

MIXED METHODS CASE STUDY OF CONSOLIDATION EFFECTS
ON A RURAL MARYLAND SCHOOL

By

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Abstract

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School consolidation is a controversial and difficult process throughout the United States that will continue well into the future as buildings age, populations shift, and finances dwindle. Therefore, any data that offers a clearer understanding of the change process and overall effects of school consolidation can hold promise to ensure the most positive outcomes for all stakeholders. The purpose of this study was to provide data and information related to the impact and acceptance of a rural school consolidation on students, teachers, and community members.

This mixed methods case study focused on a specific school consolidation involving two small, rural high schools in Maryland in order to determine the process used in this situation in comparison to components of a change theory as well as to understand the effects of the consolidation on various stakeholders. Through use of surveys, interviews, document reviews, and observations, qualitative data were gathered and analyzed to determine how the process of the consolidation was conducted as well as the impacts of consolidation on students, teachers, and community members. This data was then viewed through the lens of change theory. In addition, quantitative data of five

years of state assessment proficiency rates from each closing high school and the new high school were tested with a Welch's t -test and analyzed to determine consolidation effects on student achievement. The data analyzed indicated statistically significant findings. Results show that leadership in promoting components of change theory, such as strategy, purpose and alteration of behavior patterns as well as shared diagnosis and mutual engagement, is necessary when consolidating rural schools. Furthermore, the results indicate that concordant communities and a positive learning environment are possible outcomes in a school consolidation.

Keywords: rural schools, school consolidation, case study, mixed methods, change leadership

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Chapter 1 – Introduction

Schools in rural communities once thrived when manufacturing companies' operations, based in wide-open spaces, and family farms were instrumental in charging local economies. However, current times reflect a shift of economic growth to urban and suburban areas that causes many rural communities to struggle. As the global economy steadily grows, and suburban United States populations along with it, many of these small, isolated communities find themselves losing members who migrate to better, and often more stable, employment opportunities far from home, forcing school policymakers to consider numerous major issues. With such changes in population, outdated buildings with little capacity for high-technological resources, and pressed financial budgets, many school districts are pushed to desperate measures to meet the needs of their schools and educational budgets. School consolidation is often the option that logically makes sense.

Yet, the resistance of a community to close its school can be a serious constraint to the plans of any administrator or policymaker. Research shows that consolidation often affects stakeholders negatively because the social aspect of many communities is school centered (Noble, 2010). Not only are students of the closing and consolidated schools affected, but also other stakeholders, such as administrators, teachers, support staff, custodians, cafeteria workers, bus drivers, business owners, parents, alumni, and nearby school communities as well. Moreover, effects of such a seemingly micro alteration in the educational system of a small community will not only be economic, but will also be political, social, and even cultural. However, once a school district determines that the course of school closing and consolidation is the most appropriate option, it must be a careful and cautious process that is prudent to ensure that a quality education program

trumps the preservation of tradition and location of a rural school.

Spector's (2010) "Organizational Change" theory, which explains specified steps to lead, facilitate, and manage change effectively, will be used as a framework to investigate a consolidation effort in a rural Maryland community. Spector posits that individuals are comfortable maintaining the status quo, but when change is imminent, a leader must take steps to align stakeholder behaviors and perceptions with the organization's goal. His change theory also recognizes the importance of stakeholder support to the achievement of the vision, and therefore, requires leaders to use strategic plans to allow insight into the value and purpose in adjusting behaviors, beliefs, and perspectives of all stakeholders. In a situation involving school consolidation, which requires closure of an important community component, leaders must take special care and consideration to align stakeholder vision and mission with that of the organization.

This case study focuses on a consolidation effort that began in a rural Maryland county in the 2001-2002 school year when a recommendation was made to close and merge Public High School 1 and Public High School 2, sending the students to a newly built high school. Though financial issues drove the effort, the outdated and dilapidated condition of Public High School 1, as well as the decreasing school populations in both school communities, created an environment in which change was inevitable. The process took approximately 5 years, and in the fall of 2007, the New High School was filled with the students from two high schools: Public High School 2, which became a middle school, and Public High School 1, which was razed. This consolidation had the potential to be extremely contentious due to deep-seated emotional connections between community members and schools, but overall, the transformation went smoothly, and the

New High School's curricular and extra-curricular achievements continue without interruption, and often with more positive results.

Statement of the Problem

As the United States focuses on school effectiveness and efficiency based upon budget balance and visible college and career readiness of the students, rural districts with decreasing populations and aged school buildings often find consolidation to be a viable solution to their budget concerns. According to Duncombe and Yinger (2010), a primary purpose of school district consolidation has been an attempt to reduce cost of district operations. Yet, the reaction of stakeholders to the idea of closing their beloved schools and consolidating with another, especially if that school is a rival, often involves resistance and angst. Policymakers and leaders in a school district may fail to understand the local culture, resulting in resistance to the merger from community members. Even in consolidated schools, true unification may be difficult to achieve because of individuals' loyalty to closed schools. This can directly affect the academic and social environment of the consolidated school. In fact, history and even current events have shown that many times, consolidation, based on the premise of benefiting the students and community members, fails to deliver on that promise (Noble, 2010; Ackell, 2013).

This mixed methods case study addressed the problem of the need to understand how to consolidate rural community schools in an amiable manner that will result in a quality educational atmosphere and experience. Taking a closer look at the rural school consolidation that resulted in a New High School in Maryland offers insight about the overall effects of a consolidation on student achievement and on school communities. In addition, this study may also assist school leaders to understand how a rural consolidation

process can be carried out to promote unification between consolidated school communities, reducing stakeholder resistance and community angst.

Purpose and Significance

The purpose of this study was to provide data related to the impact and acceptance of a rural school consolidation on students, teachers, and community members. For this study, the term *stakeholders* referred to school leaders, faculty, students, parents, and community members. This study may provide information and insight into the process to consolidate schools in a rural area with average to high levels of poverty in a congenial manner that would result in a positive learning environment and experience. Having a greater understanding of the effects and process of school consolidation can inform school leaders about challenges, opportunities, and expectations of such an effort. In addition, this study may provide recommendations that can contribute to a framework for district decisions regarding how to implement a change once a school consolidation option has been identified as a necessary action.

Analysis of data and findings of this study provided an insight into a rural school consolidation with average to high poverty levels that resulted in positive student achievements and with amicable communities. Stakeholders of both the newly consolidated school along with the entire local school system may find this study useful in retrospect to understand the process of the school consolidation. This research may assist school administrators and districts with similar demographics who are considering a school consolidation. In addition, this study may help provide proactive measures to overcome resistance for representatives of districts moving forward with consolidation of schools. With a greater understanding of how to best handle the angst and anxiety

associated with school consolidation, perhaps these efforts can be dealt with in a manner to achieve positive educational environments and experiences.

Research Questions

The following research questions were designed to develop an understanding of the effects on stakeholders and the process of consolidation that occurred in a rural Maryland school district. The central question in this study was as follows: Can consolidation of two rural schools, resulting in a new entity, offer a better educational experience and can such a controversial process be completed with concordance?

