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Adaptive Change For An All Boys College Preparatory Public Middle School: A Change Leadership Project

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A THREE-PART DISSERTATION:

IMPACT OF SINGLE GENDER PROGRAMS ON ACHIEVEMENT, ATTENDANCE,
DISCIPLINE, AND CHARACTER: A PROGRAM EVALUATION PROJECT

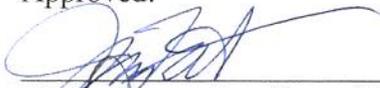
ADAPTIVE CHANGE FOR AN ALL BOYS COLLEGE PREPARATORY PUBLIC
MIDDLE SCHOOL: A CHANGE LEADERSHIP PROJECT

IMPLEMENTING AUTHENTIC PRACTICE THROUGH CAPSTONE PROJECTS AT
SELECTED TERMINAL GRADES: A POLICY ADVOCACY DOCUMENT

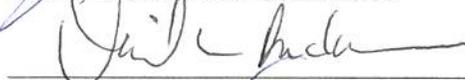
Carla L. Sparks

Educational Leadership Doctoral Program

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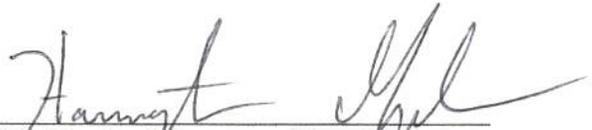
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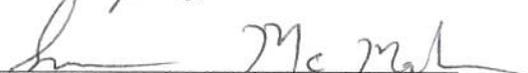
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11-30-15

Date Approved

ADAPTIVE CHANGE FOR AN ALL BOYS COLLEGE PREPARATORY PUBLIC
MIDDLE SCHOOL: A CHANGE LEADERSHIP PROJECT

Carla Sparks

Educational Leadership Doctoral Program

Submitted in partial fulfillment
of the requirements of
Doctor of Education
in the Foster G. McGaw Graduate School

National College of Education

National Louis University

November 30, 2015

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DISSERTATION ORGANIZATION STATEMENT

This document is organized to meet the three-part dissertation requirement of the National Louis University (NLU) Educational Leadership (EDL) Doctoral Program. The National Louis Educational Leadership Ed.D. is a professional practice degree program (Shulman et al., 2006).

For the dissertation requirement, doctoral candidates are required to plan, research, and implement three major projects, one each year, within their school or district with a focus on professional practice. The three projects are:

- Program Evaluation
- Change Leadership Project
- Policy Advocacy Document

For the **Program Evaluation** candidates are required to identify and evaluate a program or practice within their school or district. The “program” can be a current initiative; a grant project; a common practice; or a movement. Focused on utilization, the evaluation can be formative, summative, or developmental (Patton, 2008). The candidate must demonstrate how the evaluation directly relates to student learning.

In the **Change Leadership Project** candidates develop a plan that considers organizational possibilities for renewal. The plan for organizational change may be at the building or district level. It must be related to an area in need of improvement with a clear target in mind. The candidate must be able to identify noticeable and feasible differences that should exist as a result of the change plan (Wagner et al., 2006).

In the **Policy Advocacy Document** candidates develop and advocate for a policy at the local, state or national level using reflective practice and research as a means for supporting and promoting reforms in education. Policy advocacy dissertations use critical theory to address moral and ethical issues of policy formation and administrative decision making (i.e., what ought to be). The purpose is to develop reflective, humane and social critics, moral leaders, and competent professionals, guided by a critical practical rational model (Browder, 2006).

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ABSTRACT

As a result of district, state, and national attention on academic achievement, as measured by state assessment tests and end of course examinations, teacher and school leaders at the school identified for this Change Leadership Project (CLP) have worked diligently to raise student rigor and achievement. However, they have used largely instructional practices that rely heavily on the work of educators rather than emphasizing the engagement of students. This CLP provides the basis for a paradigm shift in instructional practice that promotes a full understanding of the value of authentic learning, project based learning, exhibitions of mastery, and capstone projects to change students' lives, increase academic achievement, and prepare students for success in the next phase of their educational career.

PREFACE

I serve a public school district as a district administrator. I work specifically with innovative instructional practices in a variety of schools. These sites are representative of urban, suburban, Title I, non-Title I, magnet, choice, and traditional schools. Among the instructional practices that I implemented as a teacher and currently supervise as a district administrator, I am most interested in authentic learning defined as “a variety of instructional techniques focused on connecting students to real-world issues, problems, and applications” (Great Schools Partnership, 2014). The authentic learning practices of particular importance to me are capstone projects and exhibitions of mastery. In fact, I conducted a multi-year field study and action research project using exhibition of mastery as an authentic learning model and authentic assessment model in writing my master’s thesis on this topic (Sparks, 2003). Since that time, I have successfully led other teachers to implement authentic learning and capstone projects.

I have had the honor on several occasions to serve as a capstone project judge for students at the middle and high school levels. In addition, I am currently working with students who are seeking their master’s degrees as they implement graduate level capstone projects. I have witnessed how capstone project experiences change student lives and redirect their futures.

I undertook my Change Leadership Project (CLP) with the goal of assisting teachers and leaders to gain a better understanding of the full, potential value of authentic learning, project based learning, exhibitions of mastery, and capstone projects. Based upon the work of Vega and Brown (2012) and Markham, Larmer, & Ravita (2003), I realize that these practices change students’ lives, while contributing to substantive

increases in academic achievement, by intrinsically engaging students in problem solving and knowledge applications leading to deeper levels of content understanding and to increased levels of preparation for success in the next phase of their educational career.

I chose to study and attempted to change a single middle school to determine how to move a school culture from a focus on test preparation with adult-driven instructional rigor to the practice of authentic instruction with student-driven rigor. The shift in mindset and pedagogical practice that is required is both complex and urgent. To implement adaptive change equal to the task required thoughtful, careful planning.

I experienced important leadership lessons while developing my CLP. In addition to my review of the literature related to capstone projects and exhibitions of mastery, my review of the literature on leading adaptive change was both insightful and sobering. Approaching change implementation is not to be taken lightly, nor entered into without a considered inquiry into the role that human processes and reactions play in the adaptive change equation.

Based largely upon John Kotter's eight-step process for leading change (2014), my project also relied on the process of assessing the context, culture, conditions, and competencies based on the work and recommendations of Wagner et al. (2006). I used both quantitative and qualitative data to diagnose accurately, and define clearly, the need for change at the school described in my study. The participants included the students, their parents, and the instructional staff of the school. As I reviewed the relevant literature, a pattern of interrelationship among the literature emerged. These researchers provided me with consistent and compelling research regarding considered frameworks from which to drive forward my Change Leadership Project.

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SECTION ONE: INTRODUCTION

The teachers and school leaders at Middle School B (pseudonym), an all-boys school, have worked to increase rigor and student achievement since the school opened in 2011. They have succeeded in many areas. Yet, I am concerned with the insufficient understanding among teachers and school leaders at Middle School B regarding how to increase rigor and engagement authentically. The teachers and school leaders need to understand how to empower the students to drive their own levels of rigor and engagement, specifically by implementing capstone projects. Such an understanding will help the school to increase further academic gains and rates of proficiency.

I saw glimpses of progress in this area. For example, the sixth grade teachers were implementing student led family conferences. Such conferences require the students to organize their work into a portfolio, and then present and defend that work to an audience – their parents. The teacher of Advancement via Individual Determination (AVID) required students to keep an AVID binder of work from their various academic courses in a specific, organized fashion. The AVID teacher also required the students to research colleges, write about them, create a presentation on a specific college, and publicly present their findings to an audience of teachers, parents, and school guests. The social studies subject area leader was guiding a group of five eighth-grade boys through the research, planning, presenting, and implementing phases of having a Gold Star Families Monument built on the campus in memory of all the fallen military personnel from the entire state.

These are all steps in the right direction, but the school had work to do to truly solve the problem. The vision was that every boy in eighth grade would complete a

capstone project or an exhibition of mastery and present it publicly before a panel of judges. The panel for each student would be made up of educators and professionals in the field related to the project. The presentations would be part of a major event during the fourth quarter of school at which the eighth graders are honored for their academic achievements throughout their time at the school.

As I used the book *Change Leadership: A Practical Guide for Transforming our Schools* (Wagner et al., 2006) to guide me through developing this change process, I realized there are further implications to consider as described by Eleanor Drago-Severson (2009) in *Leading Adult Learning*. In order to garner maximum success, while working with school leaders and teachers to help students raise levels of rigor through the authentic work of capstone projects, there arises a further necessity to provide learning contexts and opportunities for the adults to experience as learners themselves to raise their level of rigor as educators. As were the students, the adults were and continue to be challenged and supported with experiences that promise to provide the most effective learning context for them.

Statement of the Problem

The problem I have identified is a lack of understanding among teachers and school leaders about how to raise authentic rigor and student engagement by implementing capstone projects and exhibitions of mastery. This lack of understanding is exacerbated by the focus of teachers and school leaders on academic achievement as measured by the state assessment test and End of Course (EOC) examinations. EOC examinations are administered in courses such as Algebra I and Geometry that provide students with high school credit while in middle school, if they achieve a passing score

on the examination. The problem is complicated by mandated curricula that cause teachers to feel restricted in their ability to be creative with lesson planning. They often feel that there is no time within the mandated curricula to implement authentic learning and assessment via project based learning that leads to capstone projects and exhibitions of mastery.

When the district achieves a breakthrough in enabling teachers and school leaders to fully understand how to use authentic learning and assessment methods, the consequences will be significant. This adaptive change has the potential to change students' lives and increase academic achievement (Markham, Larmer, & Ravita, 2003; Vega & Brown, 2012). A full understanding should lead teachers and students to value student led family conferences, progress portfolios that are exhibitions of mastery, and capstone projects.

Rationale

Authentic learning, specifically related to capstone projects and exhibitions of mastery, has long been an interest of mine. When I was a graduate student working on my master's degree in Curriculum and Instruction, I focused my field study and action research on using exhibition of mastery as an authentic learning model and an authentic assessment model. I then wrote my thesis on the same topic (Sparks, 2003). I continued to do action research on capstone projects and exhibitions of mastery in my own classroom for seven years until I left the classroom to work in the school district office. During those seven years, I led the initiative to implement capstone projects and exhibitions of mastery school-wide at a large high school of nearly 2,000 students. We also integrated this work to include at least two curricular areas. This became part of the

school culture, and every senior was required to present his or her capstone project or exhibition of mastery to a panel of judges during the fourth quarter of the school year. The panel of judges was made up of academic judges, as well as industry experts in a field related to the student's project. The practice of implementing capstone projects among senior students continues today in many of the career programs as part of the culture of that high school.

During the seven years that I conducted action research on the authentic work my students were doing, I annually surveyed students, parents, and exhibition of mastery judges. I continued the practice of conducting annual surveys beyond the work I had done for my field study and action research project for my master's degree because I had found the original survey data to be useful in guiding me to make changes necessary to drive forward the practice of implementing capstone projects and exhibitions of mastery for my students. All stakeholder groups were very positive in their responses, and they indicated their perception of the great value the authenticity of exhibition of mastery lends to student achievement and assessment. As I completed my formal study for my master's degree, I concluded that using exhibition of mastery with my students was, indeed, an authentic method of learning and an authentic method of assessment (Sparks, 2003).

In an era of educational accountability tied to high stakes testing, it is more important than ever that we, as educators, provide authentic learning opportunities for our students. According to Wagner (2008) in *The Global Achievement Gap: Why Even our Best Schools Don't Teach the New Survival Skills our Children Need – and What we can do About It*, while our students are learning how to read,

they are not learning how to think or care about what they read; nor are they learning to clearly communicate ideas orally and in writing... The longer our children are in school, the less curious they become... Teachers haven't been trained to teach students how to think. (p. xxiv)

These are concerns that educators can address through the practice of authentic learning. Wagner continued to express concern for students when he said, "Boredom continues to be a leading cause of our high school dropout rate," (p. xxv). This statement propels a sense of urgency to address students' needs in such a way as to prevent boredom and address the high school dropout rate, a concern of the district in my study.

Wagner focuses *The Global Achievement Gap: Why Even Our Best Schools Don't Teach the New Survival Skills our Children Need – and What we can do About It* (2008) on what he calls Seven Survival Skills for the twenty-first century. The first survival skill is critical thinking and problem solving. The second is collaboration across networks and leading by influence. The third is agility and adaptability. The fourth is initiative and entrepreneurialism. The fifth is effective oral and written communication. The sixth is accessing and analyzing information, and the seventh is curiosity and imagination.

All of these Seven Survival Skills are honed during the process of developing and presenting a capstone project. Wagner said,

...tests were much too focused on mastery of factual content – at the expense of research, reasoning, and analysis... We have long defined rigor in schools as mastery of more and more complex academic content... This definition of *rigor* was institutionalized early in the last century when 'Carnegie units' became the way college entrance requirements were defined and standardized... Today,

though, we're faced with radically different circumstances. Most Americans now have Internet access, which gives all of us a growing tidal wave of information... This fundamental revolution in the nature of information has given rise to the 'knowledge worker' and demands for a different set of skills for work and citizenship... The most important skill in the New World of work, learning, and citizenship today – the rigor that matters most – is the ability to ask the right questions. (pp. 110-111)

Educators today must realize the changes in the ways students receive information, the volume of information they can access, and skills they need in order to use all that information in practical ways. This is significant to my study because the implementation of capstone projects will provide educators the opportunity to help students develop the skills they need to utilize appropriately the vast amount of information available to students.

Wagner holds the position that the most important rigorous learning for the 21st century is mastery of the core competencies for work, citizenship, and life-long learning. He also supports the philosophy that the study of academic content should not be a goal on its own, but rather the means to develop competencies. He said, "In today's world, it's no longer how much you know that matters; it's what you can do with what you know" (p.111). In my experience as a teacher and as an administrator, I have witnessed students developing these core competencies and using them to solve problems, create meaningful projects, and provide services to others through developing capstone projects.

As a district leader, I feel it is my moral and ethical responsibility to ensure that students are having authentic learning experiences outside of test preparation. My

personal experience with capstone projects and exhibitions of mastery, as well as my current role as an instructional leader, make this focus very important to me, on a personal level. It is important to the school district in my study and the educational community at large, because the district knows that it must create opportunities for students to relate to their learning by making it relevant. The district also knows that when it empowers students to engage themselves in learning that is meaningful to them it will drive the level of rigor beyond that which teachers can manufacture.

Goals

The shift from test preparation, as the primary influence on adult driven rigor, to authentic instruction and assessment, to develop student-driven rigor, is not simple. This is an adaptive change, as defined by Heifetz, Grashow, and Linsky (2009) in their book *The Practice of Adaptive Leadership*. This change will require me to diagnose carefully the challenge, be prepared for the discomfort that others may experience during the process, manage the politics of the organization, and mobilize the system (Heifetz et al., 2009). With all that in mind, I have identified six intended goals for this change project. All these goals work together to address the problem situation of teachers and school leaders lacking knowledge about how to raise authentic rigor and student engagement via project based learning that leads to capstone projects and exhibitions of mastery. These goals will lead to the implementation of capstone projects or exhibitions of mastery, and they are as follow:

- 1) Provide educational opportunities for families to become informed about how boys learn best, the school's strategies to meet those needs, and how the capstone project concept fits in.

- 2) Obtain a budget specifically allocated by the school district to support the programs. While this is mostly out of my control, I believe I can make a strong case for the need and the value of such a budget.
- 3) Implement a strategy to improve communication between the district, the school, and the teachers. I will implement an energy bus plan based upon the book *The Energy Bus* by Jon Gordon (2007). The book is an allegory using a bus full of people to represent an organization, and the bus driver is the leader of the organization.
- 4) Work with school leaders to develop a written statement that clearly defines prioritized strategies specific to how boys learn best; clearly stated performance standards that relate to the Prep Scholar Profile; and clear expectations of student results on the state assessment test, EOC, and authentic assessments such as capstone projects.
- 5) Work with school leaders to develop a common vision of what good teaching looks like, specific to this school.
- 6) Create a professional development model that is tiered to meet the needs of single gender educators at three levels of proficiency – beginner, intermediate, and expert. This model will include immediate and ongoing opportunities for training among teachers and administrators.

My first goal of educating families was intended to create buy-in from the parent stakeholder group for the adaptive change of implementing capstone projects. My second goal of obtaining a budget to support single gender programs was intended to provide the financial means to fully train teachers and school leaders on why they should and how to

implement capstone projects. My third goal of implementing an energy bus to increase communication between the district and the school leaders and teachers was intended to provide points of contact to disseminate information, plan professional development opportunities, and implement trainings.

