paramount for teachers to prepare assessments that properly assess what is taught (Davis \& McPartland, 2012).

It is imperative to understand the distinction between formative and summative assessments. Formative assessment is the most powerful type of assessment educators use because it immediately impacts instruction. Examples of formative assessments would be daily quizzes covering information previously taught. A summative assessment is often considered as a mandated standardized test or tests that do not instantly impact instruction because the results are not received in a timely manner (Chappuis, 2009). Educators typically conduct assessments to gather evidence of student achievement, and, thereby impact instruction and provide motivation for learning (Stiggins, 2004). The effectiveness of the PLC model depends greatly on the assessment practices of the school.

The final essential question is: What will we do if they do not learn it? This question solidifies the reasoning for intervention practices, and by answering the question schools separate themselves from traditional schools to modern learning communities (Kohn, 2008). Schools must implement intervention processes to accommodate students who do not learn the curriculum and show less than adequate results from established assessments (DuFour et al., 2004). Intervention processes require teachers to adjust their focus from teaching to learning and magnify the behaviors which are most effective to increase the students’ levels of achievement (Jackl, 2009). The processes must be timely and must be based on intervention, not remediation and directive (DuFour, 2004).

The entire PLC process is built on several key themes. The first theme is for a school organization to have a shared mission, shared vision, shared values, and shared goals (Reichstetter, 2006). Schools that develop missions of learning for all, but do not collectively believe that each student can learn will not be an effective PLC (DuFour,
2004). The second theme is for the staff within the school organization to have a commitment to continuous improvement through collaboration and intense, purposeful professional development (Reichstetter, 2006). This type of collaboration will change from traditional teacher conversations of what we will be expected teach to how will we know when students have learned, and what steps you took to ensure their learning (DuFour, 2004).

The third theme is to implore stakeholders to turn collective inquiry into best practices (Reichstetter, 2006). The fourth item within the PLC model is for schools to have supportive and shared leadership. The idea of top-down leadership within a PLC is impossible; each stakeholder must take ownership in the functionality of a PLC (Reichstetter, 2006). The sixth and final theme outlined in a PLC is to be results-oriented. This simply means that school organizations must pay attention to specific data. These data must be frequently monitored and must show student achievement levels (Reichstetter, 2006). A PLC is a school that possesses an administration and teachers constantly searching for and sharing learning strategies, which increase student achievement (Cowan \& Leo, 2000).

## Response to Intervention

The RtI model was originally created to serve as a process to identify and assist special education students, but recently, many schools have used the RtI model in regular educational practices. RtI was designed to provide better research-driven instructional strategies, additional supporting resources, and individualized remediation practices (Feuerborn, Sarin, \& Tyre, 2011). Many educational institutions utilize a three-tiered process (Ehren, B., Ehren, T., \& Proly, 2009). It is vital that a sound assessment tool is
used during this process. The data from the assessment tools indicate the tier each student will be placed. This allows for teams to practice data-driven decision making (Jukic, 2006). If students are not moving from tier-to-tier in a positive direction, more specific interventions are needed. Specific intervention strategies may include a referral for special education services or a referral to a more in-depth counseling opportunity (DuFour et al., 2005).

Implementing RtI in schools can be quite challenging for principals and teachers. RtI is a very specific, individualized process that can be adjusted to fit the needs of the school (Reynolds \& Shaywitz, 2009). There are four components to the RtI process: universal assessment, progress monitoring, levels of research-based interventions, and fidelity of implementation (Kahn \& Mellard, 2008).

Universal assessment. The universal assessment component is critical to the RtI process. The leadership group must make sure the universal assessment meets the academic goals of the school, and the specific areas assessed must be noted as areas of priority for the school (VanDerHeyden, 2011). Once the results of the assessment are obtained, teachers then select specific instructional resources and strategies for students determined to be at-risk (Fuchs, Johnson, McKnight, \& Mellard, 2006).

Teachers collaborate and make decisions based on the data taken from the universal assessment (Fuchs et al., 2006). This information is utilized for teachers to adequately place students in the correct intervention area (Kahn \& Mellard, 2008). Traditional grades (A, B, C, D, F) are not always a valid universal assessment because grades do not always have the same meaning across all classes, and consistency within
the universal assessment is absolutely critical for it to be effective (Burns, Parker, Scholin, \& Ysseldyke, 2010).

Progress monitoring. During progress monitoring, teachers determine whether specific students are benefitting from the instructional strategies, decide upon any curricular/instructional shifts to ensure all students meet proficiency, and create effective programs for students who are not responding properly to the instructional process (Mellard, 2003). Many teachers accomplish effective progress monitoring during academic intervention processes through the use of formative assessments. Formative assessments deliver data teachers use to make decisions on student achievement levels (DuFour \& Stiggins, 2009).

These data are also used to place students in the correct areas/tiers of interventions. Teachers also must collaborate to create common formative assessments. Students must be assessed with the same tool if they are going to be placed with other students who may not be in the same class (Phillips \& Wong, 2010).

Research-based interventions. The levels of research-based interventions are an integral piece to the intervention process, and teachers should collaborate to find the best interventions available for specific students (Boscardin, 2005). Types of interventions vary greatly due to the specific needs of each school. NCLB has brought an increased focus on Mathematics and Communication Arts; therefore, schools have adjusted their respective intervention processes to only address skills within those two areas (RhinehartNeas, 2011).

Typically, secondary schools allow interventions to meet credit remediation, skill development in core/content area classes, and reading comprehension instruction (Lange
\& Thompson, 2006). Schools must evaluate the needs of students to determine if existing interventions are appropriate. Expanding intervention opportunities to meet individual academic objectives is a viable solution.

Fidelity of implementation. The last component of RtI, fidelity of implementation, takes place when teachers utilize various strategies and deliver the curriculum in the same way the specific content was designed to be delivered (O'Donnell, 2008). This process influences the overall success or failure of the intervention process, because it gauges the perception and understanding the stakeholders have about the process and compares that understanding with the true intent of the process prior to implementation (Century, Freeman, \& Rudnick, 2008). Constant evaluation must take place during the implementation of academic intervention processes, and the fidelity of implementation is vital for administrators to consider; especially due to the lack of RtI practices/examples present in secondary schools. Overall, the RtI process is based around collaborative decisions regarding what is best for students and making sure student instructional needs are met. RtI also allows teachers to collaborate regarding students’ specific learning styles and skill levels. Collaboration serves to involve other teachers in student learning needs; whereas, the traditional format of only one teacher being responsible for a student's learning within one subject restricts the amount of learning opportunities a student may receive (Goddard, R., Goddard, Y., \& Tschannen-Moran, 2007). In upper level, secondary Math courses, it is not uncommon for students to better understand difficult content when it is delivered by someone other than the students’ regular Math instructor (Hackbarth \&

Wilsman, 2008). RtI serves as a pivotal foundation for all intervention strategies used in secondary schools (National High School Center, 2010).

## Effective Schools Research

Effective schools research also supports the use of intervention processes (Ehren et al., 2009). The effective schools research specifically cited a need for change within the educational system in America but not because the system has failed; it was because the traditional system did not offer a curriculum which possessed appropriate levels of rigor (Daggett, 2005). A clear and concise, working curriculum must be present for an intervention process to be successful (Fletcher \& Vaughn, 2009).

The pivotal goals for interventions are to enhance the academic achievement of students involved in the process, either through remediation or enrichment (SpakeBrown, 2010). The effective schools research serves as a foundational research component to justify the effectiveness of academic interventions (Huber \& Muijs, 2010). The seven correlates of the effective schools research clearly articulates the logic behind intervention processes.

The seven correlates are: instructional leadership, clear and focused mission, safe and orderly environment, climate of high expectations for success, frequent monitoring of student progress, positive home-school relations, and opportunity to learn and time on task (Lezotte, 1997). Interventions tie directly to two of the seven correlates.

One correlate relating to this research is frequent monitoring of student progress. During the intervention process, students are closely monitored to evaluate the positive or negative progress. It is vital for teachers to identify the effective procedure to use when monitoring student achievement within the intervention process (Torgesen, 2003). The
monitoring process must coincide with the mission of the school and specifically, the intervention process. Essentially, principals and teachers prioritize the skills that matter the most (Callender, Deno, Lembke, Magnusson, Reschly, Stachel, \& Windram, 2009). Without the close monitoring of the students' progress, it would be difficult to evaluate the effectiveness of the intervention.

Another correlate related to this topic is opportunity to learn and time on task. Secondary schools typically operate on a seven-period schedule (about fifty minutes per period) or an eight to ten block schedule (about seventy or ninety minutes per block depending on the eight or ten block specification) (Kalina \& Merenbloom, 2007). Unfortunately, only $50 \%$ to $60 \%$ of the period, or block, is used for instructional time (Rance-Roney, 2009). This makes a separate, structured time extremely valuable, and intervention processes provide the necessary separate time for students to work and improve. This time is generally placed within the school day. This eliminates the excuse of students claiming they do not have time to do the necessary work. This time also allows teachers to closely monitor student performance (Lezotte, 1997).

Early research under the effective schools movement did not specifically recognize secondary schools by providing specific examples of strategies to improve secondary schools; most early examples were for elementary schools (Bylsma \& Shannon, 2007). High schools are complex organizations, and their levels of effectiveness are ultimately gauged on how prepared the graduates are when they leave the school and enter post-secondary institutions or the work force (George, Jenkins, \& McEwin, 2000). It is this reason that secondary school student achievement is so vital. If secondary schools continue to assume the status quo by not allowing students extra time
to master necessary skills, schools will not be acting in the best interests of the students (Marzano, Waters, \& McNulty, 2005).

The leadership component within the effective schools movement is key in the success or failure of any school's actions (Hargreaves \& Fink, 2006). Leaders instill a common mission and vision, plus establish a collaborative culture which allows all stakeholders to meet and discuss various student achievement strategies (Spillane, 2006). The common mission and vision are created collaboratively; the mission contains specific goals and action steps (Fullan, 2006). In order to provide effective leadership to students and staff under the effective schools movement, leaders must act as they will do whatever it takes to ensure student success and achievement (Langer, 2004). Typically, students and staff will see through leaders who are not genuine in their actions, and this will, consequently, hinder the improvement efforts of the leader (Fullan, 2006).

## Elements of Successful Intervention Strategies

Positive intervention strategies and procedures at the secondary school have become more common in the last five years (Borman, Dole, Kamil, Kral, Salinger, Torgensen, 2008). School leaders and administrators inherently take ideas from other school leaders and administrators, which is a primary reason intervention processes at the secondary school have become much more prevalent (Walker, 2004). Successful intervention processes generally begin with a common goal decided upon by a guiding coalition or leadership team (Ardoin, Graney, McDougal, \& Wright, 2009).

Initial steps in developing intervention processes. In the secondary setting, it is vital that the leadership team has representatives from each subject area within the school (Christ, 2008). Ideally, a teacher from each core area (Communication Arts, Math, Social

Studies, and Science), as well as the Fine Arts, Practical Arts, Career/Vocational Arts, and Physical Education/Health departments should be on the intervention committee. Representatives from the Guidance/Counseling department and Administrative department need to be included. Once identified and established, the team holds regular meetings to begin planning for the implementation of the intervention process (Boice et al., 2008).

Early in the planning stage, the team needs to focus on the common objectives of the intervention process; typically, there needs to be only two or three general objectives (DiPerna \& Glover, 2007). If the team feels basic skill development in Communication Arts and Math is very important, then objectives are created to address those particular components. All objectives must congruently align with the overall mission of the school (Fisher, 2007).