These additional questions assisted in guiding the study:

1. How did the rural high school consolidation affect student curricular and extra-curricular opportunities?
2. How did the consolidation affect student achievement?
3. How did the process used to create a change in the schools and their communities conform to prevailing change theory concepts?
4. How did stakeholders perceive the outcome of the consolidation?
5. What leadership strategies were used to facilitate this consolidation?

Assumptions

This mixed methods case study focused on a school consolidation involving two high school communities in rural Maryland. One assumption for this study was that school consolidations are optional district reforms that are determined by policymakers at the local level rather than the state or federal level. Furthermore, it was assumed that rural school consolidations will persist because population shifts to urban and suburban areas regularly occur, creating situations for financial constraints for rural school districts.

Unless policymakers can determine a way to stimulate and revive rural economies, individuals and families will continue to migrate to other places that offer stable and solid employment. Also, it was assumed that rural school consolidations will continue to create community angst and resistance. Therefore, the process will remain controversial, and the need for leaders to understand how best to proceed with such an effort must be clear.

Limitations, Scope, and Delimitations

This case study was limited to the opening of a new school in Maryland and the two rural high schools which closed as a result of the consolidation. Therefore, the limitation of time was real; with the New High School in its sixth year, the time limit for data ranged from the school years of 2008–2013 for the New High School, and for the school years of 2003–2007 of Public High School 1 and Public High School 2 to compare the difference in student achievements.

The scope of this study in terms of time spanned nearly 14 years, beginning when the consolidation of the two schools was first considered. The two high schools, Public High School 1 and Public High School 2, closed and the New High School opened in 2007. In terms of audience, the scope was set for school boards, administrators, superintendents, principals, faculty, and community members who might have a need to better understand how to consolidate schools effectively in a rural area with average to high poverty thresholds to produce positive educational outcomes.

This case study was specific in terms of demographics, and these characteristics must be kept in mind as delimitations. According to the United States Census (2010) data, the location for which this case study was conducted is a rural area with an 89% Caucasian population. The socio-economic groupings span from a high-poverty threshold

to an upper middle class status, though the percentage of the population who lives below the poverty level is 14.9 (U.S. Census, 2010). In terms of replicating the study, the delimitations may be limited to rural areas, as well as areas without racially and ethnically diverse populations and/or homogeneous socio-economic groupings because it focused on a small, rural school district in Maryland. Furthermore, this study did not focus on the variables, likelihood, or the process of determining if school consolidation is appropriate for a given district.

Definitions

Consolidation is the combining of two schools that results in one larger school. In many cases, one of these schools will close and the other accepts the students from the closed school. In this study, both sending schools were closed and a new facility constructed. The three most often cited factors for closing schools are financial constraints, aging buildings, and dwindling populations.

Economy of scale refers to the reduction in cost per unit resulting from increased production, which is due to operational efficiencies. In schools, economies of scale can be accomplished because as production increases due to larger schools, the cost of producing each additional unit will drop.

HSAs are the High School Assessments, Maryland's mandated standardized tests that all high school students must take in order to graduate. The assessments focus on four content areas: English 10, algebra, biology, and government. Most students initially take these tests in the 9th or 10th grade and must show proficiency on each test to be eligible for a Maryland high school diploma. If a proficient score on a given test is not met, the student must retake the test until a passing score is achieved.

Poverty thresholds is a term that refers to a set of money income thresholds used by the US Census Bureau that vary by family size and composition to determine poverty levels. If a family's total income is less than the family's threshold, then that family and every individual in it is considered in poverty. The official poverty thresholds do not vary geographically, but they are updated for inflation using Consumer Price Index (CPI-U). The official poverty definition considers monetary income before taxes and does not include capital gains or noncash benefits (such as public housing, Medicaid, or food stamps).

Proficiency rates are the percentage of students in a testing group who have achieved a passing score on one of the mandated standardized HSAs given in the content areas of English 10, algebra, government, and biology. These rates are a matter of public record available on the MDreportcard.com website. For this study, only the rates for the English 10 and biology HSAs will be used.

Rural communities as defined by the US Census Bureau are areas with fewer than 1,000 people per 2.6 square kilometers (one square mile), and surrounding areas with fewer than 500 people per 2.6 square kilometers (one square mile). Typically, rural areas are geographically secluded communities with low population density who are generally devoted to agriculture. Most rural communities are not urbanized; they are made up of small towns.

School culture refers to the values, behaviors, and attitudes of the people in a given school community.

Stakeholders is a term that refers to the school leaders, faculty, staff, students, and all community members of a consolidated school effort.

Chapter Summary

As standardization, accountability, and transparency become further emphasized in educational organizations, small-town communities with stalled economies, dwindling populations, and aged school buildings will need to be creative to balance budgets. For many of these rural districts, school consolidation will likely continue to be a solution in order to reduce cost per student and still provide a contemporary education. Because of this fact, a study such as this may be significant for those districts whose budgets cannot maintain the ever-increasing costs of educating in a technology-rich environment. The findings from this case study may provide valuable information for leaders who have already determined that school consolidation is necessary for their district. As learning is the central purpose of any educational organization, leaders may be able to use the findings from this study to make informed decisions to meet the best interests of the students as well as other stakeholders. Not only should every effort be attempted to create a consolidation that will positively affect stakeholders, but the implementation of the process must be handled appropriately to achieve an ideal learning environment and experience. The research framework for this study uses Spector's change theory to correlate the implementation of this school consolidation decision with prevailing effective change implementation tasks. This theory notes the importance of aligning stakeholder behaviors and values with that of the organization in order to achieve effective change (Spector, 2010).

Chapter 2 – Review of Literature

School consolidation causes significant adjustments in many peoples' lives, and in most cases, this change is unwelcome. Resistance, resentment, and community upheaval over anxiety relating to losing a vital piece of identity and way of life often prevail for considerable time periods following school closings and consolidations. Insight into a process used to implement a significant change dealing with what appears to be less difficulty and overall positive results should prove helpful information to those entertaining school mergers in the future. The stages of change necessitate engagement with all stakeholders and the offering of consistent opportunities to be heard and be involved in the decision-making process. Studied through the lens of change theory, a school consolidation showing lasting and successful change might give insight into how to transform the theory into successful practice.

Theoretical Framework – Change Theory

The change theory as described in Spector's *Implementing Organization Change: Theory into Practice* (2010) is one model of change used to understand and analyze effective change implementation. This model takes into consideration the role of employees, but for the purpose of this dissertation, that role will be adjusted to stakeholders (i.e. students, faculty, staff, and community members of schools affected by the consolidation). Spector (2010) focuses on change that can be understood as "strategically aligned alterations" (p. viii) in patterns of stakeholder behavior. Though change is usually a difficult process and often prone to resistance, when a change is determined to be vital to the existence and mission of the organization, it must, and can, be addressed in a manner that best ensures success.