My fourth goal was critical. It was intended to lead me to guide the school leaders to create a priority plan for implementing instructional strategies that address the ways boys learn best. It also was intended to lead me to help the school leaders to clarify in writing student performance goals and expected student outcomes on both high stakes tests and authentic assessments, such as capstone projects, thus aligning the entire faculty to focus on common strategies, performance standards, and outcomes. Ultimately, when this goal is institutionalized, it will enable every faculty member to understand the importance of authentic learning and assessment and the practical process of capstone project implementation.

My fifth goal of working with school leaders to develop a vision of what good teaching looks like at Middle School B was intended to provide teachers with a clear understanding of the expectation that they would implement authentic learning practices and authentic assessments. Not only would they understand the expectation, but also there would be faculty buy-in for this adaptive change in the school's instructional model. My sixth goal to develop a tiered professional development model helped me develop plans to meet the teachers where they were in their individual ways of knowing. Then I could move each teacher forward with supported challenges, as described by Drago-Severson (2009), toward implementing authentic learning practices and assessments.

Demographics

Middle School B is a Title I school where 68.7 % of the students qualify for Free or Reduced-price Lunch (FRL). It is an all-boys middle school comprised of grades 6-8. The current enrollment includes 400 students. Ethnically, the school is diverse with 42.5% black students, 29.9% white, 20.3% Hispanic, 5.5% multiracial, 1.4% Asian or Pacific Islander, and 0.4% American Indian or Alaskan Native. These demographics are reflective of the district's overall diversity based on ethnicity and socioeconomic status as measured by FRL.

The school's achievement data is currently strong. In 2012, the state graded the school as a D, and in 2013, the school earned a B grade from the state. It is notable that the school increased two letter grades in one year, especially when the state raised the bar for academic achievement tied to school grades in 2013. Highlights of the student achievement data, based on performance on the 2013 state assessment test and EOC examinations that resulted in the double grade increase, included an 18% gain among sixth grade students passing the state assessment test in reading, and a 14% gain among sixth grade students passing the state assessment test in math. The data included an 11% gain among seventh grade students passing the state assessment test in math as well as a 7% gain among eighth grade students passing the state assessment test in reading, 3% gain among eighth grade students passing the state assessment test in math, and a 31% gain among eighth grade students passing the state assessment in test writing (only eighth graders take this portion of the state assessment test). Finally, there was a 7% gain among students passing the Algebra 1 EOC examination, thus earning high school credit for the course. Also of note, 100% of the students who took the Geometry EOC examination

passed, thus earning high school credit for the course. This was the first time the school offered Geometry to its students. The school ranked in the top 1% of all middle schools in the state for improvement in both reading and math based on the state assessment test scores.

Other points of pride earned by the school included being named a Magnet School of Excellence in 2013 by Magnet Schools of America. The school also was honored with the Apple Distinguished Program Award on March 5, 2013, for its outstanding integration of iPad technology into all aspects of curricula. Every student had a school issued iPad 2 that he checked out every day for use during school. In May 2013, the school was named a Confucius Classroom with support from a local state university's Confucius Institute and the Office of Chinese Language Council International.

Exploratory Questions

As I considered how to implement my Change Leadership Project, two exploratory questions emerged. The first question was: How will the leaders and teachers at Middle School B come to understand the need for authentic learning experiences that lead to capstone projects or exhibitions of mastery? The second question was: How can I provide professional development opportunities that will help leaders and teachers at the school to know how to implement capstone projects or exhibitions of mastery within their mandated curricula? I discussed topics related to these two questions throughout this paper.

Conclusion

The school in my project has made remarkable strides since it opened as an all-boys college preparatory academy in August 2011. District leaders who have stepped

onto the campus since then have noticed the change in culture and climate. The attendance, discipline, and academic achievement have improved drastically as demonstrated through quantitative data. Yet, there is room to grow. While the school's academic achievement demonstrates remarkable growth compared to the district and the state, the actual proficiency data place the school in the middle of the pack among all middle schools in the district and the state. The school is on the right track and making gains, but this is not the time for school leaders and teachers to sit back on their laurels to enjoy the improvements, thus far. Not only is there more work to do, but there is a lot of work to do. According to Jim Collins (2005) in his monograph, "Why Business Thinking is not the Answer: Good to Great and the Social Sectors,"

No matter how much you have achieved, you will always be merely good relative to what you can become. Greatness is an inherently dynamic process, not an end point. The moment you think of yourself as great, your slide toward mediocrity will have already begun. (p. 9)

This statement supports the need for Middle School B to continue to push forward for student achievement gains and proficiency levels in order for the school to move from being a very good school to being a great school.

The problem I saw here was that the teachers and administrators were working very hard at creating a rigorous environment for the students to make academic gains. The adults were taking responsibility for the students' work when the students should have owned the work. Over the years, as I have supervised numerous interns and trained countless new teachers, I have shared my motto regarding student achievement. "If you are working harder than the students are working, then you are doing it wrong!" What I

mean by that is students must own their education, and they must learn to dig for knowledge and understanding. Perhaps most importantly, they must find the learning so relevant and compelling that they drive their own level of academic rigor.

My vision for solving this problem was to help the adults to understand the meaning of authentic instruction and authentic assessment. In doing so, I planned to teach the adults how to implement capstone projects and exhibitions of mastery with all students. I also planned to help the adults to ensure that each eighth grade boy completed a fully developed capstone project or exhibition of mastery including background research, project development, and a public demonstration before a panel of judges. Based upon my research and action research, this would engage the students in driving rigor to greater levels than the teachers could even imagine. The outcome would be continued academic achievement throughout the school.

My Big Hairy Audacious Goal (BHAG), as Collins (2005, p. 7) puts it, was to move forward the implementation of capstone projects and exhibitions of mastery as a requirement for each student in the district at the three terminal grades – fifth grade, eighth grade, and twelfth grade. For now, I decided to work on this adaptive change within the realm in which I currently had influence. That realm included Middle School B. I truly believed the students would be better prepared for high school, college, and career, as a result.

SECTION TWO: ASSESSING THE “AS IS” 4 Cs

As I developed my plan for my Change Leadership Project (CLP), I used as a guide the work of Wagner et al., as described in *Change Leadership: A Practical Guide to Transforming our Schools* (2006). Wagner et al. demonstrated the value of using the 4 Cs – context, culture, conditions, and competencies – to analyze the current state of an organization. I completed an “As Is” 4 Cs Analysis chart (see Appendix A) that Wagner et al. provided as a tool to help me consider the context, culture, conditions, and competencies at Middle School B.

Context

Middle School B had several challenges in its current context. One of its challenges was that 68% of the students were eligible for free or reduced price lunch (FRL) which qualified it as a Title I school. While the socio-economic diversity was considered by many as strength in terms of student interaction with others who bring different perspectives on life, it was a challenge in several ways. The FRL status indicated that many students may have had difficulty purchasing the mandatory uniform of the school. Therefore, as a public school, a plan had to be in place to provide uniforms at a reduced rate or for free, as needed. Many students may not have been able to afford the costs of field trips, sports, and extracurricular activities. Again, a plan had to be in place to make sure that all students had an equal opportunity to participate regardless of their socio-economic status.

Another challenge was the high visibility of the school. As the district’s first and only all-boys school, Middle School B had attracted a lot of attention locally and nationally. While some of this attention certainly was positive publicity, some of it was

scrutiny on the way business was conducted at the school. Specifically, the school was scrutinized by the district, by the Office of Civil Rights (OCR), and by the American Civil Liberties Union (ACLU), to determine whether the students were receiving an education that was equitable to that of the all-girls school and the other middle schools across the district. For the first year of implementation, the school principal was required to meet every other week with the Assistant Superintendent of Curriculum and Instruction, the Assistant Superintendent of Federal Programs, the Assistant Superintendent of Administration, the Director of Student Planning and Placement, the Supervisor of Magnet Programs, and the Supervisor of Single Gender Programs. The purpose of these meetings was to ensure that the school got off to a strong start and that it remained in alignment with the complementary all-girls middle school. Topics of discussion in these meetings ranged from school uniforms to field trips to student demographics. Equity was monitored closely.

The OCR asked official questions regarding equity of education at the school for a period of 18 months commencing just before the opening of the school in 2011. Six months after the school opened, the ACLU made a public records request consisting of 13 complex questions that required 21 inches of documentation in reply. A year and a half later, the ACLU made a second public records request of similar complexity. Again, the focus of the questions was on equity.

The principal of Middle School B is a seasoned principal with a strong record of accountability and achievement. He is accustomed to running his former schools with authority and reasonable autonomy. Serving as the principal of Middle School B has been a new experience for this principal, not only because of the unique demands of an all-

boys student population, but also because of the decreased level of autonomy he has experienced due to the high level of scrutiny the school continues to endure.

The third challenge that affected the context of Middle School B was a lack of knowledge among the students' parents and families regarding the differences between the way boys and girls learn. The faculty was trained well in the neuroscience that serves as the backbone of the district's single gender initiatives, but little of this information was passed on to the parents. The faculty also was well trained in classroom instructional strategies to differentiate instruction to meet the needs of its student population, yet again, the parents and families did not received a significant amount of information in this area. As I addressed the primary concern, I needed to spend time educating parents about how boys learn best, and how authentic learning experiences meet the needs of male students.

Culture

The school culture holds high expectations for student learning. It also has a mission, vision, creed, core values, and Prep Scholar Profile that are known, understood, and implemented with fidelity by all key stakeholder groups. Despite all that, I noticed a lack of common vision of what good teaching looks like. The teachers did not have a common language when discussing good teaching. They had not spent time observing each other teach. This contributed to a fractured and inconsistent practice of teaching.

One other concern about the culture was that there were a few instances of a lack of trust among adults. In general, the faculty at Middle School B was one of the most cohesive groups of educators I have ever seen. Yet there were a few problems that needed to be addressed by the principal. It seemed that he may be able to improve the trust level

by conferencing with those adults who lack trust, and by referring them to the school's Behavior Intervention Specialist. Furthermore, it seemed that the principal may need to make adjustments, in terms of staff, to who was on the bus and where they sat (Collins, 2005).

This lack of trusting relationships among some adults led to communication gaps that sometimes negatively influence school activities. It also created an unstable environment that did not positively contribute to a sense of well-being on the job. In the extreme instance, the lack of trust among adults can affect the students. According to Drago-Severson (2009), when teachers feel satisfied and happy in their work, it makes a difference in how students feel in the classroom, and it affects their learning.

Conditions

In considering the holistic conditions of the school, I saw a need to work with the school leadership to help them establish clearly stated performance standards that related to the Prep Scholar Profile, which they designed for school year 2013-2014, and were currently utilizing. I also saw a need to guide the school leadership to prioritize the strategies teachers should be using in the classroom to address the ways in which boys learn best. The school needed to develop a written vision and expectation of student results related to the capstone projects and exhibitions of mastery, as well as the state assessment test achievement, EOC achievement, and results ranking among other middle schools in the district. According to Wagner et al. (2006),

If good instruction – in every classroom and for all students – is the central focus of systemic change in education, then districts and schools need to define

‘goodness’ and come to a shared understanding of what is meant by great, or even competent, teaching. (p. 37)

Having these expectations in writing would help the teachers to better focus on the goal, and better understand why the school’s faculty needed to move forward with a common mindset.

The school leadership and faculty had focused on instructional strategies that are effective with boys, they had prioritized them, but they had not focused on student performance standards outside those required by the state’s high stakes test. This relates back to the culture challenge of lacking a common vision of what good teaching looks like. The school had not addressed specifically the performance standards for the students or the teachers. The adults who worked at the school did not have a shared vision of student outcomes, other than the state’s comprehensive assessment test.

A significant challenge to the condition of the school was that the district had no budget allocated to support its single gender programs, including Middle School B. Though the district allocated Title I funds to the school and general operating budget based on the full time equivalent (FTE) funding to support general professional development needs and student needs, there were no additional funds allocated specifically for the professional development of teachers working in single gender environments. This lack of specific funding had the potential to negatively affect sustainable teacher preparation for the unique work in which the teachers were engaged on a daily basis.

Inconsistent communication from the district to the school leadership and the teachers was another condition of concern. The district employed one supervisor of single

gender programs and one secretary shared by two district supervisors. The limited personnel allocated by the district to oversee the unique perspective, needs, and challenges of an all-boys school increased the challenge of effective communication from the district to the school.

Competencies

The adults at Middle School B carried a heavy burden of making the quality of education at the school worth the long bus ride, as expected by school and district administrators. They were tasked to make a difference among the boys who applied through the magnet lottery system to enroll at the school. Many of the students traveled an hour each way to get to the school. District personnel had impressed upon the school leaders and teachers that the benefits the students gained had to be worth the sacrifice the students made to attend the school.

The biggest challenge in competency that the adults in the school faced was being fully prepared with a specific and unique set of skills required to manage effectively and teach all boys in a middle school setting. Teacher turnover resulted in teachers who were new to the school lacking knowledge of the brain based research that informs the district-wide practice in implementing gender differentiated instructional strategies. While the district did not consider the teacher turnover rate of the school to be high, there were a handful of new teachers each year due to growth in the number of students annually since the school became an all-boys school, as well as natural attrition of teachers due to promotions and personal decisions. This same problem was true among new school leaders, specifically assistant principals. A related issue was insufficient growth of

knowledge among the veteran faculty members regarding gender specific strategies for teaching boys.

The district supervisor was responsible for the professional development of teachers and school leaders regarding strategies for teaching boys and girls in gender specific settings. These professional development opportunities included the supporting neuroscience based in large part on the writing of Gurian, Stevens, and King (2008). The district needed to create immediate opportunities for single gender training for new hires at the school, both teachers and administrators. This was a challenge it had to address.

The district offered specific Professional Learning Communities (PLCs) for teachers of single gender classes. These PLCs were implemented on a weekly basis using the Critical Friends Group (CFG) format based on the work of the National Reform Faculty as documented in its resource book entitled *National School Reform Faculty Resource Book: Adult Learning in the Service of Student Achievement (n.d.)*. Through these CFGs, teachers networked with other teachers of single gender classes across the district, and they shared best practices. They also discussed teaching dilemmas using CFG protocols, and they considered student work. The function of the CFGs was to improve teaching practice specifically among teachers of single gender classes.

Additionally, teachers were awarded inservice points for their participation in these CFGs, and they were paid a stipend. However, none of the teachers at Middle School B had participated in these CFGs. This was another concern, and it has been addressed through the district's initiative to establish an Instructional Leadership Team at the school that uses the CFG protocol for looking at student work.

Conclusion

I found it particularly exciting that the district could address the learning needs of the adults at Middle School B while implementing an adaptive change that created authentic learning and authentic assessment among the students. In using the Four C's model provided by Wagner, et al. (2006), I identified needs among the faculty that I had not realized existed previously. The district was pleased with the growth of the students, teachers, and leaders, thus far. However, I now looked forward to challenging and supporting the adults and the students to do even better and to move toward greatness. I was reminded by Collins (2005) that greatness is a process that is inherently dynamic. Therefore, as I led the adaptive change that would enable the adults to guide the students in developing capstone projects, we would all move toward greatness, and we would all move our way of knowing toward transformational knowing (Drago-Severson, 2009).

SECTION THREE: RESEARCH METHODOLOGY

Research Design

My Change Leadership Project (CLP) focused on the students and the instructional staff of Middle School B. The school is an all-boys middle magnet school for grades 6-8 with a magnet theme of college preparation. According to Wagner et al. in *Change Leadership: A Practical Guide to Transforming Our Schools* (2006), the first of three phases of reinvention is to collect data. Only after that important phase can a leader create a sense of urgency and accountability, and then ensure appropriate professional relationships that will result in true change that is lasting. I planned to integrate these phases into my project for adaptive change at Middle School B.

According to Kotter (2014), nearly 50% of companies that fail in their efforts to make changes that are needed make their mistakes at the beginning of the change process. Some leaders underestimate the level of difficulty in moving people past their comfort zones while others overestimate their success in leading change. Some lack the patience needed to develop a sense of urgency that will propel people toward change (Kotter, 2014). I wanted to make sure that my Change Leadership Project was well planned from the outset to ensure success.

I intended to use both quantitative and qualitative data that I collected during my Program Evaluation Project to diagnose accurately and define clearly the problem at Middle School B, and to create a sense of urgency among the instructional personnel to address the problem. These data included academic achievement data based upon the 2013 state assessment test results in the areas of reading, math, science, and writing. I gleaned qualitative data from interviews with the principal and teacher leaders that I

collected during my Program Evaluation Project. These data sets combined provided information that helped heighten awareness of challenges at the school related to the school's context, conditions, culture, and competencies (Wagner et al., 2006).