After the specific general objectives of the intervention process have been created or identified, the intervention team shares the objectives with their respective departmental or subject area teams and create department-specific objectives (Ardoin et al., 2009). Essentially, the specific departments are deciding how they will contribute to the mission of the intervention process (Fisher, 2007). For example, if a general objective is to ensure all students are reading at least within $10 \%$ of their grade level expectation, then the Communication Arts team will create specific steps to meet the general objective. Similarly, the Math team could select the objective, all students will display mastery in the basic concepts of Algebra I, and create specific action steps and roles to meet the objective.

Selecting a universal screening tool. No matter the general objective, the intervention team must decide on an appropriate universal screening tool (Boice et al., 2008). At the secondary level, it is difficult to find one universal screening tool or instrument to adequately assess all subject areas; therefore, it is more likely to identify a universal screening tool that is subject specific (Ardoin et al., 2009). In most cases, the decision to use a certain universal screening tool is made through trial and error; however, the most successful universal screening tools are those that the specific teachers using the assessment data have written (Burns \& Riley-Tillman, 2009).

A common mistake regarding the selection of a universal screening instrument is to use a test from a workbook or textbook (Burns \& Gibbons, 2008). The data are much more useable if the assessment instrument is created by those using the data; those individuals know specifically the students and the students’ needs (Gansle \& Noell, 2007). After the universal screening tools have been selected or created and the specific duties of each department during the intervention process have been identified, the intervention team must organize how students will be placed in the respective tiers, how long they will be in the tiers, and how they will move from tier to tier (Burns \& Gibbons, 2008).

Placement of students. To effectively decide how students will move among the tiers, leaders and teachers must decide upon benchmarks and standards from the assessment data (Boice et al., 2008). If letter grades are the form of assessment, then decisions are made regarding which grade will be used for each tier. Typically, students with As and Bs are placed in Tier One; students who obtain Cs are placed within smaller groups in Tier Two; and students who receive Ds and Fs are placed in extremely small
groups in Tier Three, and specific, targeted skill-based instruction is given (Barton, 2008).

If grades are not the selected screening tool, then teachers and leaders must choose scoring benchmarks from the assessment data (Deshler \& Kovaleski, 2007). For example, if a generalized reading assessment is given to all students to determine the entire school's reading levels, students mastering the reading assessment will be placed in Tier One. Students obtaining 70\% mastery will be placed in Tier Two, and students failing the reading assessment or reading significantly below grade level would be placed into Tier Three and receive extremely targeted instruction. Selecting student performance benchmarks is a crucial piece within the implementation of a new academic intervention process, and all decisions are made collaboratively; if not, staff buy-in is unlikely. Without staff buy-in, success is difficult (Ardoin et al., 2009).

The duration students are placed in various tiers is also an extremely important decision during the process. Most research points to three-week intervention intervals (Buffum et al., 2008). Each three-week period should conclude with progress reports. These progress reports should be sent to each student's parents, as well. Doing this will increase communication regarding student performance and give substantial data as to how the intervention time is addressing the student's academic progress (Boice et al., 2008).

During the middle of each third week, the intervention team must meet and review individual student performance. It is vital to hold these particular meetings during staff contract time and not after-hours. It is difficult to truly hold staff commitment at a high-level if they are donating their time (Dufour, 2004). Intervention team members
need to review student performance, universal assessment data (if available), student attendance data, student behavior data, and any other pertinent documentation available, including, but not limited to parent recommendations and teacher referrals (Elliot \& Roach, 2008).

Evaluating the process. Intervention processes must meet the needs of the students, the school, and overall goals of the community. A system assessment of the process is critical to determine if the goals, objectives, and strategies are meeting individual student's needs (Demaray, Malecki, \& Rueger, 2010). The effectiveness of the process must be informally assessed, constantly and formally, at least once every three to four weeks (Gansle \& Noell, 2007). Student performance data are the best indicators as to the effectiveness or ineffectiveness of the intervention process (Graham \& Perin, 2007). Knowing which data to evaluate is an extremely vital part of the process (much like the selection of the universal screening tool) (Hosp, 2006).

## Statewide Intervention Process

The Georgia Department of Education has outlined a specific pyramid of interventions as a model for schools to utilize (Georgia Department of Education, 2008). This model is comprised of four tiers. Tier One is designed for all students to participate in general education activities and include the implementation of the Georgia performance standards, differentiated instructional activities, and frequent progress monitoring (Georgia Department of Education, 2008). In this format, Tier Two instruction is based on the individual student's needs, the instructional components included in Tier One, a formal process of intervening during the school day, and an increased focus on progress monitoring (Georgia Department of Education, 2008).

Tier Three practices involve all of Tier One and Tier Two components; plus individualized assessments, specific intervention practice designed to fit the student's needs, and referrals to special education, if needed. The fourth tier within this model includes the following: insertion into specialized programs or special education; adapting the content or methodology; and adding all of the strategies from tiers one, two, and three (Georgia Department of Education, 2008). Since the pyramid is designed with the top tier smaller than the bottom tier; the number of students placed in Tier Four (the top of the pyramid) is small; however, the intensity and rigor of instruction is increased (Georgia Department of Education, 2008).

Not all intervention processes are designed to meet the needs of each individual school or student. Specific school leaders must assess their respective needs and design an intervention process that meets those needs. The Department of Education in Georgia has provided its schools with a generalized model to use when creating an academic intervention process (DiPerna \& Glover, 2007).

## Summary

Presented in this chapter was a detailed review of pertinent literature surrounding academic intervention processes at the secondary school level. Specifically, discussion of the various components associated with interventions included the implementation of a systematic, academic intervention process in secondary schools; the importance of staff perception as it relates to the implementation and success of a systematic, academic intervention process; the accountability benchmarks mandated in NCLB that contain academic intervention process; and specific examples of systematic, academic
intervention processes. The conceptual underpinnings supporting this study were the PLC model, RtI, and effective schools research.

A description of the research design, population and sample, instrumentation, data collection procedures, and data analysis methods were detailed in Chapter Three.

Presented in Chapter Four was an analysis of the data as pertaining to the instrumentation used to obtain the data. Within Chapter Five, the conclusion and recommendations for further research were discussed.

## Chapter Three: Methodology

The purpose of this study was to examine the effects of secondary school intervention processes on graduation rates. Current data in the form of graduation rates, survey responses, and interview responses were obtained during the research process. Presented in this chapter were the research perspective, the design approach, and procedures. Specifically, the research setting, population and sample, instrumentation, data collection, and data analysis utilized in this study were discussed.

## Research Perspective

A mixed-methods design provided the basis for this research. A mixed design employs both qualitative and quantitative methods (Creswell, 2003). Qualitative data serve to answer questions about why something was done, what types of activity took place, and how the various responses or actions influenced the outcome (Lacey \& Luff, 2001). Quantitative data are numerical and exact in nature. During quantitative data analysis, descriptive or inferential statistics are applied to numbers (or a mass of numbers) and then organized and depicted in graphs, charts, or tables (Lacey \& Luff, 2001).

Primarily, two designs are prevalent within mixed-methods research: Concurrent and sequential designs. Concurrent designs are typically used to validate particular data with other data, to change the data to compare with other data, or to answer various problems and questions (Creswell \& Plano Clark, 2007). Concurrent research designs allow open-ended questions to be asked to generate follow-up responses from various readers and participants (Appiah-Yeboah, Driscoll, Rupert, \& Salib, 2007). Sequential research design allows data collection to transform among various phases; specifically,
data from one particular phase can contribute to data collected in the following phase (Creswell \& Plano Clark, 2007). This design provides additional data involving results from earlier phases of collection and analysis, to choose the best data from the best participants, or to summarize the findings by adjusting the results from a defined population and/or sample (Creswell \& Plano Clark, 2007).

In this study, data were gathered through interviews (qualitative design) and surveys (quantitative design). Data from public secondary schools in Missouri, in the form of graduation rates, were collected as additional documentation. The responses obtained from interviews and surveys, in addition to the graduation rates, served to triangulate the data. To triangulate the data, multiple sources or methods are collected and analyzed to confirm the emerging findings (Merriam, 1998).

## Problem and Purpose Overview

According to Burns and Riley-Tillman (2009), schools must replace the traditional school culture and procedures and consider utilizing intervention processes. Academic interventions call for a significant change in educational thinking (Muhammad, 2009), and within this change in educational culture, staff resistance plays a vital role in the success or failure of an intervention process. Due to the lack of sustainable evidence regarding the effectiveness of academic intervention processes at the secondary schools, long-term outcomes are difficult to locate; therefore, most refereed research pertaining to academic intervention processes at the secondary school deals with theoretical ideals rather than specific strategies (Feldman \& Loe, 2007).

NCLB has increased educational accountability by requiring schools not meeting necessary requirements to submit an improvement plan or comprehensive school
improvement plan (CSIP). The CSIP is meant to address an entire school district; therefore, each school or learning center within the school district must create a building improvement plan (BIP) that addresses the mission, vision, values, and goals of the CSIP (Birky et al., 2006). The BIP must include an academic intervention component (USDOE, 2009a) and must include the specific action steps involved in implementing an academic intervention process (Birky et al., 2006).

Most often, the difficulty of implementation is the collective commitment of the staff regarding the intervention process, and staff commitment is vital to the success of the process (Fitzell, 2011). An integral piece of effective intervention processes is differentiated instruction. This instructional strategy is defined as instruction that integrates the constructivist learning theory, learning styles, and brain research with empirical research on vital pieces of student preparedness, interest, and intelligence preferences toward student motivation within school (Allan \& Tomlinson, 2000). Differentiated instruction is considered a new approach to teaching and learning; yet, ironically, the one-room schoolhouse teachers were masters of differentiated instruction (Anderson, 2007). Nevertheless, differentiated instruction is considered a problem because it presents a challenge to educational thinkers (George, 2005). This method of instructional delivery generally takes more time, preparation, and patience than traditional teaching because more one-on-one time is required (Eisenhart \& Eschenmann, 2004).

The primary purpose behind this study is to provide assistance and data for future educators when implementing an academic intervention process at the secondary level. Ultimately, the powerful impact effective intervention processes can have on a school is
limitless (Bishop, Gabler-Filce, \& Reeves, 2010). Not only could the graduation rate increase; but the overall morale of students and staff could significantly improve, as well (Croninger \& Lee, 2001). The newness of various secondary school intervention programs has caused uniformity within procedures among various schools to accurately match intervention process with instructional issues (Lewis, 2008).

## Research Questions

Three fundamental questions guided this study:

1. According to public secondary school principals, what are the reasons secondary schools choose to implement academic intervention processes?
2. According to public secondary schools principals, what are the reasons secondary schools do not implement academic intervention processes?
3. What is the effect of academic interventions on graduation rates in public secondary schools that implement intervention processes and public secondary schools that do not implement intervention processes?

## Research Design

A mixed-methods research design contains philosophical assumptions with various inquiry methods. The assumptions concurrently drive and guide the direction of data analysis and collection, while mixing the qualitative and quantitative designs. By combining qualitative and quantitative methods, one obtains a better understanding of the research purpose and problem than utilizing either approach independently (Creswell \& Plano Clark, 2007).

In this study, a survey was distributed to every public secondary school principal in Missouri, and responses were tabulated. From the survey responses, 15 schools
implementing intervention processes and 15 schools not implementing intervention processes were identified. Then, the graduation rates from the 30 public secondary schools were obtained through each district's public web site. Interviews with secondary school principals were conducted, and the responses were transcribed for further analysis.