When an organization discusses the possibility of a change, several aspects should be considered. If a variation from the normal routine is perceived as arbitrary or does not consider inputs from stakeholders, a positive outcome is unlikely. Spector (2010) notes that in order for an organizational change to be successful, it must have the following components:

1. *Strategy*, in order to align behaviors with renewed strategy and the requirements of outstanding performance
2. *Purpose*, in order to focus on interventions designed to respond to a dynamic environment
3. *Alteration of behavior patterns*, in order to target and motivate stakeholders in ways that are sustainable, adaptive to shifts, and will contribute to outstanding performance

Before contemplating a change, the organization must anticipate the reaction of its stakeholders. Because resistance and desire to continue with the status quo is a normal response of stakeholders to change, shared diagnosis and continuous engagement increase the likelihood of the change being accepted. The change model notes the importance of mutual engagement, which allows stakeholders to engage in dialogue that focuses on the need for change and the barriers to achieving the same (Spector, 2010). Such practice creates an atmosphere of openness and trust among all stakeholders and leaders. With mutual engagement from all affected, a shared diagnosis of the reason for change can be facilitated, hopefully aligning stakeholder roles with the change effort (Spector, 2010). Once shared diagnosis and mutual engagement are attained, the implementation of the change process can begin.

Perhaps the success of the change can be determined by how it is implemented into the organization. Even with mutual engagement, which must be maintained through the entire process, successful change is not guaranteed unless Spector's steps of his well-structured "Sequential Model of Effective Change Implementation" are followed. Those steps have the specified order:

Step 1: Redesign

Step 2: Help

Step 3: People Alignment

Step 4: Systems and Structures

In the first step, Redesign, new behaviors that are necessary to meet the organization's goal need to be shaped. This step is driven by leaders, although stakeholders must be engaged to build commitment and teamwork. The second step, Help, focuses on the creation of required knowledge and skills to enable the effective implementation of the change. This involves communication among stakeholders and leaders as well as opportunities to reflect upon and develop new behaviors that will allow for successful change. In the People Alignment step, leaders need to consider which people will best fulfill the various roles in the organization. Individuals whose skills and behavioral patterns align with the parameters of the change are selected and/or retained and become a key component of the process. The final step, Systems and Structures, involves the more formal aspects of redesign, like performance measures, relationships, and incentives. This step works to reinforce desired behaviors (Spector, 2010). Throughout the entire implementation process, mutual engagement must be maintained, and even at the formal end of the process, shared diagnosis must again be present. This

evolving interaction is key to stakeholder commitment and motivation throughout the entire change process.

Even with specific components defining change and a well-ordered implementation plan, an organization must consider some underlying, vital points for successful change. Spector (2010) describes the three key aspects to organizational change as the following:

1. *Strategic renewal*: dynamic environments require new strategic directions and approaches require new ways of thinking and acting
2. *Strategic human resource management*: human capabilities must be aligned with strategy to achieve and maintain outstanding performance
3. *Leadership*: change must be facilitated by leaders at all levels, both individually and collaboratively

In order to implement successful change, the members of the organization need to be aligned to the organization's mission. A mission, developed through mutual engagement, should focus on the determined change. In addition, all stakeholders should be committed and motivated to the change to see it carried out successfully. Finally, the leader must champion the new strategy, purpose, and behavior, thereby creating opportunities to encourage and maintain the change effort.

History

To gain a deeper understanding of the topic of rural school consolidation, it was necessary to research specific aspects of this controversial education issue. Though consolidation may seem a current tactic, its history in the United States spans beyond a century, and such insight from the past can serve to enlighten the present and future.

Also, knowing its likely causes as well as important considerations that may affect a school consolidation effort is vital to undertaking a study. Reviewing similar examples of school consolidation efforts can help a researcher to contrast and compare individual cases. In addition, having an understanding of how school consolidation is determined and handled by state regulations may create a clearer picture of the process a district must follow before and during consolidation. Finally, knowing the history of the actual case study district, including its past school consolidations, will serve to anchor the study in its proper context.

History of school consolidation. With aging buildings and changing demographics, school consolidation may seem a current issue. In reality, the idea of closing schools and combining school populations has been a reform strategy used for nearly 100 years. Duncombe and Yinger (2007) found that “...over 100,000 school districts have been eliminated through consolidation since 1938, a drop of almost 90 percent” (p. 342). School consolidation continues as a solution for school boards because it becomes a financial necessity for efficiency, and, although justifiable on its merits, it continues to elicit emotional responses.

Pre-World War II. In the early 1900s, Ellwood P. Cubberly, a former urban school superintendent, became the primary spokesman in support of school district consolidation in the United States (Cubberly, 1914). Cubberly (1914) believed that “bigger meant better” and that smaller schools and school districts not only failed to adequately use resources in regards to economies of scale, but they also did not prepare students for adult life. In Cubberly’s (1914) opinion, larger schools and school districts used resources much more effectively:

The rural school is today in a state of arrested development, burdened by educational traditions, lacking in effective supervision and controlled largely by rural people, who too often, do not realize their own needs or the possibilities of rural education. (p. 64)

Therefore, he believed it would be in the best interest of all educational organizations to optimize student preparation for the future by reducing the number of smaller schools through consolidation.

Aside from the belief that smaller schools were ineffective, technological changes, as well as downturns in the agricultural economy in the 1930s and 1940s created population shifts that decreased the overall number of rural pupils continuing to promote the idea of school consolidation (Fanning, 1995). With industry booming in urban areas and the need for human workers decreasing on farms, many families moved away from hometowns in rural areas to find available work in cities and their outskirts. This shift directly affected both rural and urban schools and their populations. By 1940, the overall number of schools in the U.S. had decreased by 69 percent, but student enrollment had increased by 70 percent (Wolk, 2002). The reality was that many districts were closing their smaller schools and creating larger buildings for students to attend.

Post-World War II. With views of education echoing those of Cubberly, James Conant (1959), a retired Harvard chemistry professor and administrator, argued that only schools with a graduating class of at least 100 students offered quality educations. He recommended reorganization of American education by reducing the number of small high schools in order to improve international competitiveness. As Conant gained influence, no doubt through his titles as president of Harvard University and later as the

first chairman of the National Science Foundation, his advice was heard across the nation, and many small, rural high schools proceeded to close and consolidate (Spring, 1990; DeYoung & Howley, 1990). According to DeYoung and Howley (1990), this closure and consolidation took place “in the name of avoiding waste and providing a technically better sort of schooling in the national interest” (p. 70). With the purpose of creating a more reputable American workforce, school districts followed Conant’s view that bigger is better.

The reform efforts to promote larger schools truly came alive around the years involving Russia’s *Sputnik I* launch and the Cold War (Bard, Gardener, & Wieland, 2006). In 1958, Congress passed the National Defense Education Act (NDEA), mainly in response to *Sputnik I*, which emphasized programs that were considered essential for controlling and developing human resources for the Cold War (Spring, 2011). Such programs could be easily implemented in large schools, generally found in urban or suburban areas due to population, and were touted as models that constitute effective and efficient schools. Smaller schools, like those found in rural areas with sparse enrollments, were considered to be lacking in knowledge in terms of what was best for education (Bard, et al., 2006). Reformers began to push the concept of making rural schools look more like urban schools. The solution was to make rural schools “larger, bureaucratized, run by educational professionals rather than locals, and informed by the latest pedagogical knowledge” (Schafft & Jackson, 2010, p. 2). The ideal of redistricting, closing, and consolidating rural schools to not only create atmospheres more conducive to effective learning but also to make students competitive with international counterparts became widespread.