Participants

The key participants were from two stakeholder groups. These groups included the students at Middle School B and the instructional staff of the school. The achievement data were reflective of all the students at the school. The interviews involved instructional leaders including the principal and teacher leaders.

I chose these stakeholder groups as the participants for data gathering because they are the people who create the context, culture, conditions, and competencies that are the Four C's (Wagner et al., 2006) of the school. Wagner et al. recommend using the Four C's for analyzing a school's challenges. The data provided by these groups revealed the need for change and helped create the urgency necessary to move the school forward in its efforts to excel.

Data Collection Techniques

As described above, I used two methods of data collection for this Change Leadership Project. I used quantitative data that included students' academic achievement levels that I collected from the school's Annual Program Review in 2013. I used qualitative data that I collected via interviews with the principal and teacher leaders in 2013.

Annual Review of Program Data

The Annual Review of Program (ARP) completed by the principal's designee, the lead teacher, provided quantitative data sets that were compelling (for a copy of the ARP

form, see Appendix D). These data included average attendance rates, numbers of out-of-school suspensions, and student achievement proficiency rates on the state assessment test and EOC examinations. There is also a section on the ARP for the lead teacher to write a summary analysis of all the data provided in the ARP. This section puts the data into perspective in terms of areas of growth, areas of challenge, and how the school's data compare to other middle schools in the district. The lead teacher also included a proficiency chart that demonstrated comparative data from Middle School B, the district and the state. While the ARP is made up of largely quantitative data, there is one section at the end where the lead teacher is asked to include anecdotal data. This is where she can include any data that she believes might contribute to a true picture of the school. It is where data may be provided that are not collected in any other way. I collected this information directly from the lead teacher.

Interviews

As part of my previous study, I interviewed three teacher leaders at Middle School B. I asked each of them four identical questions. For the purpose of this Change Leadership Project, I used the responses to one of these questions, question #3 (see Appendix F). I also interviewed the principal at Middle School B. For the purpose of this Change Leadership Project, I used the responses to three of the six questions I asked the principal during my previous study, questions #3, 5, and 6 (see Appendix E). I chose to interview only the principal and not include the assistant principals, as one of them was new to the school and the other had recently transferred to another role at a different school.

Data Analysis Techniques

I analyzed the quantitative data from the ARP in the following way. I concentrated on the results of the state assessment test and compared the proficiency levels among the students at Middle School B in each grade level and subject area tested with the district average and the state average. The other data included in the ARP were not relevant to this Change Leadership Project. I analyzed the interview data by first identifying the themes that emerged in the responses of each person I interviewed. Then I identified themes that were repeated among the interviewees. Finally, I tied the themes to several of the challenges of the school that I identified in my “As Is” 4 Cs Analysis.

Ethical Considerations

The primary ethical consideration for this Change Leadership Project was to protect the anonymity of each participant. This was and continues to be particularly important when data gleaned from the ARP and interviews are shared with the instructional staff. As the perceptions of the instructional staff were included in the data, the importance of anonymity was increased. To protect anonymity, I removed the names of the participants and aggregated data whenever possible to further protect the identification of individual participants. Additionally, as I worked closely with Middle School B to implement this Change Leadership Project, I found it important to remain objective as I analyzed data and developed the plan for adaptive change.

Another ethical consideration was that some of the data came from high stakes tests. I had to keep these data in perspective as I used them to help create a sense of urgency while I also pointed out that the accountability tied to high stakes tests was actually part of the problem, as it seemed to inhibit teachers and school leaders from learning more about and implementing project based learning that leads to capstone

projects. I needed to consider the validity and usefulness of these data while also considering Wagner's (2008) position regarding the value of the Seven Survival Skills that he described in *The Global Achievement Gap: Why Even our Best Schools Don't Teach the New Survival Skills our Children Need – and What we can do About It*. I also needed to be very careful that I did not become hypocritical in my use of data gleaned from high stakes tests to drive adaptive change while touting the importance of moving away from an emphasis on high stakes testing to an emphasis on project based learning that would result in capstone projects. I anticipated the latter would require a sensitive and balanced approach, and I had to be duly reflective as I developed the plan for this Change Leadership Project.

As I am part of a district leadership that ties high stakes test results to teacher evaluations, and ultimately teachers' and principals' salary and/or bonuses, I could not ethically devalue the system the district in my study had in place or other districts had across the state. At the same time, I needed to keep in mind the value of the Seven Survival Skills to help support the adaptive change that was needed at Middle School B. Adaptive change is not easy, according to Heifetz, Grashow, and Linsky (2009). The careful planning that I needed to do to maintain proper perspective of the district's and state's position on high stakes testing while emphasizing the Seven Survival Skills to move Middle School B to implement project based learning was a very important challenge for me. This experience stretched my way of knowing (Drago-Severson, 2009). The key to achieving this balanced approach was in developing a plan to help teachers and school leaders understand that capstone projects were not an addition to the current

curricula, but rather a way to use authentic learning practices to meet all existing instructional goals and objectives, including the preparation for required high stakes tests.

Conclusion

As I reviewed the quantitative and qualitative data that I collected from Middle School B during my Program Evaluation Project, I was interested to see what the data told me while wearing the lens of change leadership as opposed to program evaluation. As I worked on my Program Evaluation Project, I determined that Middle School B would be the school that would benefit from a Change Leadership Project based upon my data collection that included its ARP and specific responses to interview questions. These data had a longer story to tell for Middle School B that included not only evaluative information, but also information that informed the need for adaptive change.

SECTION FOUR: RELEVANT LITERATURE

In the introduction to his book, *The Global Achievement Gap: Why Even our Best Schools Don't Teach the New Survival Skills our Children Need – and What we can do About It* (2008), Tony Wagner states some startling facts and shares observations that force educators to realize that currently we are not meeting our students' needs. Wagner creates that sense of urgency John Kotter (2014) describes in his first of eight steps toward creating change. The first fact Wagner hits us with is that the high school graduation rate in the United States is about 70% of the age cohort while that of Denmark is 96%, Japan's is 93%, Poland's is 92%, and Italy's is 79%. The district in my study has a high school graduation rate that hovers near the 70% mark, similar to that of the United States. This means that the district and the United States are underperforming other countries in terms of graduation rate. An important approach to increasing graduation rates is to implement authentic learning practices, as described by Wagner (2008).

Next, Wagner states that only about a third of U.S. high school students graduate ready for college, less than half of all students who enter college must take remedial courses, and about half of students who start college never complete a degree. He went on to say that 65% of college professors report that high school does not prepare students for college. Furthermore, according to Wagner, neither high schools nor colleges are preparing students for the world of work. Wagner's analysis of the facts concludes that students need new skills for college, careers, and citizenship. He says on page xxi, "Schools haven't changed; the world has. Therefore, our schools are not failing. Rather, they are obsolete . . ." This information is particularly significant to my Change Leadership Project for Middle School B, as it is a college preparatory school. Its vision

statement is “Molding young men of distinction who will achieve greatness.” In order to fulfill that vision, the school must use authentic learning practices to prepare more fully its students for the future.

In order to address this problem, Wagner proposes focusing on the Seven Survival Skills, which I described in Section I. Stated as goals, these skills call for new instructional strategies to address the problem of lower academic achievement in America’s schools as compared with other major countries in the world. I propose that project based learning, problem based learning, inquiry based learning, authentic learning, capstone projects, and exhibitions of mastery – all of which are closely related – will enable students to acquire the Seven Survival Skills needed for the 21st century.

Previous Action Research on Capstone Projects and Exhibitions of Mastery

As I mentioned previously, I am concerned about the insufficient understanding among teachers and school leaders at Middle School B related to how to empower students to drive their own levels of rigor and engagement through project based learning that leads to capstone projects and exhibitions of mastery. While I was working on my Master of Education degree, I learned through my field study, action research, and writing my thesis (Sparks, 2003) that “exhibitions of mastery are truly an authentic learning experience and an authentic alternative assessment” (pp.120-121). I observed my own students drive and increase their levels of rigor through their process of creating an exhibition of mastery portfolio. I watched this happen for years after I finished my field study for my master’s degree as I continued the practice of requiring senior exhibitions of mastery until I left the classroom to work in the district office. As I reviewed literature for my thesis, I discovered that schools around the world were implementing capstone

projects and exhibitions of mastery. I read of their successes, and I was inspired. I am inspired now, as well. I believe that implementing capstone projects with the students at Middle School B is the next logical step in the growth of the students, the teachers, the school leaders, and the school as a whole. I want to see Middle School B become the model used for further expansion of the implementation of capstone projects across the district, the state, and even the country.

Connections Between Previous and Current Review of Relevant Literature on Capstone Projects and Exhibitions of Mastery

Through my initial review of the relevant literature for my Master's thesis, I learned that exhibition of mastery is an authentic, alternative method of assessment built around many authentic experiences. I read about TheodoreSizer's work with the Coalition of Essential Schools (Coalition of Essential Schools, 2002), and I have drawn a parallel between several of the common principles of the coalition and Wagner's Seven Survival Skills. The nine common principles (Coalition of Essential Schools, 2014), with the Coalition's addition of a tenth principle, remain the same twelve years later and include:

- Learning to use one's mind well - The school should focus on helping young people learn to use their minds well. Schools should not be "comprehensive" if such a claim is made at the expense of the school's central intellectual purpose. *I relate this to Wagner's first survival skill – critical thinking and problem solving.*
- Less is more, depth over coverage - The school's goals should be that each student master a limited number of essential skills and areas of knowledge. While these skills and areas of learning will, to varying degrees, reflect the traditional

academic disciplines, the program's design should be shaped by the intellectual and imaginative powers and competencies that the students need, rather than by "subjects" as conventionally defined. The aphorism "less is more" should dominate. Curricular decisions should be guided by the aim of thorough student mastery and achievement rather than by an effort to merely cover content. *I relate this to Wagner's sixth survival skill – accessing and analyzing information.*

- Goals apply to all students - The school's goals should apply to all learners while the means to these goals will differ based on individual students' needs. School practice should be tailor-made to meet the requirements of every group or class of students. *I relate this to Wagner's third survival skill – agility and adaptability (on the part of the school, as well as the students).*
- Personalization - Teaching and learning should be personalized to the maximum feasible extent. Efforts should be directed toward a goal that no teacher have direct responsibility for more than 80 students in the high school and middle school and no more than 20 in the elementary school. To capitalize on this personalization, decisions about the details of the course of study, the use of students' and teachers' time, and the choice of teaching materials and specific pedagogies must be unreservedly placed in the hands of the principal and staff.
- Student-as-worker, teacher-as-coach - The governing practical metaphor of the school should be student-as-worker, rather than the more familiar metaphor of teacher-as-deliverer-of-instructional-services. Accordingly, a prominent instructional strategy will be coaching students, to provoke them to learn how to

learn and thus to teach themselves. *I relate this to Wagner's fourth survival skill – initiative and entrepreneurialism.*

- Demonstration of mastery - Teaching and learning should be documented and assessed with tools based on student performance of real tasks. Students not yet at appropriate levels of competence should be provided intensive support and resources to assist them quickly to meet those standards. Multiple forms of evidence, ranging from ongoing observation of the learner to completion of specific projects, should be used to better understand the learner's strengths and needs, and to plan for further assistance. Students should have opportunities to exhibit their expertise before staff, family, and community. The diploma should be awarded upon a successful final demonstration of mastery for graduation – an “Exhibition.” As the diploma is awarded when earned, the school's program proceeds with no strict age grading and with no system of credits earned” by “time spent” in class. The emphasis is on the students' demonstration that they can do important things. *I relate this to Wagner's fifth survival skill – effective oral and written communication, his sixth survival skill – accessing and analyzing information, and his seventh survival skill – curiosity and imagination.*
- A tone of decency and trust - The tone of the school should explicitly and self-consciously stress values of non-anxiety causing expectation (“I won't threaten you but I expect much of you”), of trust (until abused), and of decency (the values of fairness, generosity and tolerance). Incentives appropriate to the school's particular students and teachers should be emphasized. Parents should be key collaborators and vital members of the school community. *I relate this to*

Wagner's second survival skill – collaboration across networks and leading by influence.

- Commitment to the entire school - The principal and teachers should perceive themselves first as generalists (teachers and scholars in general education) and specialists second (experts in but one particular discipline). Staff should expect multiple obligations (teacher-counselor-manager) and a sense of commitment to the entire school.
- Resources dedicated to teaching and learning - Ultimate administrative and budget targets should include student loads that promote personalization, substantial time for collective planning by teachers, competitive salaries for staff, and an ultimate per pupil cost not to exceed that at traditional schools by more than 10%. To accomplish this, administrative plans may have to show the phased reduction or elimination of some services now provided students in many traditional schools.
- Democracy and equity - The school should demonstrate non-discriminatory and inclusive policies, practices, and pedagogies. It should model democratic practices that involve all who are directly affected by the school. The school should honor diversity and build on the strength of its communities, deliberately and explicitly challenging all forms of inequity. *I relate this to Wagner's second survival skill of collaboration – perhaps not across networks, but certainly with diverse groups of students. I also relate this to Wagner's third survival skill of agility and adaptability – specifically in relation to adapting to diverse differences.*

As I proceeded with my original review of relevant literature, I found that the New Millennium High School initiatives were an approach to school reform that emphasized capstone projects (New Millennium High Schools, 2002). The school where I taught at that time had just been named a New Millennium High School. Sedona Red Rock High School required its students to graduate by Exhibition (Graduation by Exhibition from Sedona Red Rock High School, 2002). I gleaned two successful strategies to implement at my school from Sedona Red Rock's practice. The school gave the students additional course credit for completing exhibitions of mastery, and their transcripts displayed the exhibition prominently (Sparks, 2003). I already had begun to implement a class specifically for my students to develop their exhibitions of mastery, thus resulting in course credit, and my research reinforced this practice. As a result of my research, I developed two seals that were placed upon the students' transcripts that indicated "Exhibition of Mastery" or "Distinguished Exhibition of Mastery" which was a higher level of achievement. These seals enhanced the students' transcripts to reflect that they had accomplished something different, something more, something special that set them apart from the rest.

As I continued my research, I found a variety of secondary schools that were implementing capstone projects or exhibitions of mastery. I also learned that not only the United States of America were engaging in this practice. Glossop High School (GHS) in Australia was implementing exhibitions of mastery with 100% success rate, including students who previously had been unsuccessful in school (Glossop High School Graduation by Exhibition – Authentic Assessment, 2002). The students were required to demonstrate mastery in four of eight key competencies through a portfolio development

based on an extensive study of a topic of their choice. The school's eight key competencies were:

- Collecting, analyzing and organizing information
- Communicating ideas and information
- Planning and organizing activities
- Working with others and in teams
- Using mathematical ideas and techniques
- Solving problems
- Using technology
- Cultural understandings

Again, I see a strong relationship to Wagner's (2008) Seven Survival Skills.

As I studied the nuances of various requirements among schools across the nation and elsewhere, I began to notice many similarities and a fundamental difference between a capstone project and an exhibition of mastery. The capstone project is a

thoroughly researched and executed project based on any topic of interest to the student that will stretch his/her knowledge and skills. An exhibition of mastery is not necessarily a project, although it may include a project. Instead, it is a public exhibition through which the student demonstrates his/her mastery of specific skills in a technical or academic area based on the student's studies... (Sparks, 2003, p. 23)

This distinction is helpful to teachers, including teachers at Middle School B, in guiding students to determine whether a capstone project or an exhibition of mastery will better help them to develop and demonstrate their skills.

In order to compare the work that is currently being done in relation to capstone projects and exhibitions of mastery, I conducted a new review of relevant literature. I wanted to see if there have been any new developments in the last twelve years in this educational practice. I found that there was a lot more information available on the topic in 2014 than there was in 2002-2003. I found countless numbers of articles related to capstone projects and thousands more related to other key phrases such as project based learning and problem based learning. Among the myriad literature available, I chose several resources with information useful to address the needs of students at Middle School B.

Project Based Learning Increases Relevance, Rigor, and Student Engagement

In a collaborative project that involved middle schools on the East Coast and the West Coast, their teachers, and higher education partners, educators found a way to make instruction relevant to students (Johnson, Kieling, & Cooper, 2013). Using a constructivist approach to allow students to identify social issues that related to their lives, teachers facilitated their students as they created visual expressions, collages, using text and images from famous artworks. Next they created PowerPoint presentations of their work. Finally, the students worked in teams to develop ideas and create studio projects related to their identified social issues. The students emailed photographs of their work along with their artist statements to students on the opposite coast of America.