## Population and Sample

The population for the survey in this study was school principals, and the sample was secondary public school principals in Missouri. These individuals were selected because their duties and responsibilities directly relate to the research questions. There are 569 secondary school principals in Missouri, and a survey was distributed electronically to each principal. The survey was sent multiple times to increase responses. One hundred thirteen responses were gathered. The survey results allowed the secondary schools currently using intervention processes to be identified.

Thirty of the schools were randomly chosen for data analysis; fifteen secondary schools using intervention practices and fifteen not using intervention practices. The data were obtained from the MODESE web site. Each school's graduation rate was recorded for comparison with the survey and interview responses.

The population for the interviews was secondary school principals. The stratified sample consisted of five secondary public school principals currently using intervention processes. The principals were asked to answer a series of questions, and the responses were recorded and coded for analysis.

## Instrumentation

Three instruments were used to collect the data: survey questions, interview questions, and secondary data from the MODESE web site. An Intervention Usage (see

Appendix A) survey was designed specifically for this study. The survey was created utilizing information gleaned from a review of relevant literature pertaining to academic interventions. As well, the questions and statements in the survey were directly related to the research questions and conceptual underpinnings of the study.

A multiple-choice format was determined as an appropriate method to obtain the survey responses. Most questions/statements offered four to five possible response options. The content ranged from educational philosophy to PLC practices. The survey was field-tested with 15 educators with the intent to identify inconsistencies.

The purpose of the interview questions (see Appendix B) was to garner additional perceptions of the principals in a face-to-face setting. This format allowed for more descriptive and extended conversations. As with the survey questions, the interview questions were field-tested with 15 educators providing comments and suggestions for improvement.

## Data Collection

Historically, data collection can determine the success or failure of any research project (Creswell, 2009); therefore, deciding which data to select becomes extremely critical. For this study, a survey, graduation rates from the 2009-2010 school year obtained from the MODESE web site, and interviews were methods utilized to collect data. An informed consent letter (see Appendix C) was attached to the recruitment letter (see Appendix D) for the principals to read before participating in the survey. Then, the Intervention Usage survey was made available, electronically, to each participant.

A letter of participation (see Appendix E) was sent electronically to the principals selected for interviews. An informed consent letter (see Appendix F) was presented to
each principal prior to the interview session. Each session was audio taped with prior approval of the participant. The responses gathered from the five secondary school principals were extremely informative. The interview format allowed for deep and thoughtful responses; the responses painted a very practical picture regarding the effectiveness of systematic intervention processes, as well as the various knowledge levels and experiences of the selected principals. The principals offered insightful information pertaining to their knowledge of intervention processes and the overall relativity of secondary school dynamics, including, but not limited to their specific intervention processes.

Graduation rates (2009-2010) were collected from the MODESE web site for the 30 public secondary schools that were randomly selected; 15 of the selected schools utilized academic intervention processes, while 15 of the selected schools were not utilizing academic intervention processes.

Limitations to the study were taken into consideration when collecting data. Academic intervention processes are a new process to secondary schools (Muhammad, 2009). Furthermore, the underlying perception of intervention processes being closely associated with special education was also taken into consideration (Hoover \& Patton, 2008). None of the secondary principals interviewed had participated in academic intervention processes for more than three academic years. It was assumed the principals responded honestly and without bias.

## Data Analysis

The data were organized using an established protocol. It is important to understand that the amount of data reflects the number of schools using intervention
processes. Essentially, the data could have been more limited if several schools were not using specific intervention processes. Fortunately, an adequate number of schools participate in intervention processes at the secondary level. The survey responses were tabulated, and using descriptive statistics, percentages were calculated. The Intervention Usage survey responses included a broad sampling of information directly related to intervention processes, including, but not limited to, PLC tendencies, collaboration practices, professional development practices, and professional literature reviews.

The interviews offered time for the practical opinions of secondary school principals regarding intervention processes to be expressed. Each principal communicated a different perspective on intervention processes and education, in general. Once transcribed, the interview responses presented an opportunity to examine key words, common phrases, significant trends, and emerging themes through open and axial coding methods.

Graduation rates from the 2009-2010 school year were obtained for each of the 30 secondary schools. The graduation rates were sorted into two groups: schools using intervention strategies and schools not using intervention strategies. An average, or mean, was calculated for each group.

## Summary

The fundamental problem identified is that implementing intervention processes at the secondary level requires a shift from traditional educational thinking to modern educational thinking (Muhammad, 2009). Establishing a reason why schools are not using intervention processes, a reason why schools have implemented intervention processes, and the role intervention processes play in increasing or decreasing the
graduation rates were the baseline issues addressed during the research. To address the research questions appropriately, a mixed-methods design was chosen.

The mixed-methods design served as the format to collect and analyze data. This design allowed for interview responses (qualitative), survey responses (quantitative), and graduation rates (quantitative); thereby, multiple sources were obtained to triangulate the data. The secondary school principals served as the population and sample during the research, and 30 schools were selected from the schools that had participated in the survey. The graduation rates of 15 schools that currently participate in intervention processes and the graduation rates for 15 schools currently not using intervention processes were analyzed. The 2009-2010 graduation rates were obtained from the MODESE web site.

In Chapter Four, an analysis of the data obtained through the various data collection instruments was conducted. Each survey question was organized to include percentages of various responses. The interview responses were coded to identify key words, common themes, and categorize the findings. The graduation rates retrieved from the MODESE web site were presented.

The research conclusions regarding the effectiveness of intervention processes as pertaining to the graduation rates in Missouri were included in Chapter Five. Specific recommendations for future research and practice were offered, as well. Potential implications for practice, helpful for schools choosing to use or not use intervention processes, were also discussed.

## Chapter Four: Analysis of Data

The primary purpose driving the study was to examine the graduation rates of secondary schools which use intervention processes and secondary schools which do not use intervention processes. The current intervention processes developed by prominent authors will require educators to make a change in educational culture (Fullan, 2001). The current idea of intervention processes significantly disputes traditional educational thinking. Therefore, intervention processes require pertinent stakeholders to change from traditional practices of school functionality to new practices that focus primarily on learning (Muhammad, 2009).

Various pieces of data were collected and evaluated to contribute to this analysis. A mixed-methods design was the organizing guide to the analysis of the data; therefore, qualitative and quantitative data were both collected. Quantitative data were collected through a survey and the graduation rates (2009-2010) from 30 secondary schools in Missouri. Qualitative data were collected through interviewing five practicing secondary school principals.

Quantitative data were obtained through survey responses from public secondary school principals in Missouri. The responses were tallied and entered in Excel for statistical analysis. These responses were statistically analyzed by organizing each group of the answers into percentages. The percentages were then used to arrive at various conclusions.

Prior to obtaining the respective graduation rates, each secondary school principal was contacted via electronic mail and posed the question: Does your school currently use a systematic academic intervention process? Then, graduation rates were collected from

30 of the responding schools, assuring equal representation between those using intervention processes and schools not using intervention processes. To analyze the graduation rates, the mean of each group was calculated.

Qualitative data were collected through interviews with five public secondary school principals. Once transcribed, the interview responses were reviewed. Using open and axial coding methods, common words, phrases, and themes were identified.

## Analysis of Quantitative Data

## Survey question 1. Does your school currently use a systematic, academic

 intervention process? Of the 113 responses from secondary principals, $80.5 \%$ of the secondary schools have implemented a systematic, academic intervention process. Less than one-fourth (19.5\%) did not use systematic, academic intervention processes. Duffy (2007) reported that the use of intervention processes at the secondary level is limited; however, the majority of schools participating in this study utilize systematic intervention processes. There is evidence of information on individual tiered instruction, but little information regarding the entire process within the secondary school; strong evidence of data pertaining to intervention processes at the secondary level is not yet available (Muoneke \& Shankland, 2009).The New York Department of Education addressed the need for systematic interventions by creating and developing the Academic Intervention Services (AIS); the AIS is a state-wide process each public school can use to assist its struggling students (New York Department of Education, 2011). Secondary school students are able to use intervention practices within New York's AIS by performing at a certain level on a state assessment; in fact, all students who score below a level three (equivalent to a sixty
percent) on a state assessment must receive interventions within AIS while in high school (New York Department of Education, 2011).

## Survey question 2. If so, what type of intervention process does your school

 use? Of the 91 responses, $33 \%$ of the principals noted that RtI was the process used, 35.2\% used a three-tiered process similar to RtI, 20.9\% used a multi-tiered process based on student performance, and $11 \%$ responded by selecting other. The responses to this question also support the notion that academic intervention processes are fairly new at the secondary level (Shapiro, 2010). Leaders have shown creativity by using an intervention process similar to RtI. Problem solving tends to be a significant component of intervention processes, and solving problems through collaborative discussions is vital; however, implementing a collaborative decision-making process in traditional schools requires sound research, and finding sound research regarding intervention processes in secondary schools is limited (Burns, 2008).In March of 2012, Jim Wright, a well-known academic intervention specialist, provided a presentation to Special Education professionals in Lake Placid, New York. Throughout this presentation, Mr. Wright (2012) provided a great example of academic intervention strategies for students who complete necessary homework assignments, but do not turn in their homework:

1. Meet with the student's parents and suggest that they check each morning to be sure that the student has all completed homework assignments in his or her backpack.
2. Set up a homework chart for the student. Award the student a point for each day that he or she turns in homework. Allow the student to redeem collected points for rewards or privileges.
3. Build a sense of personal accountability by requiring that students put their homework directly in your hand as they walk in the door at the beginning of class. Note which students fail to turn in homework and approach them before the class period is over to have them pledge when they will turn it in.
4. Send overdue homework notices home every several weeks to parents of your students. The notices should include enough information about the missing assignments so that the parents have all the information that they need to motivate their child to get the work done and turn it in.
5. Designate a staff member to be a homework checker for selected students. At the beginning of the day, students go to the staff member in the school's main office and surrender their completed homework assignments. The staff member immediately puts students' homework in the appropriate teachers’ mailboxes.
6. Encourage students to complete their homework in study halls or in an afterschool homework club. Appoint a staff member to collect students’ completed homework before they leave for the day and to put finished homework into the appropriate teachers' mailboxes. (p. 8)

## Survey question 3. If your school utilizes a systematic intervention process,

 how often and how long do students participate in the process? Of the 91 responses collected, $37.4 \%$ utilize intervention processes for five days a week for approximately 30minutes with optional after-school time, 27.5\% secondary schools responding participate four days a week for approximately 30 minutes with optional after-school time, and 33\% of the participants selected other. Frequent monitoring and extended time to complete assignments are integral components of intervention processes (Ehren, n.d.).

Implementing a process successfully requires a detailed, organized, structured plan that specifically states the frequency of interventions and the amount of time students will participate in the interventions on a daily, weekly, and monthly basis (Canter et al., 2008).

Relevant research has indicated that intervention processes are most effective when taking place at least four out of a possible five days per school week, and students should be rotated or moved out of a specific intervention area no sooner than three weeks after being initially placed in the specific intervention area (Andreou, Bennett, Brown, Gietz, MacKay, Mathews, \& McIntosh, 2011).

## Survey question 4. Is your school a Professional Learning Community (PLC)?

Of the 113 responses, almost one-half (49.6\%) stated they fully practice as a PLC, 29.2\% only utilize a few of the concepts within PLCs, and $19.5 \%$ do not act as a PLC. Schoolbased intervention processes fall directly in-line with the PLC philosophy, and "What do we do when students do not learn?" is one of the driving questions of PLCs (DuFour et al., 2005). PLCs have provided the fundamental foundation for effective school reform (Marzano, 2003). PLCs have also used an example of intervention process with the Pyramid of Interventions (Buffum et al., 2008a). It is no surprise that $80 \%$ of the schools participate in some of the practices demonstrated within the PLC format, and approximately $80 \%$ participate in systematic, academic intervention processes.