Twenty-five years later, the influential federal report, “A Nation at Risk,” continued to promote school consolidation efforts through prescribed national goals for education. According to this 1983 report that blamed America’s difficulties on public schools, a chief national goal of education was to produce a work-force able to help the United States remain economically competitive in the global economy (Spring, 2011). A second report, “Action for Excellence,” also assisted in adjusting the day-to-day operations of educational institutions to run more like businesses. Also released in 1983, this report called for “closer relationships” between American businesses and the schools (Spring, 2011). This was an opportunity for lucrative business leaders to gain influence and dominate over many decisions regarding education well into the future. By this time period in the United States, the labor market had drastically shifted “from predominantly agrarian and industrial production work to a society dominated by service occupations such as clerical and sales workers, technicians, managers, and professional workers of all types” (Miller, 1993, p. 86). Accordingly, the population growth occurred in the urban and suburban areas in which those businesses were located, which meant that rural areas found their numbers drastically decreasing. With federal reports allowing business leaders influence and direct involvement in the design and delivery of education, school mergers were touted to be the logical choice for communities with decreasing populations and outdated school buildings.

The new millennium. As policymakers consider the issues of schools’ failure to produce academically-prepared citizens and inability to meet annual budgets, various ways to overcome the challenges have been considered. In many states, legislative efforts and incentives to encourage consolidation have become the answer. Since 2001, Arizona,

Arkansas, California, Montana, Nebraska, South Dakota, and Virginia have all passed statutes or regulations addressing consolidation, while other states, like Massachusetts, Illinois, and Iowa offer funding for restructured systems (Bard, et al., 2006; Cox & Cox, 2010). The Maine state government mandated a plan to reform their educational systems only a few years ago.

The state of Maine, which is mostly made up of small, rural districts, aggressively addressed the issue of academically ill-prepared youth and the inability to meet annual budgets. In 2007, the governor of Maine, with the support of the legislature, passed a law regarding consolidation with the intent to consolidate their 290 school districts to a mere 80 by following this objective: schools must work with other units to reorganize into larger, more efficient units, or where expansion of the unit would be impractical or inconsistent with state policy, reorganize their own administrative structures to reduce costs (Spradlin, Carson, Hess, & Plucker, 2010). Recognizing the importance of local governance, the state mandated that all reorganization plans require voter approval (Spradlin et al., 2010). With the constituents having control over how the consolidation took place, local ownership could allow the process to proceed with less frequent growing pains.

After much debate, Maine's amended legislation was passed in 2009. As noted by Spradlin et al. (2010), this amended legislation affecting all Maine school districts was comprised of four parts:

1. To mandate the minimum school district enrollment be 2500 students, except "where geography, demographics, population density, transportation challenges, and other obstacles" make the 2500 student

minimum impractical, in which case, Regional School Units of at least 1200 must be created

2. To allow schools to propose alternative organizational structures (AOS), exempting the school from the mandate, but requiring a plan to improve efficiencies
3. To exempt high-performing districts
4. To exempt “doughnut hole” districts (districts that have been rejected by all surrounding districts for consolidation plans), though such districts must document their consolidation efforts and submit a plan to address projected budgets shortfalls. (p. 3)

Disadvantages associated with such an effort are the potential creation of loopholes for those districts not wanting to comply with the policy. As Spradlin et al. (2010) note in the Maine consolidation, many larger cities and wealthier communities that “did not want to share resources with poorer neighboring districts were able to escape consolidation through the alternative plan provision” (p. 3). This provision created automatic advantages for some communities to keep their schools open and not comply with the policy. In addition, Spradlin et al. (2010) cite that in the state of Maine, “state aid withheld from districts that do not have approved regional plans will be paid instead to districts with voter-affirmed consolidation plans” (p. 5). The problem with this sanction is that supposed state funding for equity of resources and learning environments for students may actually not be an outcome of the consolidation legislation. If one school receives no funding as a result of not accepting the terms of the policy, and another receives double, the problem of uneven availability of quality resources and

overall education to students arises.

Reasons. History has shown that school consolidation is often a last resort for many school districts, and the decision is often based on a multitude of factors. Typically, one of these reasons tends to deal with finances. Yet, a district's decision to close and consolidate schools must be one that comes about as a result of careful investigation into all the alternatives and costs.

Financial. The financial benefits of a consolidation in rural school districts can be significant. In regards to budget issues, larger schools can decrease the overall cost of education due to economy of size. According to Duncombe and Yinger (2001), the "optimal" (meaning lowest-cost) district enrollment is "approximately 6,000 students for total costs (p. 7). For rural areas struggling with meeting educational budgets, consolidation can be a means of offsetting costs due to economies of size. For example, in the state of New York, between 1985 and 1997, a study completed by Duncombe and Yinger (2010) noted the cost savings of 12 pairs of school districts that used district consolidations resulted in a decline of annual operating spending on a per pupil basis. The evidence from the study shows overall cost savings between 14 and 44 percent, depending on the sizes of the consolidating districts and the time horizon (Duncombe & Yinger, 2010).

Overall, many funding inefficiencies exist in educational situations, such as "far too many and far too costly administrative units" (Dodson, 2004, p. 271). With a consolidation of schools, administrative costs can be lowered because there are fewer administrators and/or specialized instructors required. For example, Duncombe and Yinger (2001) found that in New York State, one-half of the cost decrease in

consolidation was due to administrative costs, which dropped from \$1,124 per pupil with 50 pupils to \$193 per pupil with an enrollment of 1,500.

Proponents of larger schools claim that positive effects of consolidation on the community are plentiful. For those schools with large student populations, more funding from the federal and state governments are available than to schools with small enrollments (Haddad & Alsbury, 2008). Additional money, new supplies, equipment, and a variety of elective courses would create a more rigorous high school experience. Availability of funds can also have the effect of attracting and securing more effective faculty members. Finally, studies have shown that large schools have greater parent involvement because of a larger pool of parents from which to recruit (Viadero, 2006). It follows then that the savings created by consolidation can be significant and positively impact the school budget, making the process attractive for several reasons to include finances.

Yet, some financial disadvantages in school consolidation must also be considered. Duncombe and Yinger (2007) found that capital costs shift upward substantially after consolidation (p. 369). They theorize that this may be due to the initial increase in state aid that is provided for school construction which abates after construction is complete. Because consolidation is traditionally supported by state funding, post-consolidation capital spending must be monitored to see the actual impact on the expenditure side of the budget. Close monitoring of current and future budgets must be used to ensure that consolidation and the state aid given to support it “do not result in capital projects that are not cost effective” (Duncombe & Yinger, 2007, p. 370). In order to show cost savings, the costs associated with consolidation must be determined

over time and not merely in the short-term.