They responded to each other with written critiques, insights, and observations. While cultural differences emerged, so did “common interests and concerns that centered on important human issues and ideas. The students utilized interdisciplinary approaches that big ideas offer to knowledge construction and expression” (p. 23). This kind of

learning about common interests and concerns about human issues across cultures is an important benefit of capstone projects to help Middle School B realize its vision and prepare its students for cross-cultural interactions in their futures.

The project encouraged students to construct personal meaning in their artwork. It encouraged students to conduct research, to discover materials and processes to help them find solutions to art problems while maintaining a focus on meaning. It also encouraged higher order thinking and allowed for student choice. They chose their topics, as well as their teammates. The project continued for eight years, and at year four another element was added – the use of wiki. Wiki is a technology that enabled students to upload photos and videos of their work to share with students on the opposite coast. The wiki also enabled students to respond to each other more readily (Johnson et al., 2013).

Johnson et al. (2013) listed the benefits of using technology in a constructivist environment. The list includes: increased communication, verbally and visually; increased creative problem finding and problem solving; increased knowledge about contemporary artists; increased accountability, ongoing feedback and assessment, and critical thinking. They also cited increased collaboration; increased awareness of the relevance of art to life and of life to art; increased community among students and teachers; increased connections among students, among schools, and among ideas; increased opportunity for interdisciplinary learning through big ideas and essential questions; and increased awareness of others.

It is obvious that this project addressed most of Wagner's Seven Survival Skills including the first – critical thinking and problem solving; the second – collaboration across networks and leading by influence; the fourth – initiative and entrepreneurialism;

the fifth – effective oral and written communication; the sixth – accessing and analyzing information; and the seventh – curiosity and imagination (2008). As Middle School B added art as an elective course for the first time in 2014-2015, this was the time to think about how to move art from a beloved hands-on course to one that is even more relevant and rigorous by adding inquiry and technology appropriately, as demonstrated by the East Coast/West Coast Art Project.

Capstone Projects Emphasize Core Values

Capstone projects are implemented around the world at every level – elementary school, middle school, high school, undergraduate bachelor’s level, graduate master’s level, and doctoral level. At the University of LaVerne, near Los Angeles, California, capstone projects are required at the bachelor’s, master’s, and doctoral levels (Redman, 2013). In fact, at the bachelor’s level, students begin working on their capstone projects in their freshman year.

I think LaVerne’s capstone project resonates well with the vision of Middle School B – “Molding young men of distinction who will achieve greatness.” The connection of the capstone project to core values has been part of LaVerne since its inception in 1891. Those four core values are ethical reasoning to promote reflection, diversity and inclusivity, a spirit and attitude of lifelong learning, and community and civic engagement. Reflection is a key component of the capstone experience, and LaVerne’s students create an electronic portfolio of reflective essays and blogs. “Students, in their reflections, address one of the university’s core values each year, culminating in an autobiography of their years at LaVerne and the effect of the values on

their growth” (p. 14). Finally, students present their portfolios to peers under the guidance of a mentor. However, the portfolio is just part of the capstone experience.

The university collaborates with several community partners to help with the integration of curricular and co-curricular aspects of the student experience. Projects range from marketing majors partnering with a local business or nonprofit organization in developing a marketing plan to psychology majors working with faculty to make a presentation at a conference as major presenters. These projects integrate the classroom experience with practical application. One can “see the emergence of a developed person who has integrated all the experiences and merged them, becoming one who, upon graduation, is not only competitive in the job market, but also one who is ready to face the world” (p. 15). Yet again, I see the integration of Wagner’s (2008) Seven Survival Skills in the work that is being done with students.

Project Based Learning Meets the Needs of Students in the 21st Century

According to Vega and Brown (2012), students attending school at the start of the 21st century were born in the age of technology and do not know a world outside of digital technology, cell phones, and instant internet access. In the world of these digital natives, 21st century skills are required by the workforce, yet the traditional approach to teaching and learning does not prepare students with such required skills. This establishes a need for project based learning (PBL).

PBL was initially designed for medical school programs because instructors realized the students were graduating as young physicians with sufficient knowledge but lacking problem solving skills. Since then, PBL has become a pedagogical approach that

supports authentic learning experience and develops skills needed in the 21st century (Vega & Brown, 2012). PBL serves several critical educational needs.

Vega and Brown list eight needs addressed by PBL as originally identified by Markham, Larmer, & Ravita in *Project Based Learning Handbook: A Guide to Standards-focused Project Based Learning* (2003). These addressed needs correlate to Wagner's (2008) Seven Survival Skills as follow:

- PBL recognizes students' inherent drive to learn, their capability to do important work, and their need to be taken seriously by putting them at the center of the learning process. *I relate this to Wagner's seventh survival skill – curiosity and imagination.*
- PBL engages students in the central concepts and principles of a discipline. The project work is central rather than peripheral to the curriculum. *I relate this to Wagner's first survival skill – critical thinking and problem solving.*
- PBL highlights provocative issues or questions that lead students to in-depth exploration of authentic and important topics. *I relate this to Wagner's first survival skill – critical thinking and problem solving.*
- PBL requires the use of essential tools and skills, including technology, for learning, self-management, and project management. *I relate this to Wagner's fourth survival skill – initiative and entrepreneurialism.*
- PBL specifies products that solve problems, explain dilemmas, or present information generated through investigation, research or reasoning. *I relate this to Wagner's first survival skill – critical thinking and problem solving.*

- PBL includes multiple products that permit frequent feedback and consistent opportunities for students to learn from experience. *I relate this to Wagner's sixth survival skill – accessing and analyzing information, as well as his second survival skill – collaboration across networks and leading by influence.*
- PBL uses performance-based assessments that communicate high expectations, present rigorous challenges, and require a range of skills and knowledge. *I relate this to Wagner's first survival skill – critical thinking and problem solving, as well as his third survival skill – agility and adaptability.*
- PBL encourages collaboration in some form, either through small groups, student-led presentations, or whole-class evaluations of project results. *I relate this to Wagner's second survival skill – collaboration across networks and leading by influence, as well as his fifth survival skill – effective oral and written communication.*

Vega and Brown (2012) report on a study that was conducted on 15 middle school campus leaders who were trained in PBL and then implemented it on their campuses. Of the 15 leaders, five were administrators, one was a university liaison, and nine were teacher leaders. The three middle schools involved, along with the district, formed a partnership with the local university to be trained and supported in PBL. They participated in a weeklong summer training presented by the Buck Institute in 2010.

Vega and Brown (2012) collected interview data from the 15 participants, and the following four themes emerged. Leaders had a need for autonomy in PBL implementation. Traditional scheduling and school organization were in need of redesign. Principals realized teachers needed support as they redesigned instructional methods to

incorporate process teaching. Principals sought a dedicated administrator assigned to the oversight and implementation of PBL.

According to Vega and Brown (2012), one of the biggest concerns of teachers and administrators regarding PBL was the struggle between implementing PBL fully and meeting the curriculum and benchmark requirements of their school district. “This expectation, combined with the natural learning curve of implementing a new instructional approach, created additional stress among the faculty and staff of all three middle schools” (p. 14). This is a concern that I have heard from the teachers I supervise. Dealing with these types of concerns and the accompanying staff stress is an expected process of adaptive change, according to Heifetz et al. (2009).

The data reported by Vega and Brown (2012) indicate that there were some changes needed to the structure and flow of the school day when implementing PBL. Administrators said they had to change their master schedule to accommodate PBL by moving from a traditional schedule to a block schedule. Somewhat contradictory to the concern over struggling to implement PBL while managing the required curriculum, one administrator said, “The scope and sequence part of the curriculum is conducive to PBL because it helps plot out what needs to be taught by the end of the 6 weeks. It gives us timelines . . . ” (p. 16). However, another administrator said, “We are learning how to bring them together. . . . They don’t necessarily fit, but with the right implementation and the right resources they will fit” (p. 17). A teacher said, “The existing curriculum gives me what I need to teach, and PBL gives me the how to do it” (p. 17). That teacher’s comment is a point of view that I think provides ongoing help to the teachers at Middle School B.

Teachers in the study described the concept of “process as well as content” (p. 17). They suggested the notion of enhanced rigor when they commented on students being accustomed to having information handed to them by teachers in earlier grades. Some indicated that many students lacked some specific skills needed to be successful while using PBL. These skills included collaboration, organization, speaking, and time management. Again, I see a correlation to Wagner’s point that students are lacking the Seven Survival Skills (2008). One administrator’s comment points directly to Wagner’s Seven Survival Skills. The administrator said, “Our students need the ability to work together, to work in teams, the ability to do research, and the ability to work with different types of media technology” (p. 18). The students at Middle School B have the same needs to be able to work together and in teams, to do research, and to work with various technologies. The authentic practices of capstone projects address those needs at Middle School B, as they did at the middle school in the study by Vega and Brown (2012).

An interesting finding from this study is the need to identify and appoint a sole administrator to oversee the PBL planning process and implementation. Teachers expressed a need for support in the area of modeling. They also claimed that the five-day summer training was not enough preparation. Ordering additional supplies needed for PBL is another consideration the teachers expressed.

An additional theme emerged from the data. It was the concept that PBL will be received differently by different people. This relates to Drago-Severson’s description of the different ways of knowing among people (2009). That was important for me to consider when working with school leaders and teachers at Middle School B.

While teachers and students from the three middle schools in this study gave mixed reviews on the pilot of PBL, almost all the 15 participants in the study agreed that PBL was worthwhile. One teacher said, “PBL is a good thing; it’s a lot of work on the front end for teachers, but the kids will have skills that are going to be very beneficial not only in high school but also in the business work and in life” (pp. 20-21). Yet again, this makes me think about Wagner’s emphasis of the need for the Seven Survival Skills (2008).

Administrators reported that there was some push back from teachers, particularly veteran teachers. They did not believe that they, the teachers, nor the students could handle PBL. They also expressed a concern about the risk of students’ scores dropping. One administrator said that concern caused teachers to have “a tendency to fall back into classic modes of teaching” (p. 22). This is a very important consideration for Middle School B, as well. The teachers continue to feel a strong need to prepare students for high stakes testing, and that often leads to traditional instructional practices.

Similarly, some students resisted PBL. One teacher explained that it was not because the students did not like PBL, but rather that they wanted to do the least amount of work needed to get by. Another teacher said she had experienced resistance from a few students because they were frustrated by not being spoon-fed. Nevertheless, the teacher leaders in the study reported that most of their students had responded favorably to PBL. Administrators reported similarly, “Students had ‘become more engaged’ and were ‘a lot more willing to ask questions and construct their own learning’” (p. 23). Other positive responses noted by an administrator included more engagement, increased participation, and greater attentiveness.

All the participants in this study indicated that the students were not ready for PBL. Teachers realized that they had to spend time developing skills such as teamwork, collaboration, time management, and public speaking to help the students succeed in PBL. Again, I point out that these skills are among Wagner's Seven Survival Skills (2008).

Spires, Hervey, Morris, and Stelpflug (2012) reported on middle grades students who used a project-based inquiry process that involved reading, writing, and producing videos to acquire knowledge in core content areas. They proposed that by allowing students to utilize the growing trend of video production, teachers could engage students in learning across the curriculum within a project-based inquiry context. Spires et al. cited Newmann, Bryk, and Nagaoka (2001) as describing the project-based inquiry approach as authentic intellectual work. Newman et al. described authentic intellectual work as "construction of knowledge through disciplined inquiry in order to produce products that have value beyond school" (p. 14). This supports a conclusion reached through my field study and action research as described in my master's thesis (Sparks, 2003).

I should note here that Newmann et al. (2001) clarified the use of the word authentic in describing student work as follows:

'Authentic' is used here not to suggest that conventional work by students is unimportant to them and their teachers, or that basic skills and proficiencies should be devalued, but only to identify some kinds of intellectual work as more complex and socially or personally meaningful than others. More specifically, authentic intellectual work involves original application of knowledge and skills,

rather than just routine use of facts and procedures. It also entails disciplined inquiry into the details of a particular problem and results in a product or presentation that has meaning or value beyond success in school. We summarize these distinctive characteristics of authentic intellectual work as construction of knowledge, through the use of disciplined inquiry, to produce discourse, products, or performances that have value beyond school. (p. 14)

This definition of authentic work or learning is important because it preserves the value of traditional work and basic proficiencies while explaining the nature of authentic student work.

How to Implement Project Based Learning

I found the study by Spires et al. (2012) of particular merit because the authors identified a five-phase process in the problem based inquiry project. The five phases include:

- Ask a compelling question
- Gather and analyze information
- Creatively synthesize information
- Critically evaluate and revise
- Publish, share, and act

It is becoming quite obvious that studies and reports on project based learning and capstone projects consistently reflect all or part of Wagner's Seven Survival Skills (2008). This was very encouraging to me, as I considered the change leadership needed at Middle School B and the potential of Middle School B's use of capstone projects to become a model for the district, state, and nation.

The five phases listed above provided an instructional sequence for students during the creation process. Perhaps more important is that they provided opportunities for mini lessons that scaffolded students' skills in creating their final products. The entire process took six weeks (Spires et al., 2012). I believe this information to be helpful to teachers at Middle School B in that it makes PBL seem less intimidating and provides concrete steps for teachers to use in guiding their students.

Somewhat similar to the five-phase process as described by Spires, et al. (2012), John Larmer and John Mergendoller (2010) set forth seven essentials to help teachers guide students through meaningful PBL. The first essential is a need to know. "With a compelling student project, the reason for learning relevant material becomes clear: I need to know this to meet the challenge I've accepted" (p.35). In other words, the teacher needs to help students discover the relevancy of their project to their lives.

The second essential is a driving question. "A good driving question captures the heart of the project in clear compelling language" (p. 35). This helps students develop a sense of purpose related to the project. Larmer and Mergendoller (2010) suggested that the question should be provocative, open-ended, complex, and linked to what the teacher wants students to learn. They emphasized the importance of the driving question this way.

A project without a driving question is like an essay without a thesis. Without a thesis statement, a reader might be able to pick out the main point a writer is trying to make; but with a thesis statement, the main point is unmistakable.

Without a driving question, students may not understand why they are

undertaking a project.... if you asked, ‘What is the point of all these activities?’ they might only be able to offer, ‘Because we’re making a poster.’ (p. 36)

This understanding of purpose has been helpful to students at Middle School B, and continues to help guide their project based learning.

The third essential is student voice and choice. Larmer and Mergendoller (2010) claimed that this element of PBL is a key to success. They said, “...the more voice and choice, the better” (p. 36). Teachers can adjust the level of voice and choice to meet their teaching style and the students’ learning needs.

The fourth essential is 21st century skills. Larmer and Mergendoller (2010) included collaboration, communication, time management, organization, oral presentation, technology, writing, reflective thinking, and problem-solving among these skills. They, like Wagner (2008), claimed that these skills will serve students well in the workplace and in life.

The fifth essential is inquiry and innovation. Teachers must guide students to develop secondary questions that will lead them to explore answers to their primary question. As students find answers to the secondary questions, they then raise and investigate new questions. Then they synthesize their information to inform written papers and projects.

With real inquiry comes innovation—a new answer to a driving question, a new product, or an individually generated solution to a problem. The teacher does not ask students to simply reproduce teacher or textbook-provided information in a pretty format. (Larmer & Mergendoller, 2010, pp. 36-37)

This is an important point for teachers to understand in order to guide students to dig deeply into their inquiry to find authentic solutions.

Feedback and revision are the sixth essential. It is important for student teams to critique one another's work as they develop ideas and products. Additionally, teachers review plans and drafts, and they meet with student teams to monitor their progress. This kind of feedback and revision throughout a project makes learning meaningful because it emphasizes the importance of creating high-quality products. Students should and can learn that first attempts do not typically result in high quality and revision is a common feature of real-world work. The use of rubrics, mentors, and experts in field can be especially helpful to students during the process of PBL.

A publicly presented product is the seventh essential presented by Larmer and Mergendoller (2010). This can be done in a variety of ways. One of those is by holding an exhibition night to which parents, peers, representatives of the community, business partners, and government organizations may be invited. As part of their presentations, students answer questions about their projects posed by audience members. A critical part of the authenticity of PBL is that the work is not done only for the teacher or for a test. "When students present their work to a real audience, they care more about its quality" (p. 37). According to Larmer and Mergendoller (2010), "...even a poster can be meaningful if it's part of a project embodying the seven essential elements of project-based learning" (p. 37). This is an important point for the teachers at Middle School B to understand. A capstone project may be daunting, but it doesn't have to be so. It does have to be authentic, and a simple poster that is well thought out can demonstrate rigorous work by students.