Schools utilizing effective academic intervention processes typically draw their fundamental ideals from the PLC guiding principles; the guiding principle behind intervention processes is: "What do we do when students do not learn?" However, another foundational principle is tied to effective intervention processes: collaboration for best results (Fullan, 2006). As the intervention process progresses, teachers collaborate to evaluate the students’ performance during each intervention session (Buffum \& Hinman, 2006). This collaboration takes place during contracted time for teachers and is typically built into a school's early release or late start professional development sessions (Buffum et al., 2012).

## Survey question 5. How often are students moved or placed in various areas

within the intervention process? Ninety-three responses were tallied for this question. Twenty-eight percent reported that every four weeks students were moved, $18 \%$ stated every three weeks, $11 \%$ reported every two weeks, and $6.5 \%$ stated every week students were moved within the intervention process. Prominent research supports that movement of students should take place every three weeks and be limited to no more than four weeks (Agne, M., Kovaleski, J., \& Roble, M., 2008). Knoff (2009) determined that there is no correct way to move students from tier to tier, but the movement will have profound implications on the effectiveness of the process, and schools must develop a method that best fits the needs of the respective school.

Transferring students from one intervention area to another during the process is extremely vital to the overall success of the process (Fairbanks, Guardino, Lathrop, \& Sugai, 2007). The administrators and leadership team must evaluate the various options for moving students from group to group and decide which will best fit the needs of their
respective school (Bryant, Compton, Fuchs, D., \& Fuchs, L. S., 2008). Three-week rotations have been the most commonly used in current intervention processes (Gilbertson, VanDerHeyden, \& Witt, 2007); further, progress reports are also sent home at the end of each three-week rotation. This has proven to be an appropriate amount of time for students to obtain the necessary remediation and additional instruction (Bollman et al., 2007).

Survey question 6. How are students evaluated within the intervention process?
There were 86 responses to this question, and $10.5 \%$ stated the principal evaluates the students, $38.5 \%$ stated each content area evaluates students within their own areas, and $57 \%$ stated a team of teachers evaluate and place the students. The PLC process promotes collaborative decisions (Supovitz, 2002). The team approach is pivotal to the success of academic intervention processes. Teams should utilize a problem-solving approach to analyze the results from the universal screening tool (Kovaleski \& Pederson, 2008). Establishing the universal evaluation tool is paramount within the implementation of an intervention process, and leaders must collaboratively decide upon which method to utilize (Kurns \& Tilly, 2008).

In 2007, the American College Testing, Inc. (ACT) produced a system to evaluate a specific intervention program (ACT, 2007). The specific intervention program is titled Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) and financially assists schools to increase low-income students' postsecondary education readiness through mentoring, tutoring, and assistance in completing various institution admissions forms; the services each school receives depends on their specific needs (ACT, 2007). The specific evaluation tool is titled, Educational Planning and

Assessment System (EPAS), and can be tailored to assess each academic intervention process (ACT, 2007). Essentially, the EPAS compared various differences in academic preparation for numerous students involved in a multitude of GEAR UP programs and used data from other standardized assessments within the ACT, Inc. (EXPLORE and PLAN assessments) (ACT, 2007). The EPAS allowed specific evaluations in changes of college readiness for selected GEAR UP students from their eighth grade year to their tenth grade year against students during the same time span who have not utilized the GEAR UP program (ACT, 2007).

The findings were that GEAR UP schools produced slim increases in academic readiness over schools not utilizing the GEAR UP program (ACT, 2007). This information could be valuable to schools planning to use the GEAR UP program and certainly valuable to schools that currently use the GEAR UP program. The ACT, Inc. also encourages schools to use the EPAS system to evaluate their current intervention processes (ACT, 2007); however, the EPAS system is only effective if schools use the various assessments, such as EXPLORE and PLAN (ACT, 2007).

## Survey question 7. Does your school's mission, vision, values, and goals

 support academic interventions? One hundred and thirteen secondary principals responded to this question. Over $90 \%$ stated their mission, vision, values, and goals supported academic interventions, while less than five percent (4.4\%) did not, and less than four percent (3.5\%) answered other. Establishing a common mission and vision with a solid set of values and goals is critical in implementing PLC practices and processes (Rentfro, 2007). Haberman (2003) reported the school’s principal is responsible for establishing a mission, and the mission should include effective strategiesfor improvements in student learning. Teachers should play a role in mission/vision development; the mission will be more effective if collaboratively created by all stakeholders (Cibulka \& Nakayama, 2000).

Establishing a clear mission, vision, values, and goals directly relates to the overall effectiveness of a school's intervention process. The effective schools research identifies seven correlates schools must utilize as a means to enhance student achievement (Kirk \& Jones, 2004). In 1991, Lezotte stated that a vital correlate is, "Schools must have a clear mission which the faculty understands; as well as being committed to its specific goals, priorities,... and assessments are absolutely crucial to the increases of student achievement among a specific school" (p. 6).

An additional correlate for effective schools is that schools must produce timely and frequent monitoring of student performance (Lezotte, 1997); therefore, intervention processes address this particular correlate as it relates to effective schools. The correlates of effective schools are designed to be encompassing, in that all correlates are necessary to maintain high levels of student achievement and establish a clear mission, while frequently monitoring student performance is vital to maintaining an effective academic intervention process (Kirk \& Jones, 2004).

## Survey question 8. Does the faculty at your school believe all students can

learn at high levels? One hundred and thirteen responses were tabulated. Less than onehalf (46.9\%) of the secondary principals responded, absolutely; $50.4 \%$ replied, somewhat; while $1.8 \%$ of the secondary principals stated, not at all. Faculty beliefs are valuable to the success or failure of an academic intervention process. Faculties must believe that all students can learn. This belief is a foundational philosophy within the PLC process
(DuFour, et al., 2005). Faculties must also display confidence in the intervention process, otherwise, the process will fail, and it is most effective to involve stakeholders in the creation and planning of the intervention process (Slonski-Fowler \& Trustcott, 2004).

Establishing the belief that all students can learn is a difficult task to accomplish among schools (Reagle, 2006). Traditional educators typically believe some students can learn, while other students do not possess the ability to learn, no matter the situation; this mentality is absolutely detrimental to the implementation of an intervention process (Fullan, 2005). According to Littky (2004), schools must embrace a learning for all culture for academic intervention processes to successfully enhance student achievement. If this belief is not present, students’ needs will not be met, and meeting the needs of all students is a foundational goal for all educators (Littky, 2004).

## Survey question 9. Academic interventions should solely focus on two core

areas: Reading Comprehension and Mathematics. All 113 participants responded to this question. Less than ten percent (8.8\%) responded with strongly disagree; 33.6\% answered, disagree; 4.4\% were neutral; $32.7 \%$ replied with agree; and $14.2 \%$ responded with strongly agree. NCLB places significant focus on Reading Comprehension and Mathematics; therefore, many feel that intervention process should focus on those areas only (Bruce, 2009). While Reading and Mathematics are often necessary in mastering other subject areas, it is a disservice to the students to only focus assessment practices on those two subject areas; this has led to some educators having tunnel-vision (McGuire, 2007).

The primary goal for academic intervention processes is to improve academic outcomes for all students; therefore, addressing the academic shortfalls for all students
forces schools to focus on all content areas, not specifically Communication Arts and Mathematics (Fletcher \& Vaughn, 2009). NCLB evaluates schools on their Communication Arts and Mathematics performance outcomes, and many schools feel they should only focus on these two content areas (Fletcher \& Vaughn, 2009). Unfortunately, this has left other content areas as seemingly less important. Due to the focus placed on Communication Arts and Mathematics, other content areas (Science, Social Studies, Fine Arts, Practical Arts, and Physical Education/Health) have unnecessarily been pushed to the background (Pyle \& Vaughn, 2012). School should focus on providing a generalized curriculum with equal focus on all content areas (Reynolds \& Shaywitz, 2009).

Survey question 10. Do you believe academic interventions increase the graduation rates in secondary schools? One hundred and thirteen responses were obtained from this question. Over eighty percent (82.3\%) responded with yes, while less than one percent ( $0.9 \%$ ) responded with no, and $12.4 \%$ replied with somewhat. In California, five intervention processes (pre-school to specific secondary school practices) have displayed significant effectiveness in increasing the graduation rate (Belfield, C. \& Levin, H., 2007). Developing strategies to increase graduation rates should be specific to the needs of the respective school. Possible strategies are tutoring for students who are potential drop-outs, increased participation in vocational or trade-specific classes, or developing a work program which would provide students an opportunity to work during school hours (Greene, 2002).

Increasing the graduation rate is a foundational goal among schools when implementing an intervention process (Bridgeland, Burk-Morison, \& DiIulio, 2006).

Schools must improve instructional strategies to address the needs of students who are at a high risk of dropping out of school (Swanson, 2003). Specifically, schools must design processes to focus on assisting students with their individual needs and build processes around those needs (Barton, 2005). An intervention process should have broad, general components, but also contain flexibility to assist various students (Bishop et al., 2010). Schools with a specific process to assist students who have been deemed at-risk for dropping out of school will increase their graduation rate and decrease their dropout rate (Bhanpuri \& Reynolds, 2003).

## Survey question 11. Schools with academic intervention processes should

 implement more differentiated and flexible instructional practices to address the needs of a diverse student body. One hundred and ten responses were tallied from this particular question. Under one-half (42.7\%) of the principals strongly agreed, $40 \%$ agreed, $5.5 \%$ were neutral, $1.8 \%$ disagreed, and $10 \%$ strongly disagreed with the above statement. Successful intervention processes must address students individually (Hall, 2009). The notion that school improvement takes place one student at a time has proven to be true (Bender, Berkeley, Gregg-Peaster, \& Saunders, 2009). If the school believes that all students can learn, then the intervention process must be flexible enough to address each student (Giles \& Hargreaves, 2006).Differentiated instruction practices and intervention processes have the same fundamental goal: to provide specific assistance for students with a collective desire to increase and enhance student achievement (Demirsky, Goddard, \& Goddard, 2010). The beauty of differentiated instruction is that the philosophy is designed to specifically meet the needs of a particular student, and intervention practices also follow the same
philosophy. This allows a powerful unification of two dynamic instructional strategies (Goddard, Y. \& Goddard, R., 2007).

## Survey question 12. What data do you feel are necessary to adequately utilize

 an academic intervention process? One hundred and ten secondary school principals responded to this question. Under ten percent (9.1\%) stated that Grades (A, B, $C, D, F)$ were necessary data to utilize during the process, $10.9 \%$ felt that missing assignments should be tabulated, $10 \%$ replied with attendance reports, $6.4 \%$ stated that behavior/discipline reports should be tallied, and 80.9\% felt that all the above should be used when utilizing an academic intervention process.The intervention process should interconnect with the school's mission, vision, values, and goals; these are the driving factors of a school's improvement process (Fuchs, D., Fuchs, L. \& Stecker, 2008). Schools that address the entire student - from discipline/attendance to academic performance - are appropriately doing whatever it takes to enhance student performance (DuFour et al., 2004).