Population shifts. In regard to the economic state of many rural areas, Carr (2010) describes the continued downsizing of manufacturing jobs and closing of family farms, which leave a handful of jobs that often pay less and have fewer benefits, as a “hollowing out of the middle” (p. 2). As rural employment opportunities decline, the population also decreases, leaving the remaining population dependent on services outside their communities. Such services as hospitals, banking, education, and privately owned local businesses close or relocate to areas with greater populations. Because of this situation, the continual reduction of children in grade levels create a situation where there are not enough students to keep a local school viable and consolidation seems to be the only answer. Rural community members must often go outside their own geographic locale for work, and their children must as well, in order to be educated in an academically rigorous environment that is financially prudent. Quite often, this loosens the bonds that traditionally tie people together, thus creating for them, the loss of a sense of community (Miller, 1993). As the reduction of family-sustaining jobs and business opportunities in an area continues, the number of school age children attending the local schools continues to decrease as well and the phenomenon goes on.

While rural schools themselves have come under criticism for not producing academically-prepared citizens, districts in which they are located have also come under scrutiny for their economic efficiency, or lack thereof. With declining enrollments offsetting an optimal economy of scale juxtaposed to overall lower property values from which to receive funding, rural areas often struggle to meet annual budgets (Strange, 2001). Population shifts to places where economic opportunities are more plentiful create

an ongoing outflow of students with little or no reduction in the cost of operations, thus increasing per pupil costs to operate. As a result, school administrators are required to balance the educational requirements of students while maintaining a cost that is acceptable to the public, and often this means exploring options to increase efficiency (Zimmer, DeBoer, & Hirth, 2009). Though cutting costs, programs, and even personnel positions are initial options, eventually more drastic solutions are often needed. Many state and local policymakers consider ways to overcome the challenges of budget shortfalls by decreasing the number of rural school districts (Bard, et al., 2006). In effect, schools close, districts consolidate, and students find themselves in unfamiliar environments so that financial parameters set by policymakers might be met.

Aging buildings. Individual state governments remain the primary funding sources for educational organization and frequently will use monetary resources as a way to influence local decisions. In Maryland, the law regarding renovations for school buildings is specified and well-defined. Local school districts considering such construction must meet these requirements in order to acquire monies for large capital expenditures. The Aging Schools Program 23.03.02.19 in the Code of Maryland Regulations (1982) has funding for Local Education Agencies (LEAs) to fund capital improvements, repairs, and deferred maintenance of school buildings or building components that are 16 years old or over, yet evaluation of the request will be determined using the following factors:

1. Type of work
2. Age of the building or building component
3. State capital improvement program

4. Local capital improvement program
5. School's current and projected enrollments

For many rural school districts, especially those with outdated buildings in need of repair or renovations, the funding surpasses local budgets. Often, state funding will come only after much review of facts and plans, and for many rural areas with decreasing populations, budget woes, and outdated buildings, closing a school and sending the students to another school is often the only possible choice.

Transportation. An important consideration of school consolidation is the issue of transportation. A drawback of mandating school consolidation is the potential for adverse transportation issues. As reported by Bard, Gardener, and Wieland (2006), consolidation not only negatively affects transportation costs, but also the scholastic achievement levels of students who ride buses for longer periods of time. In a study, it was found that for every hour riding a school bus, fourth-grade students lost an average of 2.6 points on a scored assessment (Bard et al., 2006). Financially, however, some research indicates that the financial aspects of transportation costs in a consolidation effort are minimal or, in the long run, non-existent. As Silvernall, Gritter, and Sloan (2007) revealed in their research of consolidated districts in the 2004-05 school year, “when adjusted for inflation, gross student transportation operating expenditures were found to increase by an average of 3.8% in years preceding consolidation, 0.9% in the year immediately following consolidation, and 3.7% per year thereafter” (p. 3). The transportation costs evaluated in the report not only figured in the daily cost of transporting pupils to and from school, but also for vocational and extra-curricular purposes. At least from this study, transportation costs not only failed to significantly

increase, but merely increased minimally for a short period of time, returning to original costs before the consolidation.

In Maryland, state law requires that school bus routes for students may not exceed a one-way maximum commute time of sixty (60) minutes or a commute distance of forty-five (45) miles, whichever is less (*Slider et al. v. Board of Education Allegany County*, 2000). For many rural areas with limited road availability, distant access to student housing, and few schools within districts, complying with such busing legislation can prove to be difficult as well as ineffective due to an increase of costs based on the number and types of vehicles needed to facilitate the mandate.

Considerations. History has shown that school consolidation creates considerable angst and resistance in communities where the school is going to be closed. Because of this, a district's decision to close and consolidate schools must be one that comes about as a result of careful investigation of not only all alternatives and costs but also effects and consequences.

School consolidation effects on students. An important group to consider in the consolidation of schools is students because school size can impact learning, extra-curricular participation, and socialization. As Viadero (2001) notes, schools with less than 400 students are considered small, and ones with enrollments of over 1000 students are very large. Most small schools are located in rural areas, whereas the large schools are typically found in highly-populated urban settings. She further explains that schools with enrollments between 600 and 900 are "ideal" based on data from reading and math tests (Viadero, 2001). In any educational setting, because the students are directly affected and encompass the purpose of education, they must be taken into account before

any decision is made.

The large school scenario gives many options not available to small school students. A variety of clubs and sport teams, like lacrosse, rugby, and table tennis, becomes available with large schools (Nitta, Holley, & Wrobel, 2010). In addition to more extra-curricular activities, large schools also offer a broader choice in curriculum offerings (Haddad & Alsbury, 2008). Such schools can offer electives, like journalism or orchestra, and even a variety of more rigorous and academic opportunities, like AP and college-prep or high school classes that give college classes (Nitta, Holley, & Wrobel, 2010). Consequently, large schools have the capacity to offer a rigorous high school academic experience for all students, regardless of interests or academic abilities.

Also, large school proponents have shown these schools benefit students through the larger availability of extra-curricular programs. Because of the greater number of athletic opportunities, student athletes have more opportunities to find the individual sport in which to excel rather than be forced into participating on an available team. Moreover, large schools with strong athletic programs may keep marginal students in school because of the love of a sport. In addition, achievement on such teams might generate scholarships for those athletes who may not have other opportunities to attend college (Viadero, 2006).

In contrast to the benefits associated with larger schools, there are, however, many positive attributes for students who attend a small school. Small school proponents believe students feel a sense of belonging in an intimate educational environment because their presence is more acknowledged (Cutshall, 2003). Furthermore, students feel safer in small schools where there are often fewer behavioral problems (Viadero, 2001). In small

populations, the students frequently have known each other most of their lives, which not only gives a sense of comfort and safety, but an awareness of deviant actions and troublesome situations. Many times, students veer away from aberrant behavior and focus instead on building their own personalities that are readily accepted in a small-group setting (Viadero, 2001). Research shows that small schools enable students to participate more, both in the classroom and in extra-curricular activities (Viadero, 2001). According to this point of view, small schools promote environments conducive to student achievements.