The Process for Leading Change

The eight-step process for leading change as presented by Kotter (2014) offers concrete guidelines to initiate major change that will succeed. Kotter's cumulative research spanning 30 years have shown that 70% of significant change efforts in organizations fail. The reason for such prolific failure is because these organizations did not implement a holistic approach that was needed to fully create the desired change. Proper use of the eight-step process can enable an organization to become adept at change, thus increasing chances of success (Kotter, 2014). This process proved helpful to me as I envisioned leading a major change at Middle School B to create a culture of implementing PBL school-wide that leads to capstone projects among all eighth graders.

Kotter's (2014) first step is to establish a sense of urgency. If those in the organization can see the need for change, then they will be convinced of the importance of acting immediately. About half of the organizations that fail in their attempts to create change, do so in skipping this first important step. Part of this first step also includes determining whether the organization is in a state of complacency, false urgency, or true urgency. True urgency is characterized by people who are clearly focused on making real progress every single day. They believe that the world contains great opportunities, as well as great hazards. They are inspired by a determination to move and to win. Kotter (2014) said that leaders are guaranteed to succeed when they connect to the deepest values of their people and inspire them to greatness.

The second step is to create a guiding coalition. One person alone cannot create successful change in an organization. It is important to put together a group of people with the right vision. The group can then communicate that vision to vast numbers of

people. They can work together to eliminate key obstacles. They can generate short-term wins. They can lead and manage numerous change projects and ensure that new approaches become part of the organization's culture.

Kotter (2014) emphasized that in the second step it is essential that the guiding coalition develop a level of trust in one another. Team building must happen quickly, and that may occur off-site with activities that are carefully facilitated to enable team members to make connections with their hearts and their minds. There are four qualities that make a guiding coalition effective. The first of these qualities is enough key players so that those who are left out cannot block progress. In addition, all relevant points of view should be presented so that the group can make informed decisions. The team must have credibility. Sustained by respect earned, credibility leads to influence. To be able to drive the change process, the team requires trusted, respected, proven leaders.

Step three involves developing the change vision. A clear vision simplifies many detailed decisions, it motivates people to action in the right direction, and it coordinates the actions in a fast and efficient way. The vision is what holds things together and makes sense of them for the minds and hearts of the people involved in the change. The vision must also be seen as strategically feasible. It must consider current realities and also set forth goals that are ambitious with credible strategies to help people see the potential realization of the vision.

A vision must provide guidance by being focused, flexible, and easy to communicate. It must inspire and guide action. It cannot be so constricting that empowerment is lost. The vision must be communicable, concisely stated and easily

explained. Effective visions have six key characteristics. Such visions are imaginable, desirable, feasible, focused, flexible, and communicable.

Kotter's (2014) fourth step is communicating the vision for buy-in. It is important for as many people as possible to understand and accept the vision. The vision must be communicated repeatedly in many ways including in meetings, in emails, in presentations, and elsewhere. The vision should be stated simply. It should be made vivid by use of metaphor, analogy, and example. The ideas of the vision should be easy to repeat by anyone to anyone. The guiding coalition needs to embody the change they want to see in the organization.

Step five involves empowering broad-based action. It is important to remove as many barriers as possible to enable the people of the organization to do their best. There may be structural barriers to address such as discord between levels of management or internal information systems that need to be realigned. Another type of barrier to consider is that of supervisors with work habits that inhibit change. At this stage of change, such leaders can be a real problem that is not solved easily. The best solution in this case is honest dialogue.

Generating short-term wins is the sixth step. Creating visible and unambiguous success as soon as possible will prove effective in moving the organization forward through change. If the change effort is long-term, then short-term success is critical, and the guiding coalition can identify significant improvements that happen between six and 18 months. Recognizing these short-term gains helps to ensure successfully completing the overall transformation. Short-term success can help increase the sense of urgency, as

well as optimism related to the larger change process. These successes boost morale and motivation. They also help to fine-tune the vision and related strategies.

Short-term wins help dispel the validity of naysayers. Such wins also make it more difficult for others to block the needed change. They also create support from those in higher positions than those who are leading the change. Short-term wins build momentum. It is necessary to keep in mind that short-term wins don't just happen, they must be planned carefully and skillfully. They will cement the change initiative.

Step seven mandates not letting up. The consequences of letting up can be very dangerous to leading successful change because critical momentum can be lost. This may lead to regression, and rebuilding momentum after regression can be difficult. New behaviors and practices must become part of the culture of the organization in order for change to be lasting. By the time the change process reaches step seven, the organization will experience more new projects, additional people will be brought in to help with the changes, top leaders will be focused on providing clarity to an aligned vision and shared purpose, employees at every level will be empowered to lead projects, various areas of the organization will have reduced interdependencies, the organization will experience a constant effort to keep energy high. Leadership is particularly valuable during step seven, and successful, transformational leaders will use this phase to drive the change deeper into the organization.

Step eight requires leaders to make the change stick. They must ensure that new changes are firmly established in the culture. The organization's culture must now be composed of norms of behavior and shared values. Each new individual who joins the organization will immediately understand and accept its culture, and will likely not even

realize it. It is important to keep in mind that cultural change comes last not first in the change leadership process. Leaders must be able to prove that the new way is superior to the old, success must be visible and well communicated, some people will leave in the process of change, new norms and values must be supported with rewards that include promotions, and the culture must be reinforced with every new employee. It is also important to realize that it takes the majority of the organization embracing the new culture for there to be long-term, lasting change.

According to Heifetz et al. (2009, p. 14), “Adaptive leadership is the practice of mobilizing people to tackle tough challenges and thrive.” This practice lines up nicely with Kotter’s (2014) eight-step process for change in many ways. Adaptive leadership enables an organization to make change that brings about the capacity to thrive. Adaptive leaders help the organization to build upon the past and develop change through experimentation. It is important that experimentation be done deliberately and smartly. Adaptive leadership requires “will plus skill” (Heifetz et al., 2009, p.37).

Because adaptation displaces, reregulates, and rearranges former practices, it can cause discomfort and a sense of loss. Therefore, adaptive leadership requires the ability to assess, manage, distribute, and provide contexts that help people move through their feelings of loss to a new place. Heifetz et al. (2009) refer to this as a time of disequilibrium. This is a result of “calling attention to tough questions and drawing people’s sense of responsibility beyond current norms and job descriptions” (p. 29). During this time, adaptive leaders must be able to manage themselves in the new environment and help those they are leading to tolerate the discomfort of disequilibrium. Similar to Kotter’s (2014) sixth step, Heifetz et al. state that “significant change is the

product of incremental experiments that build up over time” (p. 17). Heifetz et al. explain that adaptation takes time, thus adaptive leadership requires persistence. This correlates with Kotter’s seventh step.

Heifetz et al. (2009) explain that the first critical step to moving forward an adaptive change is collecting data. This step aligns with Kotter’s (2014) first step of creating a sense of urgency. When an organization can see the need for change by studying a current set of data, they will develop a sense of urgency.

Adaptive leadership involves “the convergence of multiple intelligences” (Heifetz et al., 2009, p. 38). This means that an adaptive leader must not only use the mind, but also the heart in order to be able to relate to the people in the organization who are likely to be struggling through the adaptive change. “When you face a tough decision, or when prospects for success look bleak, reminding one another what you are trying to do provides guidance, sustenance, and inspiration” (p. 40). This reminds me of Kotter’s (2014) second step in which the guiding coalition must build a sense of trust in one another.

Similarly, in their book *Resonant Leadership* (2005), Boyatzis and McKee hold the position that “resonant leaders are in tune with those around them. This results in people working in sync with each other . . . leaders manage others’ emotions and build strong, trusting relationships” (p. 4). They go on to explain the importance of self-renewal among leaders in order to avoid burn out and to continue to inspire those whom leaders influence. Boyatzis and McKee stress the elements of mindfulness, hope and compassion as the key elements to self-renewal for leaders. They describe mindfulness as “living in a state of full, conscious awareness of one’s whole self, other people, and the

context in which we live and work” (pp. 8-9). In alignment with Kotter’s (2014) third step to develop the change vision, Boyatzis and McKee state that “hope enables us to believe that the future we envision is attainable and to move toward our visions and goals while inspiring others toward those goals as well” (p. 9). The third element of compassion involves understanding the wants and needs of those we lead, and being motivated to act upon our feelings.

Similar to the state of disequilibrium described by Heifetz et al. (2009), Boyatzis, and McKee (2005) state an important element of navigating confusion and change this way, “Know that you will feel uncomfortable, even vulnerable, because in the midst of real change around you, the rules are not clear and politically expedient behavior is very tempting” (p. 119). Boyatzis and McKee explain two additional tenets gleaned from Dan Sontag, administrator of Merrill Lynch. “Build trust through clarity and consistency. Make sure you never profess beliefs when people are watching, only to act differently when the temperature rises and the pressure is on” (p. 119). This also correlates to Kotter’s (2014) third step of building trust within the guiding coalition.

Boyatzis and McKee (2005) place strong emphasis upon helping the team to believe the dream: “Hope is driven, we believe, in part by the belief that the desired image of the future (the dream) is possible” (p. 164). They go on to explain,

There are specific leadership actions associated with optimism, such as seeking opportunities and deliberately overcoming obstacles to a goal, as well as overtly expecting the best from people and situations... people who are generally optimistic are happier, more resilient, and more productive; they live longer;

recover from illnesses faster; and are more likely to create resonance and lead effectively. (p. 165)

This perspective gives me pause when I consider the current level of stress on teachers across America, including the teachers at Middle School B. However, the instructional leaders at the school are optimistic, and that is a trait that is contagious among the teachers at the school.

Relative to the state of disequilibrium (Heifetz et al., 2009), Boyatzis and McKee (2005) state that “using vision and hope as the driving force, rather than real or manufactured crisis, is a more powerful motivational force without many of the negative effects that stress and defensiveness have on learning, innovation, and adaptability” (p. 172). Furthermore, Boyatzis and McKee emphasize the required people skills behind effective change leadership: “Effective leaders are able to suspend automatic judgment, and can work to understand other people without filters. Effective leaders care enough to want to learn about other people” (p. 179). This perspective has helped me to determine a non-judgmental approach and one that has caused me to learn about the people who are leading and teaching at Middle School B and to listen to their real concerns about the school.

The conceptualizations and perspectives on leadership presented by Heifetz et al. (2009) and Boyatzis and McKee (2005) align, and this alignment segues nicely with Kotter’s (2014) eight-step process. Integrating the concepts of leadership with the eight-step change process seems to be a strong foundation for planning and effecting transformational, adaptive change. The eight steps provide a sequential, concrete approach to leading change. By embedding effective leadership with these measured

steps, a change plan aligned to a clear vision, promises potent, long-lasting, meaningful transformation that realizes an organization's hopes, dreams, and visions for the future.

Definition of Terms

In order to provide clarity of meaning, definitions of several key terms used throughout this Change Leadership Project are provided below.

- Capstone Project – a thoroughly researched and executed project based on any topic of interest to the student that will stretch his/her knowledge and skills (Sparks, 2003, p. 23)
- Exhibition of Mastery – a public exhibition through which the student demonstrates his/her mastery of specific skills in a technical or academic area based on the student's studies throughout [middle] school (Sparks, 2003, p.23)
- Project Based Learning – an alternative to traditional, teacher-led classrooms wherein students engage in diverse skills including researching, writing, interviewing, collaborating, and/or public speaking to produce work products (Great Schools Partnership, 2014)
- Problem Based Learning – learning that is driven by identifying a problem, studying the problem, finding a solution, and evaluating that solution (Chadwell, 2003)
- Authentic Learning – a variety of instructional techniques focused on connecting students to real-world issues, problems, and applications (Great Schools Partnership, 2014)
- Authentic Assessment – projects, presentations, or products through which students demonstrate what they have learned (Great Schools Partnership, 2014)

- Inquiry Based Learning – an instructional approach in which students investigate and analyze real-world problems and issues (Great Schools Partnership, 2014)

Conclusion

In my review of literature about PBL and capstone projects, I truly was surprised to see the tight correlation between the relevant literature and Wagner's (2008) Seven Survival Skills. The Common Principles of the Coalition of Essential Schools (2014) are remarkably related to the Seven Survival Skills. The key competencies required of students at Glossop High School (2002) in Australia also reflect the Seven Survival Skills. The work done over seven years in the East Coast West Coast Art Project (Johnson et al., 2013) addressed most of the Seven Survival Skills. The capstone projects required at the University of LaVerne (Redman, 2013) incorporate the Seven Survival Skills. The study of middle school PBL reported by Vega and Brown (2012) reflect the Seven Survival Skills. The eight needs of students described by Markham et al. (2003) mirror the Seven Survival Skills.

Just as the research on PBL strategies and outcomes relates to the Seven Survival Skills, so does the research on how to implement PBL and capstone projects. The five-step process for implementing PBL, as explained by Spires et al. (2012), as well as the seven essentials presented by Larmer and Mergendoller (2010), demonstrate several of the Seven Survival Skills. All these sources taken together represent consistency and agreement among researchers and educators about the skills students need in order to be successful in the 21st century. This level of agreement affirmed my belief that PBL and capstone projects were what the school needed to drive forward achievement levels at

Middle School B, and to prepare the students for high school, college, and career. This heightened my resolve to move forward with my Change Leadership Project.

SECTION FIVE: DATA ANALYSIS & INTERPRETATION

Findings

As I reviewed all the data I collected relative to Middle School B during my Program Evaluation Project, I used a completely different perspective in analyzing and interpreting the data. In my review of the data for my Program Evaluation Project, I was focused on considering student gains from one year to the next, along with a comparison of Middle School B's gains to the gains of other middle schools across the district and the state to inform success of the single gender program at the school in identified areas. For this Change Leadership Project, it was important that I view the data in terms of student proficiency levels, so that I could help the principal and his leadership team understand the need for change and to gain a sense of urgency.

According to the Annual Review of Program (ARP) submitted by the lead teacher of Middle School B, the school made remarkable gains in many areas that were reflected on the state assessment test during school year 2012-13. The scores indicated a school-wide gain of nine percentage points of students demonstrating proficiency in reading over the previous year, a gain of 10 percentage points in math, and a gain of 33 percentage points in writing. The students dropped three percentage points in science. The school leaders and district leaders were pleased with these gains that contributed largely to the school raising its state assigned grade from a D to a B in that single school year. The state was also pleased, and demonstrated so in a congratulatory note that the governor sent to the principal. Middle School B ranked among the top 2.7% in reading gains and the top 2.5% in math gains among Title I schools across the state, and it ranked among the top 1% in reading and math gains among middle schools across the state.

Despite the remarkable gains on the state assessment test, when I considered the rate of proficiency or demonstrated mastery of academic subjects tested as opposed simply to making learning gains in all areas tested – reading, math, science, and writing – I realized that the results were mediocre. Among the students at Middle School B, 49% demonstrated proficiency in reading across all three grades combined and 52% were proficient in math. In science and writing, the state only tested eighth grade students, and at Middle School B, 39% were proficient in science and 74% were proficient in writing. Academic areas needing attention were obvious. Reading among seventh grade students (41% proficient) and science among eighth grade students (39% proficient) were areas of specific concern. While the school-wide gains in reading were notable, seven percentage points higher than the previous school year, the proficiency level was still slightly below 50% while the district and state averages were above 50% at every grade level. The expectation is that the school exceed the district and state averages because it is a magnet school to which all its enrolled students applied because of the magnet theme of college preparation in a single gender setting.

Similarly, in math, the school-wide gains were 10 percentage points, yet the proficiency level was just above 50%. The results were inconsistent and varied notably at each grade level. In science, the students at Middle School B demonstrated a proficiency rate that was below the district average and the state average. Again, the expectation is that the school exceed the district and state averages in each subject and at all grade levels. Additionally, the principal had a stated goal that the students at Middle School B demonstrate proficiency levels that are among the top five highest performing middle schools in the district.

Writing was the only subject area on the state assessment test that demonstrated a comparatively notable level of proficiency. The eighth graders at Middle School B had the largest gains in the school district and exceeded the district average of proficiency in writing. They also exceeded the state average of proficiency in writing.