## Survey question 13. What role do parents play in an academic intervention

 process? One hundred and ten responses were tallied for this question. Over one-half (58.2\%) of the principals answered with vital role; $30.9 \%$ replied with minimal role; and 4.5\% stated, no role at all. Parents need to be involved in the intervention process for their children (Stewart, 2008). Parents need to ensure their child is accurately placed and receiving the necessary assistance (Bruce, 2009). Parental involvement is especially important to students as they enter high school; high school transition interventions are very popular for middle school students (Amador, Falbo, \& Lein, 2001).Historically, parental involvement has been a chief complaint among educators (Gershberg \& Shatkin, 2007). In fact, teachers tend to use the lack of parental involvement as a common excuse for low student achievement results (Christenson, 2004). School leaders beginning an academic intervention process should prepare for this situation and develop processes and procedures to proactively involve parents in the intervention process (Kratochwill \& Sheridan, 2007). Effective academic intervention processes possess various tools to meet this vital need: distributing progress reports consistently and frequently, holding various conferences with students above and beyond the regularly scheduled parent-teacher conferences, and sending individual notes regarding positive academic actions or behaviors (Christenson \& Peterson, 2006). Parents inherently welcome intervention processes because of the school's desire to provide additional instruction to students in needed areas (Christenson \& Sheridan, 2001); further, proactive communication with parents is positive public relations for schools (Graham-Clay, 2005).

## Survey question 14. To what degree is the curriculum of the program

 consistent with the mission of the school? Under one-half (48.2\%) of the one hundred and ten principals felt their curriculum was completely consistent, 37.3\% felt their curriculum was somewhat consistent, $5.5 \%$ felt their curriculum was somewhat inconsistent, and 7.3\% felt their curriculum was completely inconsistent. The information used during an academic intervention process must be curriculum related or the foundational objective of the intervention process is lost (Clarke, 2009). Burns, Dean, and Klar (2004) stated that curriculum must match the assessment, and theassessment results will dictate the type and degree of intervention needed; therefore, a sound curriculum is vital to the success of an intervention process.

## Survey question 15. What is the primary purpose of academic intervention

 processes? One hundred and seven principals responded to this question. Over eightyfive percent (88.8\%) of the responses were ensure all students learn, $7.5 \%$ were to increase the graduation rate, $3.7 \%$ were to align with the NCLB, and $11.2 \%$ were to create data to evaluate instructional effectiveness. The purpose of intervention processes is to enhance student achievement. How the student achievement is tracked is a local school’s decision (Barnett et al., 2004). The historical purpose of academic intervention processes was to identify students who may need special education services; however, as educational practices moved further, it was realized that intervention processes can be useful for regular education students who may need assistance in a variety of subjects (Edwards \& Klingner, 2011).
## Survey question 16. How important is staff commitment as related to the

success of an academic intervention process? One hundred and seven responses were collected from this question. Over one-half (57\%) of the secondary school principals stated that all teachers must support the academic intervention process, and 44.9\% of the secondary school principals replied that staff consensus must support the academic intervention process. PLCs call for devout staff commitment to the common mission, vision, values, and goals. Schools that truly act as PLCs or have adopted PLC traits and philosophies must have staff commitment and buy-in (DuFour, 2004). Teacher commitment is paramount in the implementation of any school initiative. Intervention processes are no exception, and teacher commitment is extremely important due to the
amount of trust the students must have in the teachers to truly improve (McEvoy \& Welker, 2000).

## Survey question 17. Does the school possess an academic intervention team?

 Slightly fewer than seventy percent (68.2\%) of the one hundred and ten secondary school principals answered, yes, while $31.8 \%$ answered, no. Data teams who evaluate the progress and performance of students are more likely to limit the amount of students who fall between the cracks. Collaborative decision-making allows more teachers the opportunity to provide input as to what is best for each student (Agne et al., 2008). The intervention team must be a cross-curricular representation of teachers students will have as classroom teachers; ideally, these teachers will be effective communicators as they will carry information about specific students to intervention team meetings (Martens, 1993).Survey question 18. Has the school compiled a collection of effective, researchbased intervention ideas for common concerns (For example: poor reading fluency or defiant behavior)? One hundred and five secondary school principals responded to this question. Twenty percent (20\%) answered yes, a full collection is available; 65.7\% replied, some resources are available; $13.3 \%$ answered, no, there is nothing to assist teachers in dealing with specific concerns during the intervention time; while 2.9\% selected, other. As intervention processes move from a new initiative to a process used by many schools, an abundance of resources will be available for teachers to use (Duffy, 2007). Hansen, Kachgal, and Nutter (2001) stated that there are numerous resources and strategies for academic interventions, but finding a strategy for a specific student proves to be most effective.

## Survey question 19. How often is the effectiveness of the academic intervention

 process evaluated? Approximately ten percent (9.9\%) of the one hundred and one principals stated that their intervention processes are evaluated weekly; $32.7 \%$ replied with quarterly; 7.9\% answered with each semester; $11.9 \%$ stated, annually; and 21.8\% stated, all the time. Intervention processes must never be complete, they must continue to change and adapt to the needs of the students (Ehren, n.d.). With the newness of secondary academic interventions, most practitioners follow the evaluation practices of elementary intervention processes (Barnett, 2011).
## Survey question 20. If your school uses a systematic intervention process, what

 is the role of the non-core teachers in the process? Ninety-six responses were obtained from this question. Over fifteen percent (16.7\%) of the responses stated, supervision of students not needing assistance; 31.3\% replied with enrichment opportunities for students not needing assistance; 49\% responded with assistance in core areas that have a high number of students in need of interventions; and $12.5 \%$ stated, no role at all. Intervention processes that support the mission, vision, values, and goals of a school should be a school-wide initiative.A school-wide initiative utilizes all stakeholders within the school; therefore, all professional staff members are involved in the intervention process (Buffum \& Mattos, 2008). The importance of non-core teachers is vital, as their interaction with students is equally valuable. Non-core teachers must relay their support of an implemented initiative, or the initiative will be likely to fail (Cupido, 2006).

## Survey question 21. Do you separate students needing academic assistance

 from students who present behavior concerns? Ninety-nine secondary school principalsresponded to this question. Approximately thirty percent (30.3\%) responded, yes, we have a specific room for students who intentionally do not work and cause behavior concerns; 64.6\% answered, no, we keep all students together who need assistance; and $7.1 \%$ responded, other. Maintaining positive behavior is a must for any academic intervention process to be successful, and each school should identify and create its own plan to address student behavior during the specific intervention process (Algozzine, B. \& Algozzine, K., 2009).

## Analysis of Qualitative Data

Interview question 1. How do you define an academic intervention? Is it a process? Is it systematic? Each of the principals stated that academic interventions are processes. Two of the principals described effective intervention processes as assistance to mastery. Principal X described interventions in this way, "Though some interventions can be one-time shots, I feel interventions need to be on-going to be truly effective." Duffy (2007) determined that secondary interventions are effective if routine and systematic. A structured academic intervention process provides clear standards, appropriate measurement, and instructional practices; it lays the groundwork of enhancing student achievement for all students (Wedl, 2005).

Interview question 2. What types of academic interventions do you currently use? If you currently do not use academic interventions, what types of academic interventions have you read about? Two of the principals responded, "tiered interventions." Principal Y stated that "sending students to the teacher of origin for reteaching and re-assessment four days per week" has given the best results for his particular school. One of the principals, Principal Z, presented a four-level approach.

Level one is designed for the majority of students, while level four offers specific interventions based on individualized needs of students. Effective interventions must address the needs of the individual school. Interventions cannot be labeled as a one-size-fits-all mechanism (Sawchuck, 2008). An academic intervention can be many things; it can be any change or program of change instituted during instruction, or it could be formal or informal, school-wide, or specific to an individual classroom (Hall, 2009).

Interview question 3. How long have you been using systematic intervention processes? If you currently do not use academic interventions, when do you first remember academic interventions being discussed as a school-reform initiative?

Principal Z stated his school has been involved with academic intervention processes for the past 10 years, and the process has been revised each year. The other principals ranged from three to five years of participation in academic intervention processes. Principal X exclaimed that his school receives assistance and professional development from the local Regional Professional Development Committee (RPDC). He also stated that when this idea was first presented to the professional staff at his school, there was professional development. This led to negative feelings by the stakeholders within the school.

Professional development within the implementation of intervention processes is integral to the success of the process. Stakeholder buy-in is crucial to the process and stakeholders must have the necessary knowledge of the process (Fisher, 2007). The preparation prior to implementing an academic intervention process is crucial (Hattie, 2003). Teachers and stakeholders must be given research-based logical reasoning as to why initiating a change of this magnitude is necessary. Once teachers understand the
purpose behind an academic intervention process, it is more likely the process will be successful (Burdette, 2007).

Interview question 4. In your opinion, what types of interventions have proven to be most effective? Each of the principals had different responses to these questions. Principal X stated that interventions begin and end within the relationships between students and teachers. Principal Z mentioned, "the key to any intervention is providing tutoring/additional support during the school day," while Principals Y and W felt that "reteaching" is the best type of intervention instructional technique.

Intervention processes must specifically adhere to the characteristics of a school. The general guidelines and parameters can be similar from school to school, but schools must develop a process that specifically addresses a need (Johnson \& Mellard, 2008). Intervention processes are most effective when processes are molded and adjusted to fit the specific needs of a school. Processes are ineffective when administrators attempt to force a strategy on teachers that does not fit the school's individual issues (Knoff, 2009).

Interview question 5. In your opinion, what types of interventions appear to be ineffective? Two of the principals felt that intervention processes which focus on punitive measures for students and not on establishing intrinsic motivation for students were ineffective. Principal Y stated that the assignment of interventions must be specific to the student. Principal X believed that students should be rewarded for doing appropriate work, and this process needs to be instilled in the culture of the school.

Intervention processes impact the established culture of the school, and the entire mindset of all stakeholders within the school must be focused specifically on student performance and achievement (Rentfro, 2007). Ineffective intervention strategies must
be recognized early. Practitioners learn to identify ineffective strategies through trial and error, and principals must adjust intervention strategies to meet the needs of the identified learners (Rentfro, 2007).

Interview question 6. What evidence do you have that academic interventions are tied to positive school reform? Each of the principals has tracked data for several years. Principal Z stated the following data are tracked: Grades, three-week progress reports, attendance rates, drop-out/graduation rates, ACT scores, and grade point averages. Principals X and Y focus on tracking failure rates. Principal Y reported his school has reduced semester failures by an average of 94 students each year, while Principal X focused on two areas to evaluate success: attendance percentages and overall number of students receiving Ds or Fs.

Data tracking is one of the most integral parts of a successful intervention process. Data are best tracked by a team of stakeholders, as Principal Z explained. The intervention process he uses changes annually based on student needs. Unfortunately, a solid universal-screening tool has not been developed for secondary schools. Grades typically serve as the tool secondary schools use to assess student master (Ehren, n.d.). Quint (2006) determined that specific strategies must be evaluated and adjusted separately, whereby; research-based intervention processes that are examined by teams of teachers are known to increase achievement and graduation rates.

Interview question 7. What proof do you have or thoughts to support academic interventions being linked to increased graduation rates? Principal Y stated that the current senior class has many more potential graduates then the previous five years. He attributed this to the implementation of an intervention process. Principals X and Z both
utilize the Missouri Options Program (allows students to take the General Education Diploma [GED] while obtaining a high school diploma) as an intervention tool. They both attribute an increased graduation rate to this program.

Secondary school interventions will only increase graduation rates if increasing graduation rates is a focus of the school and intervention practices specifically support practices to assist increasing the graduation rate (Belfield \& Levin, 2007). Finding the reasons students do not complete high school within the specific school is vital to establishing an effective intervention process to increase the graduation rate (Allensworth \& Easton, 2007). Once the reasons and causes for dropping out are identified, stakeholders can then begin designing a plan to intervene (Balfanz, McPartland, \& Shaw, 2002). Catching students early in the high school experience and giving them multiple opportunities to get back on pace for graduation are vital to their success (Pinkus, 2008).