The benefits of small schools are universal, affecting all social classes in terms of student accomplishments. Besides academic success in the achievements of upper- and middle-class children in small schools, students from low-income families also have increased amounts of achievements than similar-status students in large schools (Viadero, 2001). In a report from the Center for the Study of Education Policy (2009), a strong negative correlation exists between size and student achievement for low-income populations, and it also indicates that student achievement in smaller schools is equal to or better than that of students in large schools. In fact, none of the research finds student achievement at large schools to be superior to that of small schools. Furthermore, the report (2009) found that achievement effects are “especially strong for low-income students, who score higher on standardized tests when they attend small schools” (p. 4). Overall, small schools have higher standardized test scores, especially in math/reading (Cutshall, 2003; Viadero, 2001).

Students who attend smaller schools appear to thrive in postsecondary education, yet another positive long-term effect of the small school educational experience. Besides

lower dropout rates and higher graduation rates, small schools produce graduates who are more likely to become involved in further educational endeavors (Center for the Study of Education Policy, 2009; Cutshall, 2003). Small schools seem to promote more widespread student success. In fact, in terms of empirical literature concerning student academic achievement in consolidated schools/districts, results show that "...larger schools produce lower student performance and deter learning" (Cox & Cox, 2010, p. 3).

School consolidation effects on teachers. Along with students, faculty members would also feel the outcomes of school consolidation because their work environments can be altered. The ability for teachers to grow professionally is another benefit of large schools. With greater numbers of teachers in a large school, faculty members have benefits directly associated with teacher collaboration and team teaching (Cutshall, 2003). More opportunities exist for faculty to plan lessons together or discuss successful instructional strategies. Also, large schools offer teachers greater schedule flexibility in choosing what they want to teach with a greater number of course options (Haddad & Alsbury, 2008). Larger schools, with significantly greater resources, can offer better professional development opportunities to help its faculty achieve stronger pedagogical skills (Nitta, Holley, & Wrobel, 2010).

Advocates for small schools argue that individual classroom teachers may have less stress in their teaching environments. Some research shows that these teachers have fewer discipline problems in the classroom (Cutshall, 2003; Jacobson, 2001). The absence of negative behavioral issues would enable teachers to spend more time teaching and less time handling disciplinary situations. Because of the ability to focus on the actual content, teachers in small schools can more easily spot students who struggle and

tailor instruction specifically to fit those students (Jacobson, 2001). Furthermore, small schools allow teachers greater flexibility in scheduling individual lessons as well as quicker responsiveness in dealing with student needs (Cutshall, 2003).

More than any other groups, teachers may have greater anxiety at the utterance of the term consolidation. In many situations, closing and consolidated schools means that fewer staff members are needed. Therefore, the possibility of reductions in staff or even involuntary transfers will likely occur (Nitta et al., 2010). For those staff members who are selected to be a part of the consolidated school, many may be confronted with issues normally associated with first year teachers: new schedules, new courses, new environments, and even new colleagues. Rather than feeling confident in their new educational setting, faculty may find feelings of uncertainty and uneasiness will surface.

School consolidation effects on community. Though all members of the community may not be housed inside of a school building, school consolidation has a significant impact upon this group. In considering the effect of consolidation on a rural area, the sense of community must be understood, as schools are often the focal points of communities. Schafft and Jackson (2010) define community as having the following three senses:

1. the everyday, local life-world of important meanings that are constructed in a particular place
2. the ideal of a locally constructed common good
3. an indeterminate group of people in a place who engage the project of constructing the common good in a way that reflects but also redefines important local meanings. (p. 36)

Though diversity in terms of race, religion, culture, and/or socio-economic status exists in all communities, the unification of a strong community is achieved by members remaining together despite their differences. For rural people, the sense of community remains an advantage because often socio-economic distinctions could “be less hatefully constructed when the common good is engaged on local ground” (Schafft & Jackson, 2010, p. 37). Therefore, in small communities, all members, regardless of socio-economic status, often consider themselves equally important to the vitality of the area.

In rural communities, the schools often become focal points because these educational institutions affect so many community members. Considering a historical context, Tyack (1974) summarizes events frequently found in many 19th century rural schools:

During the nineteenth century, the country school belonged to the community in more than a legal sense: it was frequently the focus for people's lives outside the home.... In one-room schools all over the nation ministers met their flocks, politicians caucused with the faithful, families gathered for Christmas parties and hoe-downs, the Grange held its baked-bean suppers, Lyceum lecturers spoke, itinerants introduced the wonders of the lantern-slide and the crank-up phonograph, and neighbors gathered to hear spelling bees and declamations. ... As one of the few social institutions which rural people encountered daily, the common school both reflected and shaped a sense of community. (p. 15)

These roles for rural schools have persisted throughout the years, and even in current times, community events, such as charity walks, national theater and music groups, and

community-based clubs which meet in the schools along with sporting activities, continue to draw community members to the building. These citizens embody a sense of identity to the school, whether they are parents, grandparents, and/or neighbors of current students or alumni who maintain a connection to their alma mater. Because of this, residents will normally oppose and resist school closings and consolidations. As often found in rural areas, community members have long-standing emotional connections with their schools, many due to nostalgic traditions handed down by previous generations. According to Howley, Howley, Hendrickson, Belcher, and Howley (2012), community members are often bound to a school due to tradition and its locus for important community activities, which means that “the loss of a school represents the loss of the community’s identity and hopes for the future” (p. 5). Though educating students is an important aspect of rural community schools, it is not the school’s only purpose.

In many cases, rural schools generally provide more for their students than merely knowledge needed for success. Because of isolation, limited resources, and low population density, rural community residents do more for their schools than might be expected in a metropolitan setting, where “such activities often carry the weight of tradition and therefore may go unrecognized as anything special” (Miller, 1993, p. 94). Most rural community members view their schools with a sense of tradition, identity, and pride, thereby “reducing educational settings to a more human scale” (Toch, 1991, p. 263). Oftentimes, faculty will come to know entire families over the years from class interactions with relatives from the same kin. Such personal contact between students and teachers results in closer ties that promote a level of genuine caring and mutual obligation necessary for educational success (Toch, 1991). Rural schools, primarily small schools

due to widespread and sparsely-populated communities, often provide an education that is personal and conducive to the local environment and economy.

In addition to providing personal and collective identities, schools often positively affect the economic health of an area. Lyson (2005) notes the economic effect that a small school has on a given community can be significant because “schools can serve as important markers of social and economic viability and vitality” (p. 26). Not only do small schools provide professional jobs for communities, but blue-collar ones as well, and for many rural counties, the education system often serves as the largest employer (Woods, Doeksen, & St. Clair, 2005). Other than sources of employment, local economies thrive on profits made from goods and services used at the school.