Information gleaned from interviewing the principal and teacher leaders provided informative data regarding areas needing improvement. For example, three of the four people I interviewed stated the need to provide stronger academic support for students in the bottom quartile. Two interviewees indicated a need for greater communication among faculty and cohesiveness in implementing strategies and determining focus areas. When I considered the ARP data and the interview data, specific areas for improvement became obvious.

Annual Review of Program

According to the ARP, the percentage of students at Middle School B meeting or exceeding proficiency level in reading in grade 6 was 58%, which surpassed the district average of 55% but fell short of the state average of 59%. In math, the sixth grade students demonstrated a proficiency level of 55% which was higher than the district rate of 51% and the state rate of 52%. The point of concern for the sixth graders was in reading.

Among seventh graders, the percentage of students who achieved proficiency in reading was 41%, a two percentage point drop from the previous school year. That was 10 percentage points below the district average of 51% and 16 percentage points below the state average of 57%. Reading among seventh graders was another area of concern. In

math, the seventh grade students met or exceeded proficiency at a rate of 56%, which exceeded slightly the district average of 55% and the state average of 54%.

In addition to reading and math, eighth grade students across the state were tested in science and writing. The percentage of eighth graders that reached proficiency in reading was 47% which fell four percentage points below the district average of 51% and nine percentage points below the state average of 56%. In math, the proficiency rate among eighth graders at the school was 45% which was eight percentage points below the district average and six percentage points below the state average. In science, the proficiency level was 39% which was six percentage points below the district average and eight percentage points below the state average. The eighth grade students at Middle School B fell short of the district and the state in reading, math, and science. The single area in which the eighth graders exceeded the district and the state was in writing with a proficiency rate of 74%, the highest in the district.

School-wide, the proficiency level in reading was 49%, in math it was 52%, in science it was 39%, and in writing it was 74%. The proficiency level in writing is respectable, especially compared to the previous year's 43% rate of proficiency, along with the fact that it exceeded the district average and state average. Yet 74% means that more than a quarter of the students tested did not meet proficiency in writing. There was room to grow.

Interviews

As part of my Program Evaluation Project, I interviewed the principal and three teacher leaders at Middle School B. I selected several of the interview questions that I originally wrote for my Program Evaluation Project to present here in my Change

Leadership Project as part of my summary of data analysis. I selected three questions for the principal and one question for the teacher leaders because the questions specifically related to the need for change or improvement. All the interviews I conducted separately with the principal and three teacher leaders demonstrated their belief in the success of the school. They all indicated that they perceived that the school was positively affecting the lives of its students in academics, character development, attendance, and conduct. Yet, they all identified areas in need of improvement. (See Appendices E and F for interview questions.)

I asked the principal: What improvements in your single gender program do you believe are needed to improve student achievement as measured by the state assessment test scores and state assigned school grades? He said that the school needed to identify ways to better meet the needs of the students in the bottom quartile based upon the state assessment test. He said the school needed to make a change in the way it approached its lowest performing students because their needs were not being met sufficiently. The principal emphasized the need for additional professional development for the teachers at the school to help them learn instructional practices that would impact positively the bottom quartile, as well as all the students over time. The principal's response to this question clearly indicated the need for change in order for the school to address better the learning needs of all its students.

I asked the principal: How can the Annual Review of Program be improved to enable you to provide a true picture of your single gender program's effectiveness and areas for improvement? The principal said the document did not need to be changed, but rather the district should include additional stakeholders to provide input regarding the

school's impact on students. He thought that custodians, cafeteria workers, clerical staff, and district employees who visited the school should be included in perception surveys – in addition to the students, parents and guardians, and teachers – to glean a more global view of the school's effectiveness. The principal's response to this question indicated a need for the district to change the way the ARP document and related surveys were used to include more stakeholder groups, thus increasing the data collection to provide more information for evaluating the school's effectiveness.

I asked the principal: What suggestions do you have on how to incorporate qualitative data, along with quantitative data, into district reports to show results of your students in single gender classes in ways that are not measured on standardized tests and other data collection mechanisms? He suggested including a broad group of stakeholders from whom to collect qualitative data, as that would provide a bigger picture of the impact of the school on meeting its vision of “Molding young men of distinction who will achieve greatness.” He also suggested comparing discipline data to all other middle schools in the district, rather than just Title I schools. He thought that such a comparison would provide a clearer picture of the areas in need of improvement at his school. He stated his goal that the school reach performance levels that are among the top of all middle schools in the district. I noted the similarity in the principal's response to this question and his response to the question above, and this similarity indicated to me that he felt strongly that additional stakeholder groups should be included in data gathering instruments to inform evaluations of the school that are included in district reports. This broader approach would better inform the principal and district leaders in making

decisions about improving the school to help it become one of the top performing middle schools in the district.

The principal's responses supported the need for change. He identified a need to change instructional practices to better meet the needs of students in the bottom quartile. He said a change was needed to better meet the professional development needs of teachers so that they, in turn, could better meet the needs of students in the bottom quartile. Additionally, he would like to have input from a broader variety of stakeholders to provide a better understanding of areas in need of improvement.

I interviewed separately three teacher leaders. I asked each of them: What improvements in your single gender program do you believe are needed to improve student achievement as measured by state assessment test scores and state assigned school grades? Each teacher was specific in response to this question.

The first teacher's response demonstrated the theme of a data driven school. She was concerned clearly with increasing the use of data to drive instructional decisions. She said that a change in teacher practice was needed in order to strengthen a wider usage of student data to guide instruction and learning. She specifically said that in addition to administrators, teachers and students needed to learn how to use formative data to increase gains in learning. She emphasized that, in her experience, data was an intrinsic motivator for the boys as it helped them understand their academic rank and what they needed to do to improve their achievement levels.

The second teacher's greatest concern resonated with the principal's response to this question. He said a change was needed to better address the achievement gains among the bottom quartile of the student body. Furthermore, he indicated that students in

that group were not showing enough growth over time from sixth grade to eighth grade, particularly in reading. He also said that if all the teachers had a unified vision of their impact on each other's instructional effectiveness, then teachers and students would benefit. The statement about the need for a unified vision relates to two of the conditions I identified in my 4 Cs Analysis (see Appendix A). Those conditions are 1) lack of agreed upon performance standards, and 2) need to strengthen shared vision of student results in addition to the state assessment test.

The third teacher seemed particularly concerned about the lack of consistency from class to class regarding the level of academic expectations for students. As a college preparatory middle school, the teachers are to hold students to a high academic standard. This teacher indicated that some of the teachers were doing a good job of setting a high bar for academic expectations, yet common expectations and structures were not in place among all teachers. This teacher's response speaks to two of the conditions I identified as challenges of the school in my 4 Cs Analysis (see Appendix A). Those conditions are 1) lack of agreed upon performance standards and a 2) strong focus on strategies but not priorities. This response also speaks to one of the culture challenges I identified – lack of common vision of what good teaching looks like.

When taken together, all the teacher responses indicated the need for change. The first teacher focused on the need to use data universally throughout the school to drive instruction and learning. The second teacher focused on the need to change instructional practices to meet the needs of the bottom quartile of students and move them forward in achievement gains over time. The third teacher identified the need to develop common standards, priorities, and vision of what good teaching means at Middle School B.

Interpretation

The ARP and content of the interviews provided useful information. They revealed that work must be done in order for the school to continue to move forward in its effectiveness in helping all students achieve academically. When considering these data with the lens of student proficiency, as opposed to student gains, the picture is quite different.

The student academic gains, based upon the state assessment test scores from 2011-2012 to 2012-2013, are impressive. In fact, these gains were largely responsible for the school's grade assigned by the state to increase from a D in 2011-2012 to a B in 2012-2013. Yet, when I reviewed the proficiency levels of the students, I did not find them to be impressive.

As explained above, the district's expectation is that Middle School B exceed the district and state averages in proficiency in each subject tested and at each grade level. In 2012-2013 the school did not meet that expectation. All the state assessment test proficiency data for reading and math hovered near the 50 % mark. That means that about half the students at the school were not meeting proficiency in reading and math as measured by the state assessment test. The percentage of students who reached the science proficiency level was below the 50 % mark. This may be a reflection of the context of the school as noted on the "The 'As Is' 4 Cs Analysis" (see Appendix A).

As I described in Section Two, all the students chose to attend Middle School B by applying to the school via the Magnet School application process of the school district. Then they were assigned via a random weighted lottery. The lottery is blind to student proficiency levels and achievement levels during previous grades. As a result, the

school has a student body that is academically diverse ranging from students who are performing at the lowest levels academically all the way to students who are performing at the highest levels based upon formative assessments, standard achievement tests, and the state assessment test.

The student body includes exceptional education students with individual education plans. It includes students with 504 plans and students who are intellectually gifted. The lottery also selects students from all geographic regions of the school district. This creates a socio-economically diverse population. As a result, 68 % of the students qualified for free or reduced-price lunch in 2012-2013; therefore, the school was designated as a Title I school.

My interviews with the principal and three teacher leaders were encouraging. They all expressed a high level of satisfaction with the success of the school in meeting its vision of “Molding young men of distinction who will achieve greatness.” The interviews revealed satisfaction with student growth in the areas of academic achievement, character development, attendance, and student discipline. Yet each interviewee could readily identify a specific area of focus for improvement.

This was where I first noticed a sense of urgency regarding areas upon which to focus for improving the school. The interviews revealed a culture that set high expectations but lacked a common vision of what good teaching looks like. This reference to a unified vision reminded me of Kotter’s (2014) third step to leading change – developing the change vision. This observation strengthened my resolve that change was needed in order to drive Middle School B forward further.

The interviews also revealed a condition in which teachers had a strong focus on instructional strategies that had been shown to be effective when teaching all boys, but they had not prioritized these strategies. Additionally, the interviews revealed the problem that teachers were bearing the burden of raising rigor and student engagement by implementing identified strategies in the classroom. They were doing so, in many cases, without empowering the students to raise authentically the rigor and engagement for themselves through project based learning.

All four of these interviews reflected the ideals of Kotter (2014), Heifetz et al. (2009), and Boyatzis and McKee (2005) regarding leading an organization through adaptive change. This indicated to me that the leadership of Middle School B was ready for the kind of change I have described in this Change Leadership Project. They already had the sense of urgency, they had an identified leadership team that could readily become the guiding coalition, and they had the beginnings of a change vision demonstrated through the articulation of each interviewee regarding changes they saw were needed to move the students forward. Based upon my review of the relevant literature, project based learning leading to capstone projects had the potential to meet the needs identified by the principal and teacher leaders at Middle School B.

SECTION SIX: A VISION OF SUCCESS (TO BE)

The heart of my vision of success at Middle School B was to ensure that each member of the instructional staff and administrative team be equipped with a working knowledge of how to use PBL to empower students to drive their own level of rigor and engagement. This knowledge would culminate in each eighth grade student completing a capstone project, and then presenting it publicly before a panel of judges. The panel for each student would consist of educators and experts in the field related to the project. The capstone presentations would be part of a major event that celebrated and honored the eighth graders for their achievements during their time at the school. The rationale behind this vision was that capstone projects are an approach to helping students take ownership for their learning and drive their own rigor through the identification of a project that is relevant to them, as suggested by the research literature. This kind of rigor and relevance increases student engagement. It is an authentic method of learning and assessment.

In order for this vision to be achieved, identified challenges needed to be addressed within the organization in the areas of context, conditions, culture, and competencies, as identified in the As-Is diagram in Appendix A and based upon the Four-C's identified by Wagner et al. (2006). In my To-Be vision of success (Appendix B), the challenges in each of these areas would become positive aspects of the organization. As such, they would contribute to the successful implementation of PBL leading to capstone projects for each eighth grade student.

Context

The racially and economically diverse population of the school, which made up part of the context, presented opportunities for students to learn about the cultures of

others in an environment that was safe and supportive. The fact that the school was designated as a Title I School based upon the percentage of its students who were eligible for free or reduced price lunch was a benefit in that this designation qualified the school for additional federal funds and resources that were not available to non-Title I schools. The high level of visibility of the school became an asset, as it enabled the school to attain designations as a Magnet School of Excellence, a Confucius Classroom, and a Gurian Model School, as well as many opportunities for positive press by the local media. These were all achievements that were notable, lent credibility to the school, and enhanced the learning environment of the school for the betterment of all its stakeholders. To be highly successful, a focus on core competencies for work, citizenship, and continuous learning needed to be consistently implemented school-wide as part of the school's context. In order for all these aspects of the school context to work together with the best possible effectual environment, the school needed its families to buy-in and maintain support. For this to occur, informed families and supportive homes were necessary. Families needed to understand how boys learn best in order to support the principles and strategies at work at the school to meet the needs of the boys.

Conditions

To create conditions that were positive and contributed to the achievement of the students at Middle School B, the school needed to develop opportunities for teachers to work together to solve problems on a weekly basis. The school district had to demonstrate and implement support of the school's initiatives by allocating funds to support the single gender program at Middle School B. Clear lines of regular communication had to be established between the district and the school. The district held

regular meetings with the school's lead teacher, and frequent contact with the leadership team to establish two-way communication regarding federal, state, and district regulations, as well as needs of the school.

The conditions at Middle School B continue to be enhanced as the school prioritizes strategies specific to how boys learn best. This ongoing process enables the school to develop clearly written performance standards that relate to the Prep Scholar Profile it developed previously. These performance standards were communicated to all instructional staff and students, and the leadership team monitored the implementation of these performance standards. In my vision for success, the school would also develop stated expectations of student results on the state assessment test, end of course exams, and its standing among other middle schools in the district.

Culture

The culture of the school includes high expectations for students' learning. The school continues to use its mission, vision, creed, core values, and the Prep Scholar Profile extensively and with fidelity. It is important for all members of the instructional staff and administrative team to maintain a common vision of what good teaching looks like. That common vision is maintained through onsite professional development, collaboration in Professional Learning Communities within the school, and discussions in leadership meetings and faculty meetings. The school leaders realize the value of furthering its common vision of good teaching through the creation of model lessons by strong teachers with extensive training and experience in single gender education for boys. This includes providing opportunities for teachers who are newer to single gender education and to the school to observe others engaged in good teaching.

As a further development of the school's rich culture, the school leaders developed a heightened awareness of the level of trust among the adults working at the school. In my vision for success, all members of the leadership team, including the principal, two assistant principals, lead teacher, subject area leaders, and academic coaches take ownership of this awareness and share with each other any identified lack of trust among the employees. The principal addressed identified trust issues by first conferencing with those employees who lacked trust or contributed to the lack of trust. The principal then decided whether counseling was necessary to develop greater trust. In the most serious circumstances, the principal made needed adjustments to the staff. It was important for all employees of the school to recognize the importance of developing trusting relationships with other employees.

Competencies

A top priority among district leaders who worked with Middle School B was to ensure that every single member of the instructional staff had all the training and tools necessary to reach a level of competency that enabled each student, and the school as a whole, to reach its highest potential in academic achievement. As such, the district had to provide immediate opportunities for new teachers at the school to participate in professional development. It achieved that goal by offering a foundations course during the summer after the teacher transfer period, teacher pool placement, and teacher interview days for new hiring to the district. At that point in the summer, the staff for the upcoming school year was in place, and it was the optimal time for professional development among the instructional and administrative staff. However, each summer there are a few new teachers hired just before school begins, thus giving district leaders

the additional responsibility to ensure that these teachers also are trained appropriately in understanding the neuroscience that drives the district's work in differentiating instructional strategies by gender, as well as a working knowledge of strategies that are proven to be successful in all-boys classes.

In order to meet these additional professional development needs, the district implemented an online book study early in the first semester that was specific to an overview of the neuroscience and detailed strategies for gender-differentiated instruction. In addition to the professional development opportunities that the district office provided, it was also important for the lead teacher to implement on-site book studies using recently published books on the topics of neuroscience and its implications on classroom instruction and effective classroom strategies for teaching boys. The onsite book studies were offered to teachers new to the school, as well as other instructional staff members to provide continual growth opportunities to the entire faculty and administration.

My vision for Middle School B was to help the district create a three tiered professional development plan. It had a strong foundational plan for teachers who were new to the school, as described above. Further, I envisioned a training model that would also meet the needs of teachers who have become experts in gender-differentiated instruction and are now training other teachers on that topic. Additionally, Middle School B had several teachers who were no longer new to the school, but were not yet experts in gender differentiated instruction. These teachers who were developing their knowledge base of neuroscience and gender specific strategies for teaching boys needed to be supported in such a way that they would reach the level of expert and begin modeling lessons and training other teachers. This three-tiered plan was implemented when the

district held a single gender education summer symposium that offered differentiated levels of professional development to meet the needs of the entire instructional staff.