Interview question 8. Does your research or opinions support the notion that academic interventions are tied directly to Special Education Initiatives? If so, in what way? If not, do you believe the Response to Intervention (RtI) process was originated as a general education initiative? All principals responded that intervention processes may have originated as special education initiatives but can also be extremely effective as general education practices. Principal W mentioned that the notion of RtI being a special education practice presented problems with faculty perception. RtI began with the purpose of assisting educators in identifying disabilities among specific students (Bruce, 2009).

The history of RtI and special education can present problems for stakeholders as they attempt to obtain stakeholder buy-in because traditionally, teachers do not feel
special education practices pertain to regular education practices, and this tends to delay the implementation process and overall success of the program (Dimino \& Gersten, 2006).

Interview question 9. In your opinion, why do schools choose not to implement academic intervention processes? Principal Z stated that a lack of organized and systematic approach leads to many schools not implementing an intervention process. Principal X mentioned that a severe lack of understand about the basic principles within intervention processes lead to failure of implementing this type of process. Principal Y cited two reasons - lack of resources in small schools and a lack of effort and leadership of the school's administration.

Schools that shy away from implementing intervention processes typically do not have a culture of sustainable school improvement (Agne et al., 2008). Schools typically avoid implementing academic intervention processes because of negative perceptions. The negative perceptions are a product of educational tradition; this tradition produces theories of special education and academic intervention processes being tied together. Unfortunately, this mind set has hindered the advancement of academic intervention processes at the secondary school level (Deshler \& Kovaleski, 2007). Another pivotal reason schools tend to avoid academic intervention processes is the lack of researchbased knowledge about past intervention strategies and processes (Algozzine, Kincaid, \& Sandomierski, 2007).

Interview question 10. Is there any other information you wish to share that directly relates to systematic, academic intervention processes? Principal Y provided insight into the implementation of intervention processes, by stating that the processes are
essential to insure student comprehension and also have a positive effect on standardized assessment results. Principal Z provided several statistics that support the school's vision of Learning First. A successful academic intervention process can fundamentally change the culture of a learning environment by establishing a whatever-it-takes attitude with numerous opportunities for students to obtain assistance and enrichment in the appropriate areas (Buysse, Coleman, \& Neitzel, 2006).

Thirty schools' graduation rates were evaluated during this research. Fifteen of the schools participated in an academic intervention process, and fifteen of the schools selected did not participate in an academic intervention process. The schools were randomly selected based on responses received from the survey. The fifteen schools that participated in an academic intervention process displayed an average graduation rate of $88.9 \%$, while the fifteen schools that did not participate in an academic intervention process possessed an average graduation rate of $90.2 \%$; a difference of $1.3 \%$.

## Summary

From the analyses of the data sources (survey responses, interview responses, and graduation rates), the implementation of intervention processes leading to increased graduation rate was inconclusive. An overwhelming number of secondary schools participate in intervention processes. Several schools take part in the process more then three days per week, while evaluating student achievement progress every three to four weeks.

The interview responses also indicated a strong support of intervention processes. Each of the principals admitted participation in some type of intervention process. Each also tracked various types of data. All principals felt that an integral piece in the
successful implementation of intervention processes is to believe that all students can learn, and it the school's obligation to respond when students do not learn. Contrary to the opinions and perceptions of the principals (intervention processes contributed to higher graduation rates) were the percentages of the graduation rates for the two groups. The average graduation rate for the group of secondary schools not implementing intervention practices was higher (90.2\%) than the group implementing intervention practices (88.9\%).

In Chapter Five, conclusions were discussed. The findings were presented and recommendations were posed. During the study, several gaps were identified; these factors were explained. Intervention processes require a shift from traditional educational thinking. Simply, doing what is best for students is a foundational principle for the implementation and success of secondary intervention processes.

## Chapter Five: Summary and Conclusion

Academic intervention processes are supported by numerous laws, initiatives, and theories. NCLB requires schools to develop improvement plans; these plans must include an intervention process (Erpenbach et al., 2003). PLCs, the effective schools research, and RtI have significantly influenced the development of academic intervention processes.

This study specifically examined the effect academic intervention processes have on secondary school graduation rates. The research questions guiding this study were:

1. According to public secondary school principals, what are the reasons secondary schools choose to implement academic intervention processes?
2. According to public secondary schools principals, what are the reasons secondary schools do not implement academic intervention processes?
3. What is the effect of academic interventions on graduation rates in public secondary schools that implement intervention processes and public secondary schools that do not implement intervention processes?

Presented in this chapter were the findings related to the research questions. Conclusions were shared, as well as implications for practice. Recommendations for future research were revealed.

## Findings

Descriptive data were collected from the Intervention Usage survey and the MODESE web site. The survey consisted of 21 questions and was completed by 113 secondary school principals. The results of the survey were:

- $80.5 \%$ of the 113 secondary schools reported using a systematic, academic intervention process;
- $89 \%$ use a multi-tiered intervention process;
- $64 \%$ participate in intervention processes at least four days out of a traditional five-day school week;
- 79\% utilize PLC concepts.

The movement of students within the intervention processes was spread somewhat evenly, as $28 \%$ of the secondary schools move students every four weeks, $18 \%$ change every three weeks, $11 \%$ change every two weeks, and $7 \%$ change every week.

A team of teachers evaluates and places each student in 57\% of the secondary schools, and $40 \%$ of the secondary schools utilize content area teams to evaluate and place students. Only $11 \%$ of the secondary school principals evaluates and places students. Schools must research various methods regarding student placements during intervention process and delicately select a process that fits the school's needs. If schools do not utilize an effective process to place and organize students in the various implementation areas, the entire process is less likely to sustain long-term gains in student achievement.

Ninety-two percent of the secondary schools' mission, vision, values, and goals support academic interventions. Fifty percent of the secondary schools' faculties somewhat believed that all students can learn at high levels, and 47\% absolutely felt that students can learn at high levels. The mission, vision, values, and goals contain language that addresses all students learning at high levels.

The survey results indicated that $34 \%$ of the secondary school principals disagreed that academic interventions should solely focus on two core areas: Reading and Mathematics. Conversely, 33\% agreed that academic interventions should focus only on Reading and Mathematics. NCLB has focused solely on Reading and Mathematics. Schools must address more than two content areas to provide diverse educational opportunities for students.

Eighty-two percent of the secondary school principals believed that academic interventions increase the graduation rates in secondary schools. Twelve percent of the secondary school principals somewhat believed that academic interventions increase the graduation rates in secondary schools. Essentially, schools that address the students who are deemed at-risk will decrease the dropout percentages, and schools that specifically target the reasons students drop out in their respective schools will also decrease their dropout rates.

Forty percent of the secondary school principals agreed that schools with academic intervention processes should implement more differentiated and flexible instructional practices to address the needs of a diverse student body. Forty-three percent strongly agreed. Ten percent strongly disagreed. Educational leaders and teachers must combine differentiated instructional practices with intervention practices and utilize both sets of strategies congruently to achieve the same goal: Addressing the specific needs of students.

Eighty-one percent of the secondary school principals responded that grades (A, B, C, D, and F), missing assignments, attendance reports, and behavior/discipline reports should be evaluated when utilizing an academic intervention process. A true intervention
process must address more than one indicator to address the wide variety of student needs. Typically, students have more than one area in which they are struggling. For example, students who are reading below their current grade level will struggle in other academic areas because reading skills are essential in all academic areas.

Fifty-eight percent of the secondary school principals felt parents play a vital role in an academic intervention process; 31\% reported parents play a minimal role, and $4 \%$ expressed parents play no role at all in an academic intervention process. Parents may not play a practical role in the intervention process at school, but administrators can gain positive public relations if parents are proactively notified regarding their student's academic performance. Further, parental support can increase student effort within the intervention process by the parents encouraging the student to complete the necessary requirements during the intervention time.

Forty-eight percent of the secondary school principals reported that the curriculum of the school's program is completely consistent with the mission of the school. Thirty-seven percent determined the curriculum is somewhat consistent. Seven percent of the secondary school principals believed the curriculum is completely inconsistent, and 5\% stated the curriculum is somewhat inconsistent. It is difficult to completely align curriculum with a specific school's mission, but the general tone of a school's mission should be aligned to the curriculum.

Eighty-nine percent of the secondary school principals proposed the primary purpose of academic intervention processes is to ensure all students learn. Eleven percent of the secondary school principals believed the primary purpose is to create data to evaluate instructional effectiveness. Eight percent of the secondary school principals
reported the primary purpose is to increase the graduation rate, and $4 \%$ determined the primary purpose is to align with NCLB mandates. Each school must define their individual purpose for implementing and sustaining an academic intervention process. It is vital to create the intervention process to address the specific needs of the respective school.

Fifty-seven percent of the secondary school principals reported that all teachers must support the academic intervention process to ensure success of the implemented process. Forty-five percent believed that staff consensus must support the academic intervention process to establish a successful process. A foundational attribute of PLCs is that consensus must be obtained prior to implementing any new instructional process; therefore, schools wishing to implement an academic intervention process must achieve consensus regarding the implementation, or the process will fail.

Sixty-eight of the secondary schools participating in this study possessed an academic intervention team. Thirty-two percent did not possess an academic intervention team. A guiding coalition with representation from each department or grade level of a school is crucial for effective implementation of any new process or program. The principal or chief administrator must be willing to make certain decisions, but the guiding coalition or leadership team must be present and be able to make decisions, as well.

Sixty-six percent of the secondary schools have compiled a small collection of effective, research-based intervention ideas for common concerns. Twenty percent of the secondary schools have a full collection. Thirteen percent have nothing to assist teachers in dealing with specific concerns during intervention time. Unfortunately, possessing an adequate and current professional library is not a high priority for most school leaders.

Schools that possess outstanding resources tend to have higher levels of student achievement.

Ten percent of the secondary schools evaluate the effectiveness of the academic intervention process weekly. Thirty-three percent of the secondary schools evaluate the effectiveness quarterly. Twenty-two percent evaluate the effectiveness constantly. Twelve percent evaluate the effectiveness annually, and $8 \%$ evaluate the effectiveness each semester. Consistent and timely evaluation of any instructional initiative is crucial towards the stability and success of the initiative; therefore, schools with academic intervention processes must instill an effective procedure to evaluate the intervention process.

Forty-nine percent of the secondary schools' non-core teachers assist core areas that have a high number of students in need of interventions. Thirty-one percent of the non-core teachers provide enrichment opportunities for students not needing assistance. Seventeen percent of the non-core teachers supervise students not needing assistance, and $13 \%$ of the non-core teachers have no role at all. Finding productive tasks for non-core teachers to complete during the intervention process has been an ongoing challenge for school administrators. Schools must evaluate their specific needs and devote additional personnel to addressing those needs.

Sixty-five percent of the secondary schools do not separate students needing academic assistance from students who present behavior concerns. Thirty percent of the secondary schools have a specific area for students who intentionally do not work and cause behavior concerns. Unfortunately, students with behavior concerns tend to distract students who need additional academic assistance during intervention time. Schools must
evaluate the level of this concern within their respective school, and, if necessary, devote additional staff to holding specific areas of interventions for students with behavior issues.

The graduation rates of 30 secondary schools were evaluated during this research. The fifteen schools that participated in an academic intervention process yielded an average graduation rate of $88.9 \%$, while the fifteen schools that did not participate in an academic intervention process possessed an average graduation rate of $90.2 \%$; a difference of $1.3 \%$.