Small schools can greatly improve the overall atmosphere of a community. A research study by Lyson (2005) notes that, “rural communities with schools have proportionately more college graduates than communities without schools” (p. 25). An area with an educated population has been reported to achieve a higher quality of life and to have greater economic growth (Aldrich & Kusmin, 1997). One way to promote a healthy economy is to educate the children of the rural community to use innovation and creativity, which can enhance “the ability of local businesses to adopt superior technologies and respond to changing economic conditions” (Barkley, Henry, & Li, 2005, p. 10).

Rural communities also benefit from schools within their own town limits because studies find such communities have fewer instances of drugs, alcohol, and tobacco (Cutshall, 2003). The adolescent years are often turbulent years in which teens are more willing to take risks with unfamiliar substances. Yet, in small schools, this type

of delinquent behavior occurs less frequently. Furthermore, studies show that small schools have overall less crime and violence (Cutshall, 2003). Perhaps this goes hand-in-hand with the lowered instances of illegal substance abuse. Studies show that violent incidents are eight times more likely in 750+ student school populations than schools with under 350 students (Viadero, 2001). According to Fanning (1995), consolidation may contribute to the social problems that concern parents and educators because the “sound development of children is closely linked to the well-being of communities” (p. 5). Curbing the likelihood of adolescent aberrant behavior and raising children in a nurturing environment is certainly beneficial to the community and its members.

Overall, small schools reflect more frequent instances of student achievement in school statistics. Schools with lower pupil enrollment boast higher graduation rates and lower drop-outs rates (Cutshall, 2003; Viadero, 2001). In small schools, students are more likely to have personal connections with teachers, administrators, and fellow classmates that promote class participation and higher daily attendance rates. Increased graduation rates may be attributed to better student attendance rates that smaller schools often have (Viadero, 2001).

In addition, the personable environment of small schools causes ineffective teachers to be more easily identified (Jacobson, 2001). In these situations, the administration is able to deal with such teachers on an individual basis by improving their skills or steering them to a better-suited career. Because of the statistics of higher graduation and attendance rates coupled with lower drop-out rates, many advocates of small schools claim that keeping student populations low is financially effective in the long run because “cost-per-graduate” is lower than cost-per pupil (Viadero, 2001).

The difference in academic performance of students who come from impoverished homes is noticeable across all educational systems, regardless of size. Schafft and Jackson (2010) note that rural communities with eroding economies seem to disclose two patterns in regards to student achievement data: (a) markedly lower achievement among students classified as economically disadvantaged in comparison to students not classified as economically disadvantaged, and (b) achievement scores consistently below those of other schools in the state with similar demographic characteristics. The theory to justify such patterns is that the impact of “generational poverty” limited personal and institutional horizons so significantly that social mobility was beyond the school’s ability to address (Schafft & Jackson, 2010, p. 42). The disparity between the achievement levels of diverse economic student populations seems exacerbated when the economically disadvantaged students are shifted from a small school setting to a large school setting. While studies show that large schools often exhibit negative trends in terms of academic outcomes, the correlations are largest for the most impoverished students (Howley, Johnson, & Petrie, 2011). This pattern is sufficient to raise serious doubts as to the benefits from enlarging a given school or district, especially when poor and minority students are affected.

For many rural places that are undergoing suburbanization or following community-altering policies, which the U.S. mainstream views as improvement, such change is viewed as “destroying rural identity by losing community diversity and accommodating to the requirements of a homogenized national culture” (Schafft & Jackson, 2010, p. 43). In many situations, school closings and consolidations result from these changes, which are said to improve rural life. Yet, what becomes clear is that

“school survival and community survival are linked: not only does community decline result from school closure, but school closure often results from community decline (Howley et al., 2012, p. 2). The possibility of the school consolidation having detrimental effects on communities must be considered.

For nearly every case of consolidation, the process is often confronted with much community angst and student hostility. Consolidation normally entails school closings, actions which are perceived as damaging to the community, so the recommendation can prove to be very emotional. As Cox and Cox (2010) note, “the issue confronts the most resistance in small, rural areas where a community’s identity is linked with the local schools” (p. 2). For community members who feel such loyalty to their schools, resistance to consolidation comes in a variety of forms, including: campaigns involving news media and public meeting, legal action, and direct pressure on elected officials. In cases where community members realize that consolidation will happen eventually, they “...do what they can to delay it” (Howley et al., 2012, p. 2).

In situations where school closings and consolidation are certain to occur, anxiety and hostility resulting in overall resistance will still persist. As Miller (1993) notes, a major barrier that limits school-community collaboration and cooperation is the failure to recognize such a serious education problem, and this is especially true for rural communities whose economic decline has been more gradual. In such cases, meaningful change must come from an understanding of school-community needs and the constraints that must be overcome in order for efforts to be successful. Members of the school and community need to “reconceptualize the primary purpose of the school and its role within the web of social services created to serve the needs of the community” (Miller, 1993, p.

95).

In a consolidation effort, policy makers, school personnel, and community residents must have a place in which to meet, discuss and understand the views of each other as such an event will pose a perceived and negative drastic change. School consolidation would indeed affect community members and their families for years to come and they must, therefore, feel heard and accounted for in any decision to close and join schools. Ward and Rink (1992) note the following lessons in terms of creating educational policies:

1. Policy makers and policy analysts who expect information to have immediate and independent power in the local policy making process, especially where clear self-interest and ideology are involved, have a distorted view of the local policy making process. Where information is useful, it needs to be viewed as (a) accurate, (b) reliable, (c) balanced, and (d) not blatantly self-serving. Financial information seems to have a greater acceptance and influence than other kinds of information.
2. It is extremely difficult to alter people's ideologies and fundamental beliefs about how the world works. Therefore, the values and ideologies invoked in advancing a policy are important. Policies which are compatible with predominant ideologies are more likely to be accepted.
3. The history of a policy issue is important. The community's background with a particular policy issue can exert a great deal of influence in how a community deals with the issue in the future. History is not destiny, but it does have an influential impact. Therefore, to know well

the history of a policy issue is critical.

4. Reform strategies which attempt to circumvent local traditions, values, and beliefs rather than building on them are less likely to succeed. Policy making does not occur in a cultural vacuum and knowledge of local culture is also as critical as knowledge of the local history.

5. Local community bonds are important. Local community culture is based on common interests and common ideologies. The need to belong to a community is important and may involve strong forces to exclude others. What often appear to be local biases may be expressions of a common set of cultural bonds. Change may be more possible by finding common bonds rather than by opposing or denigrating local cultural norms.

6. Equality of educational opportunity may be best served by recognizing differences that inevitably exist and by seeking ways of responding to them rather than by endeavoring to impose a common educational experience on all children. (p. 18)

Research has shown that if such a process is followed and community members are given a voice and empowered to be a part of an actual consolidation, a sense of ownership and unity is created. According to the Center for the Study of Education Policy (2009), Tippecanoe County in Indiana faced a consolidation in 2005 with three school districts. Though administrative cost savings would have been substantial, it was determined that consolidating the schools would not be beneficial to student learning in terms of curriculum, facilities, staffing, or technology. Rather than merging schools, the districts decided to create a joint committee that explored ways to cooperate and collaborate about

such issues as inter-district student mobility, coordination of extracurricular activities and sports, and coordination of summer school program offerings (Center for the Study of Education Policy, 2009). In effect, the districts worked together, finding optimal situations of combining populations that would benefit their students, yet allowing the continuance of the individual district identities.