Another part of the vision for the development of competencies at Middle School B included establishing an onsite Critical Friends Group (CFG). Such groups across the district and the country provide a space for teachers to meet regularly, at least once per month, to discuss dilemmas they face in teaching, and they are run by teachers for teachers. Teachers identify the topics they want to discuss, as well as the CFG protocols they will use to facilitate their discussions. A teacher facilitates the CFG in order to build trust and confidentiality among the group members. The school established an Instructional Leadership Team (ILT) of teachers that continues to meet monthly to implement the CFG protocol of Looking at Student Work to identify strategies that propel student achievement forward and share that information with teachers throughout the school. By using this CFG protocol, the ILT also identifies areas in need of improvement.

The school now uses effectively formative data to guide instruction. To add to that use of data, the school also uses the prior year's growth and proficiency data based upon the state assessment test, end of course exams, and comparisons to the other middle schools in the district to identify specific areas to target at each grade level. Additionally, these data are viewed through the lens of determining the impact of the single gender aspect of the school.

The school increased its level of collaboration among the instructional staff and the administrative staff. This was accomplished via regularly held PLC meetings, the onsite ILT that uses a CFG protocol, site based professional development opportunities,

and district offered professional development opportunities. District offered professional development opportunities included the aforementioned foundations course, online book studies, as well as in-depth summer training offered at all levels of teacher and administrator proficiency.

To ensure that the administrators are prepared to lead the single gender initiative at Middle School B, they participated in district led Single Gender Administrators Compliance meetings. These meetings were comprised of a combination of information sharing regarding federal, state, and district regulations for single gender programs and professional development specifically designed for administrators of single gender programs. The compliance meetings continue to be held once each semester. Additionally, monthly meetings were held for the lead teacher/facilitator that provided the opportunity to network with other single gender teacher leaders, to share best practices, and to assist the administrators in monitoring school-wide compliance with federal, state, and district regulations for single gender programs. The monthly meetings for the lead teacher were also designed to provide professional development for those who were at the expert level of implementing gender specific instructional strategies. Finally, district leaders communicated frequently with the principal to reflect upon the work being done that was unique to the all-boys, and to make immediate adjustments, as needed.

Conclusion

Several aspects of my organizational change plan have been realized through this Change Leadership Project. School and district leaders now better understand the importance of the racial and economic diversity of the school that is partially reflected in

its Title I status. School leaders and faculty members have demonstrated their understanding of the value of core competencies for work, citizenship, and continuous learning. The school's high visibility is widely considered to be a model school across the district and the nation. When my organizational change plan is fully realized, the context of the school will change further with continuous information and training for families about how boys learn best and how the school's strategies meet those needs. School and district leaders have already begun work to make this training available to families.

Many of the challenges identified in my "As Is" 4 Cs Analysis diagram (see Appendix A) have already become areas of strength in the conditions, culture, and competencies of Middle School B, as described above. When my organizational change plan is fully realized, all these strengths will work together to enable the achievement of the vision stated in the center of my To-Be Vision of Success diagram (see Appendix B). When the achievement vision is realized, and each boy in eighth grade completes a capstone project and presents it publicly before a panel of judges as part of a major event at the end of the school year, then a true culture of student ownership of his learning will be in place. Students will drive their own rigor in authentic ways that are meaningful to them, and the district will assess them in an authentic way that is meaningful to the teachers and administrators. Remarkable gains have occurred toward the realization of the achievement vision. Students across all three grade levels are engaged in project based learning, problem based learning, authentic learning, and inquiry based learning on a daily basis. Many eighth grade students completed a capstone project that incorporated the Seven Survival Skills (Wagner 2008) and the common principles of the Coalition of Essential Schools (2014).

SECTION SEVEN: STRATEGIES AND ACTIONS FOR CHANGE

When I considered the six goals I set forth in Section One relative to the challenges I identified on my “‘As Is’ 4 Cs Analysis” diagram (Appendix A), along with my “Vision of Success (To Be)” diagram (Appendix B), I realized that I must plan a series of pragmatic steps to lead Middle School B toward the Achievement Vision (see Appendix B). An analysis of the challenges facing the school was a strong beginning point, and I did that first (see Appendix A). Then envisioning the future of a perfect version of Middle School B was important because it helped to begin with the end in mind. The next step for me was to identify research-based change strategies and actions to help Middle School B realize that vision (see Appendix C).

According to Kotter (2014), I must first create a sense of urgency. That began with my interview with the principal, as he identified needs for improvement in student achievement. The conversation continued from there, and we are still looking at the school’s achievement gain data in comparison to the school’s proficiency data for 2013. The stark difference between the gains and the proficiency levels based upon the state assessment test and the school’s standing among the other middle schools in the district was obvious. The next step was to share that urgency with members of the leadership team that is comprised of the assistant principals, the lead teacher, and the core subject area leaders. This group of people continue to be the guiding coalition, as described in Kotter’s second step.

The guiding coalition is a strong group to help meet several of the six goals I originally identified, as well as to address Kotter’s third step of developing the change vision. According to Kotter (2014), with the right vision, this group can communicate the

vision to vast numbers of people. That includes working with families to inform them about how boys learn best, the school's strategies to meet those needs, and how the capstone project concept relates to the boys' learning needs, my first goal. I worked with the guiding coalition to plan parent events to communicate this information. It is important to note that in order for authentic, student-driven rigor to become ingrained in the culture of the school, these parent training events are necessary every school year to help families who are new to the school to understand exactly how the school is different from traditional middle schools. The district invited parents to attend training events through its Parent University, in addition to the informational sessions offered at the school. These annually repeated parent training events will, of themselves, become a part of the culture of the school.

Another part of developing the change vision involved my fourth goal of working with school leaders – the guiding coalition – to develop clearly defined prioritized strategies specific to how boys learn best; clearly stated performance standards that relate to the Prep Scholar Profile; and clear expectations of student results on the state assessment test, end of course exams, and authentic assessments including capstone projects. I agree with Kotter (2014) that I, alone, cannot create this successful change within the organization of Middle School B. This had to be, and continues to be, a collaborative work of the guiding coalition to help clarify the change vision for all the stakeholders of the school.

Similarly, I worked with members of the guiding coalition to develop a common vision of what good teaching looks like, specific to Middle School B. Together, we continue to develop this common vision, and thusly, we move toward accomplishing my

fifth goal. We have worked on Kotter's (2014) fourth step of communicating the vision for buy-in. With clearly defined prioritized strategies, stated performance standards, clear expectations of student results, and what good teaching looks like, we are better able to communicate that information to the faculty, the students, and the parents. The school has communicated successfully its vision statement, its nine core values, and its Prep Scholar Profile, and it is working toward communicating a Vision of Success with clearly prioritized strategies, performance standards, expected student results, and defined good teaching in meetings, in emails, in group phone messages to families, in presentations to all stakeholder groups, and on posters throughout the school.

Kotter's (2014) fifth step is to empower broad-based action and to remove barriers. One clear barrier was the lack of specific funding from the district to support the single gender programs, including the all-boys at Middle School B. As a result of implementing Kotter's first four steps, using the approach I described above, I made headway toward meeting my second goal as I shared with district decision makers the importance of a budget to support the school's unique single gender program. District allocated funds empowered the implementation of a three-tiered level of professional development for the instructional staff and the administrative staff, thus meeting my sixth goal. The training model included immediate and ongoing opportunities for training of single gender educators at the levels of beginner, intermediate, and expert. Additional resources enhanced opportunities to implement parent training events, my first goal, as well as aided the district in increasing communication with the school, my third goal. Financial resources and human resources empowered the work, and the guiding coalition continues to have the authority to implement program change within reasonable limits.

A strategy I mentioned in the original statement of my third goal was to implement an energy bus plan based upon the book *The Energy Bus* by Jon Gordon (2007). Through his allegory, Jon Gordon demonstrated ways of positive thinking that lead to forward momentum in helping an organization through change. This book focuses on developing a vision, trust, optimism, enthusiasm, purpose, and spirit while also offering concrete strategies. Gordon's strategies are to create a vision, develop a purpose that fuels the vision, write down the vision statement, and share the written vision with your team. His strategies also include identifying goals that are needed to make the vision a reality, identifying those people you need to help you realize the vision, engaging the team with positive energy to prevent negativity from breeding, addressing negative team members, and navigating adversity. Further, Gordon's strategies are to make sure that the people on your team know that you care about them, work with your team to develop a way to be successful, and bring more joy to the work.

Gordon's strategies remind me of Kotter's (2014) steps, as well as the concepts of Wagner et al. (2009), Hefetz et al. (2009), and Boyatzis and McKee (2005). The Energy Bus that I created includes a passenger from each of the single gender sites the district has, including the lead teacher at Middle School B. I continue to meet monthly for two hours with the identified representative from each of the schools with single gender programs across the district, including Middle School B.

During each energy bus meeting, I share positive energy through a form of inspiration related to education. That may be a reading, an activity, or a group sharing of positive experiences. We spend some of our time addressing pragmatic issues that include information from the district, as well as new requirements and regulations from

the state and the federal government. The school leaders on my bus also have an opportunity to share needs and challenges, so that we can discuss dilemmas and offer solutions, as a group. A very important aspect of the group meetings is the professional development portion that comprises the first hour of each meeting. The second hour is dedicated to practical matters including data reporting and federal, state, and district compliance measures. As I continue to lead Middle School B through adaptive change, I also want to lead the other single gender programs through positive change and growth in identified areas of need.

Kotter (2014) recommends the generation of short-term wins, as his sixth step. Since the change I envisioned is an adaptive change, according to Heifetz et al. (2009), then it will be lengthy in implementation. It also is an ongoing change since the stakeholders of the school are changing constantly with the promotion of students, incoming new students, the accompanying changes among the parent stakeholder group, and teacher and administrator changes. Thus, my plan for change recommended the guiding coalition to establish specific checkpoints which are short-term goals, accompanied by celebrations whenever a goal is met all along the way. That means several times each school year the guiding coalition holds a celebration of achievement with the appropriate stakeholder group(s) related to the various aspects of the 4 Cs in the Vision of Success.

By the time those involved in this change process reached Kotter's (2014) sixth step, which is the point which the guiding coalition of Middle School B has reached, they are well on the way to implementing adaptive change. Thus, step seven is critical in that it requires the leaders to not let up. This means that they will need to continue to meet

with the guiding coalition to make sure that momentum is not lost and to ensure that all the identified changes are part of the culture in such a way that they can withstand changes in students, parents, teachers, and school leaders.

Step eight requires the leaders to make the change stick. That means that strategies must be in place to ensure that new students, new parents, and new faculty members are provided the education needed to seek to be part of the culture in a seamless manner. All the values and expectations that are identified in the Vision of Success will be demonstrable at this point, and all stakeholders will be able to see that the new way is superior to the old. Teachers will readily see that students drive the rigor and engagement at Middle School B. They will notice quickly that project based learning is a way of work. They will know what the school values because it will all be written and continuously communicated in the variety of actions previously stated.

Likewise, students will acclimate naturally to a school where they are expected to take ownership of their learning, to identify problems they want to solve, and to solve them. Parents will understand the school's strategies to meet the specific learning needs of boys and how project-based learning fits into those strategies. Parents will gain this understanding informally from their sons' natural conversations with them about school and from talking with other parents. Parents will have multiple opportunities throughout each school year to participate in training events designed specifically for parents. The opportunities will support parent understanding of learning differences and needs. Through practical and highly informative parent-friendly sessions, presenters will explain the basis in the research on how boys learn best, the strategies implemented at Middle School B to meet those needs, and exactly how the school expects their sons to be

responsible learners who authentically drive their own rigor and engagement through PBL and capstone projects.

Conclusion

In conclusion, some wise words of caution and admonition: “Smart leaders don’t always bring out smarts in others” (Wiseman, Allen, & Foster, 2013, p. 3). Just because a leader is smart, the effectiveness of that leader does not necessarily follow. Ineffective smart leaders could be characterized as “diminishers.” The term, coined by Wiseman et al., identifies leaders who diminish others and manage to kill ideas and sap energy. Diminishers create stress. A diminisher needs to prove he or she is the smartest person in the room.

The opposite of a diminisher is what Wiseman et al. (2013) call a “multiplier.” This kind of leader uses his or her intelligence to amplify others. “People get smarter in their presence because they’re given permission to think” (p. 3). Multipliers inspire employees to stretch themselves and to surpass expectations. Everyone around a multiplier becomes better and more capable. “Multipliers are leaders who look beyond their own genius and focus on extracting and extending the genius of others, they get more from their people. . . Multipliers get so much brainpower from their people that they essentially double the size of their staff for free” (p. 4). In order to effect the complex change process demanded by this project, leadership characterized by the term multipliers is essential.

Wiseman et al. (2013) have identified five disciplines of the multiplier. Multipliers attract and optimize talent. They create intensity that requires best thinking. They extend challenges. They build community decisions. They instill ownership and

accountability. In the realm of education, the leader who is a multiplier is one who can and does lead his or her organization, or in this case a school, to fully develop its students. In the instance of Middle School B, a multiplier is needed to focus all stakeholders on the survival skills students need for a successful future (Wagner, 2008); common principles such as those identified by the Coalition of Essential Schools (2014); core values, as the University of LaVerne (Redman, 2013) has done successfully; and authentic learning, as described by Newmann et al. (2001).

The good news is that the principal of Middle School B is a multiplier. I recently heard him lead a discussion among other principals during which he said, “If I am the smartest person in the room, then I’m in the wrong room!” He was explaining how his school had recently won recognition for its promotion of teacher leadership based upon a district-wide survey of all teachers.

Knowing that a multiplier leads Middle School B assures me that several important things will happen to promote the adaptive change I have identified as needed to make the school great. First, I believe that he will have an open mind during discussions about the proficiency data of his school as compared to its achievement gain data. He quickly gained the sense of urgency needed to begin the change process. He empowers his leadership team to be the guiding coalition that leads the school through adaptive change. The multiplier aspects of the principal’s personality will help him to understand the concepts of Heifetz et al. (2009) as they relate to adaptive change. They will also enable him to demonstrate the qualities of a resonant leader as described by Boyatzis and McKee (2005) that so closely relate to being a multiplier (Wiseman et al., 2013).

I look forward to continuing to be a part of the Energy Bus (Gordon, 2007) at Middle School B. I am taking turns driving and being a passenger with the principal and the members of his leadership team. I have already learned a lot about leadership from the multiplier principal of Middle School B and his guiding coalition. I plan to enjoy this ride as Jon Gordon suggests in his eleventh rule of the Energy Bus.