## Conclusion

Three research questions guided this research. Intervention processes require a change to traditional educational practices and strategies. Due to this change, intervention processes do not occur in all secondary schools. It is vital to understand the reasoning behind schools choosing to not implement academic intervention processes.

Each of the interviewed secondary school principals was asked why schools choose not to implement academic intervention processes. The principals provided several reasons. In certain instances, secondary school principals are afraid to make a drastic change to the schedule. Change involves fear, fear leads to disagreement. Professional educational stakeholders tend to oppose changes.

Systematic intervention processes require specific allocated time four to five days per week. Teachers also display apprehension about what to do during the intervention process and show unwillingness to prepare for an additional period. Teachers must be shown what and how to prepare and conduct additional instruction during the academic
intervention time. If necessary, teachers may be sent to other schools to see exactly what other schools do during their academic intervention time.

Professional educators possess the same learning styles as students. Educational leaders must utilize differentiated instruction to address the variety of learning styles the teachers possess. Giving clear examples to educators can minimize staff resistance to implementing a systematic academic intervention process.

Another reason schools choose not to implement an academic intervention process is a lack of clear, organized goals. The PLC process supports the notion of setting a clear mission, vision, common values, and common goals. It is vital to obtain consensus when creating the mission, vision, values, and goals as each staff member needs to have the opportunity to state his or her respective opinion. Consensus simply means that each stakeholder's voice is heard, and the will of the group is followed. Consensus does not mean everyone must agree with a particular situation or issue (Rentfro, 2007).

Schools must develop the mission, vision, values, and goals to support systematic, academic intervention processes. If the mission, vision, values, and goals do not support the implementation of academic intervention processes, then the process will fail. Schools must organize themselves to support a culture of assisting each student to obtain mastery.

A school's leadership must support academic intervention processes. A PLC school possesses a shared leadership culture. This culture instills ownership and allows stakeholders to take ownership in decisions within the school. Typically, schools develop a leadership team. If the leadership team does not support academic intervention
processes, the process will fail. The school's leadership must educate themselves because a change of this magnitude will create questioning from stakeholders. It is vital that the leadership maintains a common knowledge of the intervention process.

Confusion is a main ingredient in an initiative's failure, and if the school's leadership answers the same questions differently, confusion and failure will take place. The leadership of a school must be knowledgeable and support the proposed initiative. Intervention processes are new initiatives, and the leadership must be willing do whatever it takes to assist each student. If the leadership resists a whatever-it-takes mentality and does not support the academic intervention process, the process will fail.

Intervention processes require a significant amount of work and extra time. Time is often the variable in any initiative implementation. A lack of provided time is often the reason why schools do not implement intervention processes. Systematic, academic intervention processes must take place during the school day. Teachers must be given time to adequately prepare for the intervention time during contracted time. If teachers are not given appropriate time to prepare for intervention time, the initiative will fail.

Finally, many intervention processes are not successful due to the connection of intervention processes and special education practices. General education professionals tend to view special education as a completely different type of education. Intervention processes were conceived in special education through RtI, but recently, intervention processes have become a general education initiative. The historical stereotype of intervention processes being a special education initiative also creates apprehension among students. Students not involved in special education practices typically resist any type of academic activity related to special education. Student and teacher perceptions of
academic intervention processes being a special education initiative significantly decrease the chances of the process being successfully implemented.

Professional educators are morally obligated to do whatever it takes to ensure student learning, mastery, and achievement (Campbell, 2007). Academic intervention processes provide educators an opportunity to give students extra time and assistance to obtain mastery. This study also focused on reasons why schools choose to implement systematic, academic intervention processes. Intervention processes allow students an extra opportunity to understand material and gain mastery in various content areas. There are numerous types of interventions current practitioners use, such as tiered intervention processes, peer interventions, and required before or after school tutoring/interventions. An intervention process must be specific to the needs and mission/vision of a respective school. An intervention process in one school may not be effective in another school. The faculty/staff must support an academic intervention process. This support must be measured by consensus. Consensus is simply when every stakeholder has the opportunity to voice his or her opinion, and the will of the group is then followed. Another reason schools decide to implement an intervention process is that the idea of an intervention process fall directly into the practices of PLCs (DuFour et al., 2008).

Intervention processes have shown to have minimal affect on graduation rates. Schools that currently implement intervention processes did not have higher graduation rates, on average, than schools not currently implementing intervention processes. According to the interviews conducted in this study, the Missouri Options Program seems to be the most profound intervention process directly impacting the graduation rates of public schools.

The Missouri Options Program is for students who are behind in graduation credits and will not graduate in the traditional four-year tract. These students must take certain courses in various core areas and successfully pass the General Education Diploma (GED) exam. Once they meet the requirements under the Missouri Options Program, the students receive a regular high school diploma. Other than the typical remediation practices and re-teaching in various courses, the Missouri Options is a valuable intervention for students. This program is easier to track, and the various tiered processes schools utilize as intervention processes do not display the necessary statistical data reflecting an increase or decrease in graduation rates.

## Implications for Practice

The culture surrounding academic intervention practices is one in which educators possess an unrelenting focus on learning for ALL students. Practitioners must not feel that only certain students can learn and other students may not. Teachers must believe in students and their ability to master certain concepts. There are two common methods current practitioners use to implement an academic intervention process.

Tiered System of Delivery - schools must develop a committee or team of professionals to assist in the implementation of this process, such as the intervention leadership team. This team plays a crucial role in the development, implementation, and sustainability of an effective intervention process. The team must decide when and how often the intervention time will take place. Schools that adhere to PLC recommendations typically release school early, or start school late, one day per week; during these days, secondary schools run shorter class periods.

A traditional secondary school class period is forty-five to fifty minutes, on earlyrelease or late-start days, and the class periods are twenty-five to thirty minutes depending on the schedule of the school. The intervention process should not take place on early-release or late-start days, but the process should take place during the remaining four days. Selecting the appropriate time during the school day is also a challenging decision the leadership team must make. Many schools hold their intervention time right after school begins in the morning or right before school ends in the afternoon, and some schools choose to hold their intervention time in the middle of the school day. Due to the variety of programs or services schools offer, each school should evaluate their specific needs and the specific goals to decide when the intervention process should take place during the school day.

After the schedule has been decided and set, the team must select a universal screening tool. This tool will initially assess students to gauge their achievement levels. Many schools use traditional grades as their universal screening tool. This is only effective if grades represent the same in all classes. An A equals mastery, a B equals above-average, a C equals average, a D equals below-average, and an F equals failure. When grades are used as the universal screening tool, areas and locations are created for students to attend during the academic intervention time.

Tier One students may be making all As and Bs; Tier Two students may be making Cs; and, Tier Three students may be making Ds or Fs. Depending on the vision/mission of the school, Tier One work may be enrichment practices. Tier Two strategies may consist of providing additional time for students to complete homework assignments. Tier Three strategies may align with basic skill development and practice.

The school would re-evaluate each student's progress every three weeks. The reevaluation would determine the next placement for the student. In some cases, a fourth tier is added to an intervention process: required after-school tutoring. This is typically instituted when students spend two to three rotations in Tier Three. At this time, a parent conference is held, and the student signs an agreement committing to working harder on coursework. Most schools provide transportation for students if they are assigned to the fourth tier. During this process, specific data are tracked each week and at the end of each rotation. The percentages of grades are tracked through the entire process. The percentages of student movement within the process are also recorded.

If grades are not used as the universal screening tool, then the leadership team must carefully select an assessment tool. The selected assessment tool must meet the overarching goals of the intervention process. If increasing levels of reading comprehension are deemed a collective need, then an assessment tool must be selected that adequately assesses students' individuals reading levels. Unfortunately, there are very few universal screening tools to use in secondary schools.

The importance of the intervention leadership team cannot be overstated. A specific administrator cannot effectively implement an intervention process alone; it must be done collectively and collaboratively. The specific intervention leadership team is vital to the success or failure of the process. This particular team generally meets at the end of each rotation and identifies students for the next rotation. It is vital that the team receives feedback from other staff members prior to each meeting. This feedback will then be taken to the meeting and used in placing students for the next rotation.

Many schools develop their own specific intervention referral sheet. This information is used to gather information about students' academic performance that the universal screening tool does not cover. It is imperative that the intervention leadership team meetings take place during contract time, because teachers will be more likely to focus and produce if these meetings are not outside of their expected work time. Once the team meets and places students in various areas and classrooms during the process, the information is posted in several locations throughout the school. When the next rotation begins, students visually check the list - then attend their specific intervention location.

Alternative Learning Centers - schools often utilize an alternative learning center as a way to keep at-risk students from dropping out of high school. Typically, teachers recommend students to the principal or counselor. Once this takes place, a feedback sheet is given to all of the student's teachers. The teachers are to complete the sheet and return it to the counselor or principal. If several teachers feel the student meets the criteria for at-risk, then the student may have the opportunity to participate in the alternative learning center. Once students enter the alternative learning center, they then may complete credits or classes in a non-traditional format. These programs are typically computer-based. The premise behind the alternative learning philosophy is to intervene prior to a student actually quitting school. Furthermore, at-risk students tend to respond better when not placed in a traditional classroom environment, but a more relaxed, independent format.

Intervention processes used effectively in secondary schools must be adapted to fit the specific needs of the school. The process must not be copied from one school to
another. It is much more effective if the stakeholders first establish the goals of the intervention process then work backwards to design the best process for the specific needs of the school. The importance of creating expands further than simply effectiveness, but lends itself to incorporating staff ownership of the potential process. Intervention processes can positively affect secondary schools, if aligned with the school's mission, vision, values, goals, and specific needs.

## Recommendations for Future Research

This study contained two significant limitations: The implication of intervention processes being tied specifically to special education initiatives and the overall lack of long-term data pertaining to the use of intervention processes utilized in secondary schools. As the idea of implementing intervention processes in secondary schools continues to grow, more data will be available for practitioners. It is vital to evaluate the past to effectively implement the present.

Special education practitioners will continue to utilize the RtI process to identify students in need of special education services. With the continued use of intervention processes in regular education practices, perhaps a healthy collaboration of RtI in special education and intervention processes within secondary schools will ensue. Regular education teachers will begin to accept the intervention processes as a true benefit to all students. The perception of intervention processes only being used in RtI special education practices is vital to consider this profound limitation for future research.

The second limitation notable for future researchers is the newness of secondary school intervention processes. As the process continues to grow, intervention processes at the secondary school will become a common way to reach students in need of
assistance. The more common the implementation of secondary school intervention processes, the more examples for other practitioners to observe. Educational professionals tend to lean towards tradition, and in the future, intervention processes will become traditions. The longitudinal data created by this evolution will prove to be extremely powerful. Educational decision-makers must understand that the lack of intervention processes at the secondary school could potentially hinder the acquisition of long-term data.

## Summary

Intervention processes have shown to positively impact secondary school students. The processes originated from three initiatives in education: the PLC model, RtI, and the Effective Schools Movement. Each of these movements have independently motivated the use of intervention processes in secondary schools.

The PLC model has taken the educational world by storm. Since Dr. Rick DuFour and Dr. Robert Eaker started this movement in the early 1990s, thousands of schools have titled themselves as a PLV (Rentfro, 2007). One of the pivotal factors of PLCs is how schools must respond when students do not learn.