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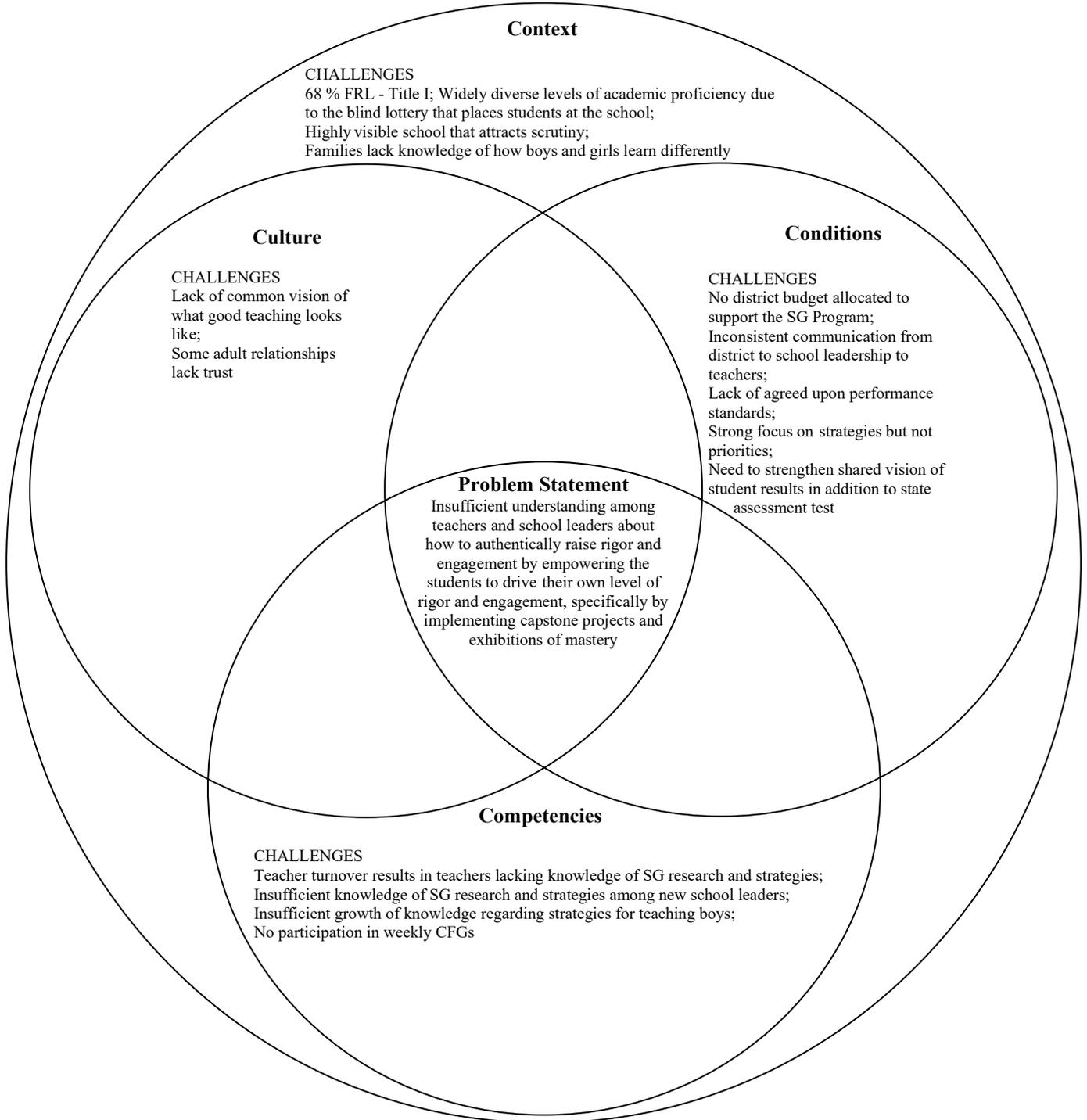
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APPENDIX A

The “As Is” 4 Cs Analysis

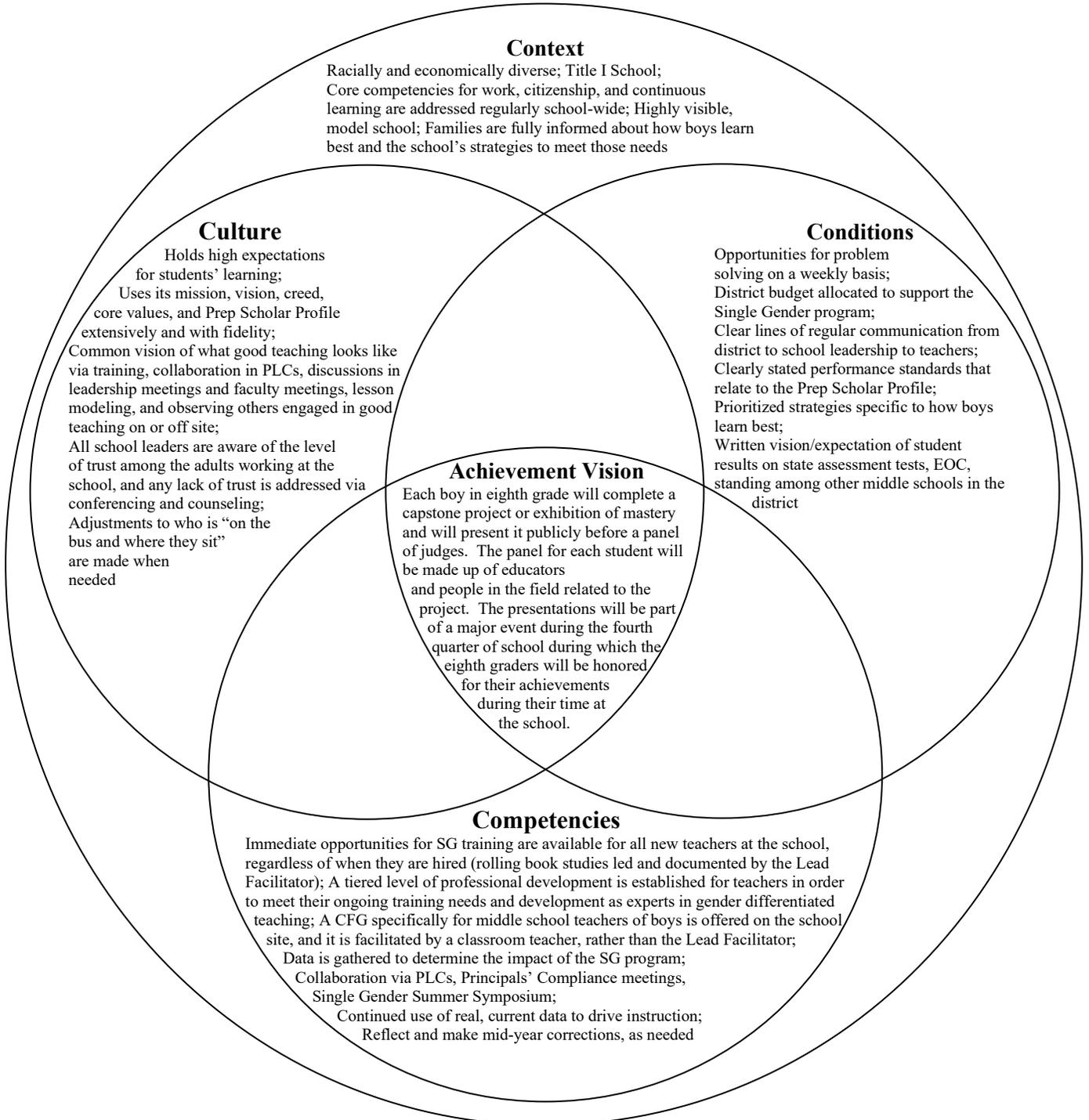
“As Is” 4 Cs Analysis for the Single Gender Program at Middle School B



APPENDIX B

A Vision of Success (To Be)

A Vision of Success “To Be” 4 Cs Analysis for the Single Gender Program at Middle School B



APPENDIX C

Strategies and Actions Chart

Strategies	Actions
Create a sense of urgency.	<ul style="list-style-type: none"> • Hold a conversation with the principal regarding the disparity between the school's student achievement gain data and the school's proficiency data based upon the state assessment test; end of course exams, and the school's standing among the other middle schools in the district in 2013. • Share this information with the leadership team of the school that is now the guiding coalition.
Develop a common vision of what good teaching looks like at Middle School B.	<ul style="list-style-type: none"> • The guiding coalition will put in writing a common vision of what good teaching looks like at Middle School B.
Develop the change vision.	<ul style="list-style-type: none"> • The guiding coalition will develop a written statement that clearly defines prioritized strategies specific to how boys learn best. This statement will include performance standards that relate to the Prep Scholar Profile, as well as clear expectations of student results on the state assessment test, end of course exams, and authentic assessments including capstone projects.
Communicate the change vision.	<ul style="list-style-type: none"> • The guiding coalition will share the vision of prioritized strategies, performance standards, expected student results, and defined good teaching in meetings, in emails, in group phone messages to families, in presentations to all stakeholder groups, and on posters throughout the school. • The guiding coalition will work with families via parent training events throughout the school year to inform them about how boys learn best, the school's strategies to meet those needs, and how the capstone project concept relates to the boys' learning needs. These training events will be repeated annually, so that they become part of the culture of the school.
Identify funding to support the school's unique single gender program.	<ul style="list-style-type: none"> • I will share with district decision makers the importance of a budget to support the school's unique single gender program. I will explain that the funds will be used, in part, to implement a three tiered level of professional development for the instructional staff and administrative staff, as well as to implement the parent training events and to aid me in increasing communication between my office and the school.

<p>Implement an Energy Bus.</p>	<ul style="list-style-type: none"> • I will work with the principals at each single gender site to identify a lead facilitator for the single gender program. At Middle School B, the lead facilitator will be the Magnet Lead Teacher. • I will meet monthly with the lead facilitators for two hours. During this time, I will share inspiration related to education, address pragmatic issues and new regulations from the state and federal government. The school leaders on my energy bus will have an opportunity to share needs and challenges, so that we can discuss dilemmas and offer solutions, as a group.
<p>Generate short-term wins.</p>	<ul style="list-style-type: none"> • The guiding coalition will establish specific checkpoints which are short-term goals. • The guiding coalition will lead the school in a celebration whenever a goal is met along the road to change. This should happen several times during each school year with the appropriate stakeholder group.
<p>Maintain momentum.</p>	<ul style="list-style-type: none"> • I will meet regularly with the guiding coalition to make sure that all the identified changes are part of the school culture in such a way that they can withstand changes in students, parents, teachers, and school leaders.
<p>Make the change permanent.</p>	<ul style="list-style-type: none"> • The guiding coalition must have strategies in place to ensure that new students, new parents, and new faculty members are indoctrinated into its culture in a seamless manner. • All the values and expectations that are identified in the Vision of Success will be demonstrable at this point, and all stakeholders will be able to see that the new way is superior to the old. • Teachers will readily see that students drive the rigor and engagement at Middle School B. They will notice quickly that project based learning is a way of work. • Likewise, students will acclimate naturally to a school where they are expected to take ownership of their learning, to identify problems they want to solve, and to solve them. • Parents will understand the school's strategies to meet the specific learning needs of boys and how project based learning fits into those strategies.

APPENDIX D

Single Gender Programs
Annual Review of Program
2012-2013

This is a copy of the ARP form the district used to collect data for School Year 2012-13.
It is the same form I will use, if I gather further data.

This data should be submitted by June 30, 2013.

Name of Person Completing Review:

Rationale for Single Gender Program as stated on the Program Creation Form:

**ARP Table 1
Program Design Table**

School Name:		School Principal:				
2012-13	Male students only		Female students only		Co-Ed students	
Grade/Course	of Classes/ Sections	of Students	of Classes/ Sections	of Students	of Classes/ Sections	of Students

Supporting data – Compare the students in Single Gender classes to others in your school and district-wide:

ARP Table 2

Attendance	Average Attendance Rate
School-wide	
Co-gender - KG	
All Female - KG	
All Male - KG	
Co-gender - Grade 1	
All Female - Grade 1	
All Male - Grade 1	
Co-gender - Grade 2	
All Female - Grade 2	
All Male - Grade 2	
Co-gender - Grade 3	
All Female - Grade 3	
All Male - Grade 3	
Co-gender - Grade 4	
All Female - Grade 4	
All Male - Grade 4	
Co-gender - Grade 5	
All Female - Grade 5	
All Male - Grade 5	
Co-gender - Grade 6	
All Female - Grade 6	
All Male - Grade 6	
Co-gender - Grade 7	
All Female - Grade 7	
All Male - Grade 7	
Co-gender - Grade 8	
All Female - Grade 8	
All Male - Grade 8	
Co-gender - Grade 9	
All Female - Grade 9	
All Male - Grade 9	
Co-gender - Grade 10	
All Female - Grade 10	
All Male - Grade 10	

Supporting data – Compare the students in Single Gender classes to others in your school and district-wide:

ARP Table 3

Discipline	Number of Referrals	Number of In School Suspensions	Number of Out of School Suspensions
School-wide			
Co-gender - KG			
All Female - KG			
All Male - KG			
Co-gender - Grade 1			
All Female - Grade 1			
All Male - Grade 1			
Co-gender - Grade 2			
All Female - Grade 2			
All Male - Grade 2			
Co-gender - Grade 3			
All Female - Grade 3			
All Male - Grade 3			
Co-gender - Grade 4			
All Female - Grade 4			
All Male - Grade 4			
Co-gender - Grade 5			
All Female - Grade 5			
All Male - Grade 5			
Co-gender - Grade 6			
All Female - Grade 6			
All Male - Grade 6			
Co-gender - Grade 7			
All Female - Grade 7			
All Male - Grade 7			
Co-gender - Grade 8			
All Female - Grade 8			
All Male - Grade 8			
Co-gender - Grade 9			
All Female - Grade 9			
All Male - Grade 9			
Co-gender - Grade 10			
All Female - Grade 10			
All Male - Grade 10			

Student Achievement – use as many of the following data sets as applicable:

ARP Table 4

State Assessment Test	Reading Percent of Students achieving level 3 or higher		Math Percent of Students achieving level 3 or higher		Science Percent of Students achieving level 3 or higher		Writing Percent of Students achieving level 3 or higher	
	SY 2011- 12	SY 2012-13	SY 2011-12	SY 2012-13	SY 2011-12	SY 2012-13	SY 2011-12	SY 2012-13
School-wide								
Co-gender Grade 3								
All Female Grade 3								
All Male Grade 3								
Co-gender Grade 4								
All Female Grade 4								
All Male Grade 4								
Co-gender Grade 5								
All Female Grade 5								
All Male Grade 5								
Co-gender Grade 6								
All Female Grade 6								
All Male Grade 6								
Co-gender Grade 7								
All Female Grade 7								
All Male Grade 7								
Co-gender Grade 8								
All Female Grade 8								
All Male Grade 8								
Co-gender Grade 9								
All Female Grade 9								
All Male Grade 9								
Co-gender Grade 10								
All Female Grade 10								
All Male Grade 10								

Student Achievement – use as many of the following data sets as applicable:

ARP Table 5

SAT10	SAT10 Reading Results Reported by NPR		SAT10 Math Results Reported by NPR	
	SY 2011-12	SY 2012-13	SY 2011-12	SY 2012-13
School-wide				
Co-gender - KG				
All Female - KG				
All Male - KG				
Co-gender - Grade 1				
All Female - Grade 1				
All Male - Grade 1				
Co-gender - Grade 2				
All Female - Grade 2				
All Male -Grade 2				

Student Achievement – use as many of the following data sets as applicable:

ARP Table 6

Formative Tests SY 2012-13	Form A High Likelihood of Level 3+	Form B High Likelihood of Level 3+	Form C High Likelihood of Level 3+
School-wide			
Co-gender - KG			
All Female - KG			
All Male - KG			
Co-gender - Grade 1			
All Female - Grade 1			
All Male - Grade 1			
Co-gender - Grade 2			
All Female - Grade 2			
All Male - Grade 2			
Co-gender - Grade 3			
All Female - Grade 3			
All Male - Grade 3			
Co-gender - Grade 4			
All Female - Grade 4			
All Male - Grade 4			
Co-gender - Grade 5			
All Female - Grade 5			
All Male - Grade 5			
Co-gender - Grade 6			
All Female - Grade 6			
All Male - Grade 6			
Co-gender - Grade 7			
All Female - Grade 7			
All Male - Grade 7			
Co-gender - Grade 8			
All Female - Grade 8			
All Male - Grade 8			
Co-gender - Grade 9			
All Female - Grade 9			
All Male - Grade 9			
Co-gender - Grade 10			
All Female - Grade 10			
All Male - Grade 10			

Student Achievement – use as many of the following data sets as applicable:

ARP Table 7

End of Course Exams	Course Title		Course Title		Course Title		Course Title	
	SY 2011-12	SY 2012-13						
School-wide								
Co-gender Grade 6								
All Female Grade 6								
All Male Grade 6								
Co-gender Grade 7								
All Female Grade 7								
All Male Grade 7								
Co-gender Grade 8								
All Female Grade 8								
All Male Grade 8								
Co-gender Grade 9								
All Female Grade 9								
All Male Grade 9								
Co-gender Grade 10								
All Female Grade 10								
All Male Grade 10								

ARP Table 8

Summary Analysis

Please write a brief summary that explains how your data relates to your educational rationale for implementing this program.

Anecdotal Data

Please describe the success of your Single Gender (SG) Program this year. Examples may include, but are not limited to:

- Percent of SG participation in Science/STEM Fair
- Character Development initiatives and results
- Number of SG students winning academic awards
- Innovative teaching strategies implemented in SG
- Parent satisfaction with SG Program
- Other evidence of success

APPENDIX E

Interview Questions for School Principal

- 1) What improvements in your single gender program do you believe are needed to improve student achievement as measured by FCAT scores and state assigned school grades?
- 2) How can I improve the way I design the Annual Review of Program to enable you to provide a true picture of your single gender program's effectiveness and areas for improvement?
- 3) What suggestions do you have on how I can incorporate qualitative data, along with quantitative data, into district reports to show growth of your students in single gender classes in ways that are not measured on standardized tests and other data collection mechanisms?

APPENDIX F

Interview Question for Academic Coaches and Teacher Leaders

What improvements in your single gender program do you believe are needed to improve student achievement as measured by FCAT scores and state assigned school grades?