Schools must respond by providing students extra time and assistance during the school day. Schools can do this by developing and creating an intervention process specific to the needs of the student body. PLCs also command a strong focus on teacher collaboration, and an effective intervention process must also possess teacher collaboration. Students generally take a minimum of seven classes in secondary schools. If all seven teachers collaborate on the progress of one student, imagine the possibilities. Teachers can make decisions based on the best interest of specific students. Once the
collaboration takes place, teachers can then decide which way to assist a student in one subject, while a teacher in another subject can possibly work on two skills that can benefit the student in more than one particular class. The PLC focus can greatly assist a school's ability to implement an intervention process.

The effective schools movement concluded that schools do make a difference in the success or failure of students. This profound discovery was a result of the 1966 Coleman Report, which stated that schools do NOT make a difference in student learning and achievement (Lezotte, 1997). The effective schools movement produced seven correlates, which specified the steps schools need to take to improve their educational practices.

Intervention processes can be linked to one of the seven correlates: frequent monitoring of student progress. Typical, successful intervention processes rotate placements every three weeks. This allows frequent monitoring to take place. Without this influential research, intervention processes would have fallen on inactive and complacent educators.

Leaders must always reference various research initiatives that support the specific implementation. Intervention processes require a significant change in traditional educational practices. Using the effective schools research as a reference to support intervention processes will greatly assist in the implementation process.

Intervention processes are perceived to be effective, practical tools for secondary schools to increase graduation rates. Schools must adopt a vision of doing whatever it takes to increase student achievement. A vision with this focus will allow schools to implement intervention processes. Schools must also adapt current research regarding
intervention processes and mold the process to their respective, specific school. Even though the findings of this study were inconclusive, intervention processes show promise and are powerful tools to incorporate into a school improvement plan.

## Appendix A

## Intervention Usage <br> Survey

This survey will be distributed electronically to every secondary school in Missouri utilizing Survey Monkey.

1. Does your school currently use a systematic, academic intervention process?
a. Yes
b. No
2. If so, what type of intervention process does your school use?
a. Specific Response to Intervention (RtI) process
b. A Three-Tiered Process similar to RtI
c. A Multi-Tiered Process based on students' grades
d. Other - please explain in comment area
e. Other (please specify)
3. If your school utilizes a systematic intervention process, how often and how long do students participate in the process?
a. 5 days a week for approximately 30 minutes with optional after school time
b. 5 days a week for approximately 1 hour with optional after school time
c. 4 days a week for approximately 30 minutes with optional after school time
d. 4 days a week for approximately 1 hour with optional after school time
e. Other - please explain
4. Is your school a Professional Learning Community (PLC)?
a. Yes, we fully practice as a PLC
b. We utilize only a few of the concepts within PLCs
c. No, we do not act as a PLC
d. Other - please explain
5. How often are students moved or placed in various areas within the intervention process?
a. One week
b. Two weeks
c. Three weeks
d. Four weeks
e. Other - Please explain
6. How are students evaluated within the intervention process?
a. The principal evaluates each student and places students
b. A team of teachers evaluates each student and places them
c. Each content department/team evaluates students and places them
d. Other - please explain
7. Does your school's mission, vision, values, and goals support academic interventions?
a. Yes
b. No
c. Other - please explain
8. Does the faculty at your school believe that all students can learn at high levels?
a. Absolutely
b. Somewhat
c. Not at all
9. Academic interventions should solely focus on two core areas: Reading Comprehension and Mathematics
a. Strongly Disagree
b. Disagree
c. Neutral
d. Agree
e. Strongly Agree
10. Do you believe academic interventions increase the graduation rates in secondary schools?
a. Yes
b. No
c. Somewhat
d. Other - please explain
11. Schools with academic intervention processes should implement more differentiated and flexible instructional practices to address the needs of a diverse student body.
a. Strongly Disagree
b. Disagree
c. Neutral
d. Agree
e. Strongly Agree
f. Other - please explain
12. What data do you feel is necessary to adequately utilize an academic intervention process?
a. Grades (A,B,C,D,F)
b. Missing Assignments
c. Attendance reports
d. Behavior/discipline reports
e. All the above
f. Other - please explain
13. What role do parents play in an academic intervention process?
a. Vital role
b. Minimal role
c. No role at all
d. Other - please explain
14. To what degree is the curriculum of the program consistent with the mission of the school?
a. Completely inconsistent
b. Somewhat inconsistent
c. Somewhat consistent
d. Completely consistent
15. What is the primary purpose of academic intervention processes?
a. Ensure all students learn
b. Lower the dropout rate and increase the graduation rate
c. Align with the No Child Left Behind Act
d. Create data to evaluate instructional effectiveness
e. Other - please explain
16. How important is staff commitment as it relates to the success of an academic intervention process?
a. All teachers must support the academic intervention process
b. Staff consensus must support the academic intervention process
c. Staff commitment is not important
d. Other - please explain
17. Does the school possess an academic intervention team?
a. Yes
b. No
18. Has the school compiled a collection of effective, research-based intervention ideas for common concerns? For example - poor reading fluency or defiant behavior.
a. Yes, a full collection is available
b. Some resources are available
c. No, there is nothing to assist teachers in dealing with specific concerns during the intervention time
19. How often is the effectiveness of the academic intervention process evaluated?
a. Weekly
b. Quarterly
c. Each semester
d. Annually
e. All the time
f. Other - please explain
20. If your school uses a systematic intervention process, what role do the non-core teachers play in the process?
a. Supervision of students not needing assistance
b. Enrichment opportunities for students not needing assistance
c. Assistance in core areas that have a high number of students in need of interventions
d. No role at all
e. Other - please explain
21. Do you separate students needing academic assistance from students that present behavior concerns?
a. Yes - we have a specific room for students who intentionally do not work and cause behavior concerns
b. No - we keep all students together who need assistance
c. Other - please explain

## Resources

Florida PS/RtI Statewide Project. (2008). Problem solving/Response to intervention. Retrieved from http://www.floridarti.usf.edu

Wright, J. (2006). Response-to-intervention school readiness survey. RtI Wire. Retrieved from http://www.jimwrightonline.com/php/rti/rti_.php

## Appendix B

## Interview Questions for Secondary School Principals

In-person interviews will be conducted to five secondary school principals from the state of Missouri.

1. How do you define an academic intervention? Is it a process? Is it systematic?
2. What types of academic interventions do you currently use? If you currently do not use academic interventions, what types of academic interventions have you read about?
3. How long have you been using systematic intervention processes? If you currently do not use academic interventions, when do you first remember academic interventions being discussed as a school reform initiative?
4. In your opinion, what types of interventions have proven to be most effective?
5. In your opinion, what types of interventions appear to be ineffective?
6. What evidence do you have that academic interventions are tried to positive school reform?
7. What proof do you have or thoughts to support academic interventions being linked to increased graduation rates?
8. Does your research or opinions support the notion that academic interventions are tied directly to Special Education Initiatives? If so, in what way? If not, do you believe the Response to Intervention (RtI) process was originated as a general education initiative?
9. In your opinion, why do schools choose not to implement academic intervention processes?
10. Is there any other information you wish to share that directly relates to systematic, academic intervention processes?

# Appendix C 

Lindenwood University

School of Education
209 S. Kingshighway
St. Charles, Missouri 63301
<Survey>

# Informed Consent for Participation in Research Activities <br> "The Effect of School Based Intervention Processes <br> on Secondary School Graduation Rates" 

Principal Investigator: Ben H. Yocom
Telephone: 417-xxx-xxxx E-mail: ben@ $\qquad$
Participant: $\qquad$ Contact information: $\qquad$

1. You are invited to participate in a research study conducted by Ben H. Yocom under the guidance of Dr. Sherry DeVore. The purpose of this research to evaluate the effectiveness of academic interventions on the graduation rates of secondary schools in Missouri and to provide information for school practitioners regarding intervention processes.
2. Your participation will involve answering the questions in the "Intervention Usage Survey."
a. The amount of time involved in your participation will be 45-50 minutes.
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 academic intervention processes and may future practitioners.
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 that 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 that may result from this study and the information collected will remain in the possession of the investigator in a locked cabinet for five years and then destroyed.
7. If you have any questions or concerns regarding this study, would like a copy of the research results, or if any problems arise, you may call the Investigator, Ben H. Yocom at 417-xxx-xxxx or the Supervising Faculty, Dr. Sherry DeVore at 417-881-0009. 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 636-9494846.

By completing the survey, you consent to participate in this study.

## Please click here <hyperlink> to complete the survey.

## Appendix D

E-mail Recruitment Letter<br>Intervention Usage<br><Survey>

## Dear Colleague,

This is an invitation for Missouri Secondary School Principals to participate in a survey for a research study entitled, The Effect of School Based Intervention Processes on Secondary Graduation Rates. The purpose of this study is to explore the reasons public secondary schools implement or do not implement school-based interventions.

I am completing this study in partial fulfillment of the requirements for a doctorate in Educational Administration through Lindenwood University. If you would like to participate in this study, please click here: <link> to access the letter of informed consent.

Yours truly,

Ben Yocom<br>Doctoral Candidate<br>Lindenwood University

## Appendix E

Letter of Participation
<Principal Interview>
<Date>
<Title> <First Name> <Last Name>
<Position>
<School District>
<Address>

Dear < Title> < First Name> <Last Name>,
Thank you for participating in my research study, The Effect of School Based Intervention Processes on Secondary School Graduation Rates. I look forward to talking with you on <date> <time> to gather your perceptions and insights into the use of intervention processes. I have allotted <amount of time> to conduct our interview.

Enclosed are the interview questions to allow time for reflection before our interview. I have also enclosed the Informed Consent Form for your review and signature. If you agree to participate in the study, please sign the consent form.

Your participation in this research study is voluntary and you may withdraw at any time. Confidentiality is assured. If you have questions, please call (417) xxx-xxxx or e-mail ben@ $\qquad$ . Once this study has been completed, the results will be available to you by request.

Sincerely,

## Ben Yocom

Doctoral Candidate
Lindenwood University

# Appendix F 

Lindenwood University<br>School of Education<br>209 S. Kingshighway<br>St. Charles, Missouri 63301

## <Interview>

Informed Consent for Participation in Research Activities<br>"The Effect of School Based Intervention Processes on Secondary School Graduation Rates"

Principal Investigator: __Ben H. Yocom
Telephone: 417-xxx-xxxx E-mail: ben@ $\qquad$
Participant: $\qquad$ Contact information: $\qquad$

1. You are invited to participate in a research study conducted by Ben H. Yocom under the guidance of Dr. Sherry DeVore. The purpose of this research to evaluate the effectiveness of academic interventions on the graduation rates of secondary schools in Missouri and to provide information for school practitioners regarding intervention processes.
2. Your participation will involve responding to interview questions.
a. The amount of time involved in your participation will be 45-50 minutes.
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 academic intervention processes and may future practitioners.
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 that 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 that may result from this study and the information collected will remain in the possession of the investigator in a locked cabinet for five years and then destroyed.
7. If you have any questions or concerns regarding this study, would like a copy of the research results, or if any problems arise, you may call the Investigator, Ben H. Yocom, at 417-xxx-xxxx, or the Supervising Faculty, Dr. Sherry DeVore, at 417-881-0009. 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 636-9494846.

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.

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## Vita

Ben Yocom currently serves as superintendent of schools with the Plato R-V School District in Plato, Missouri. Prior administrative experience includes working as a high school principal, high school assistant principal, and activities director. Prior teaching experiences include primary and secondary physical education. Areas of professional interest include human resources, curriculum, instruction, and fiscal procedures.

Ben holds an Educational Specialist degree in district-wide educational administration from William Woods University, a master’s degree in secondary educational administration from William Woods University, and a bachelor’s degree in physical education and health from Iowa Wesleyan College.