In a report from the Center for the Study of Education Policy (2009), consolidation can be achieved with less angst when the action is supported by the citizens of a given community. In 1997, school districts located in Hamilton County, (Chattanooga), TN, addressed the rising costs and declining enrollments in their communities. Leaders met to rethink and redesign the county educational system to offer equity to the taxpayers and better serve the students. Listening to their constituents' concerns, policymakers addressed issues like curriculum, technology, parent-involvement, and student achievement. Clearly, if the community members can feel served by the process and feel vested in the decision, the resulting consolidation can have positive results by creating less angst and more congeniality within the students, the school people, and the affected communities.

Data from a study of the newly formed Hamilton County School District determined that as the student population and the average daily attendance declined, the ethnicity of the student population changed with a loss of 5% Caucasian students, and the students' academic performance increased negligibly in Reading/Language Arts with a 1% gain (Cox & Cox, 2010). The data collected after this consolidation indicated that the closing and combining of community schools did not deliver better education to students nor did the district become more efficient and effective. In fact, results found the

consolidated Hamilton County School District are similar to other studies on the effects of contemporary consolidation. There is a body of research that suggests closing schools and creating a consolidated school is unlikely to produce either greater efficiency or better instructional outcomes (Howley, Johnson, & Petrie, 2011; Cox & Cox, 2010).

Examples of school consolidation efforts. School consolidation has been a facet of education reform for a long time. However, in looking at various school consolidations that have occurred in recent times, it is clear that the process of closing schools and uniting these schools in a new form is rarely congenial, and the decision is often received by school and community members with much angst, dismay, and contention.

Armstrong (PA) school district school consolidation. The situation involving the consolidation of two high schools in the Armstrong School District, a school district northeast of Pittsburgh, PA, is one that shows the amount of angst and community resistance possible when schools are threatened for closure. In January of 2008, Armstrong Superintendent William Kerr made a proposal to close Elderton High School due to declining enrollment, low graduation numbers, increased building operating costs, high real estate taxes in the district, the inability to schedule any honors/Advanced Placement classes beyond single class offerings, and the number of classes that have 10 or fewer students; as a result of this closure, it would be necessary to redraw the remaining attendance areas and split the Elderton students between Ford City and West Shamokin high schools (Shuster, 2009). Not surprisingly, the proposal caused a serious uprising in the community, and within a month, community members had formed the HERO (Help Elderton Remain Open) group with the sole purpose of stopping the closure

or to secede from the Armstrong district and join another district (Shuster, 2009).

In September and again in April of 2009, directors voted 5-4 to close Elderton High School at the end of the 2008–2009 school year; on June 17, members of HERO attempted to deter the process by filing petitions in the Armstrong County Court of Common Pleas for the creation of an independent school district with the intention of joining the Apollo-Ridge school district (Shuster, 2009). Even though the court approved HERO petitions, Armstrong directors voted a second time, by a 5-4 vote, not to reopen Elderton High School and to uphold the consolidation (Shuster, 2009). The students who had attended Elderton High School the previous spring were redistricted and sent to other schools.

Despite the closure of their beloved high school, the HERO group pressed on, and a change occurred that would affect their efforts. On December 9, Armstrong directors swore in two new board members and proceeded to propose a resolution to reopen Elderton High School (Shuster, 2009). The HERO group, who had been attempting for over a year to stop the closure of Elderton High School, finally found its effort compensated on December 14, 2009 as the Armstrong School District board of directors voted 6-3 to reopen the school beginning in the 2010–2011 school year (Shuster, 2009).

Bedford (PA) school district consolidation. Another school closing and consolidation school board recommendation that was met with strong community resistance occurred in 2011 in Bedford County, PA. At the conclusion of the 2010–2011 school year, the Bedford Area School District announced plans to close Hyndman Middle-High School and send those secondary students to Bedford High. This decision was based mostly on the fact that student enrollment had fallen in both high schools

within the district. Since 1983, Hyndman enrollment declined from 361 high school students to 225, and Bedford High's enrollment dropped from 831 to 624 (Bedford won't, 2009).

The school consolidation news was met with dismay by community members who expressed concern over the economic and psychological effects the school closing would have on students and the community (Miller, 2009). For many years, the Hyndman community members worried that the Bedford Area School District might close either Hyndman Middle-High School, Hyndman-Londonderry Elementary School or both (Brant, 2011, July 31). Many meetings in regards to the future of the schools drew large standing-room-only crowds of Hyndman residents, many wearing Hyndman colors or "Save Hyndman Schools" t-shirts, and this volume of people caused larger venues to be chosen to conduct meetings (Miller, 2009). Resistance to the consolidation was strong in the Hyndman community, for reasons ranging from a longstanding school rivalry with Bedford High School to concerns about larger class sizes and longer commutes, some as lengthy as a daily round-trip bus ride exceeding 40 miles (Miller, 2009; Sutor, 2013).

Preparing for the worst case scenario because the school population was visibly dwindling, a group of concerned parents formed HOPE for Hyndman, and the members, who coined the phrase "Hyndman Hornets forever" as a battle cry, began the process of completing a charter school application for students in kindergarten through grade 12 (Brant, 2011, July 31). When the board made their final decision to close Hyndman Middle-High School and send the students to Bedford High School, HOPE for Hyndman was ready. The group opted to leave the Bedford School District and open HOPE for Hyndman Charter School during the 2011–2012 academic year (Sutor, 2013). With

approval from the district as well as an agreement to allow HOPE to rent the former high/middle school, organizers worked to open a charter school, and in just three months, faculty was hired, a curriculum plan was developed, and student recruitment was completed with many who had attended the original school and surrounding areas (Brant, 2011, November 2).

In 2013, rural Bedford County, PA again experienced school closing and consolidation that created much community angst in the Everett Area School District. School district officials made public their budget dilemmas caused by dropping student enrollment and the rising costs of education. A financial report showed that, unless changes were implemented quickly, the district would suffer an operating deficit of \$2.3 million for the 2016-17 school year budget (Coyle, 2013).

Despite the daunting financial figures, large numbers of community members in hopes of keeping their school open, attended a school board meeting that was required before closing any school building. A group of about 70 community members, in which 15 were speakers, made a plea to Everett Area School Board to keep their neighborhood elementary school open, stating that the school's closure meant that their youngest children would have longer bus rides to a larger school with larger class sizes (Coyle, 2013).

Though the school did eventually close, the community angst and despair was apparent. According to many parents, the closing of the school was counter to the district's mission statement of "with community cooperation is committed to providing a quality education" and that larger class sizes and longer bus rides are counter to the mission. Though many residents claimed to have returned to the area so that their

children can have the same “quality education” that they experienced, with the school no longer open, some say that they will opt to move or provide home-schooling for their children rather than face longer bus rides to attend larger classes (Coyle, 2013).

Newark (NJ) public school system. Another recent consolidation that incurred negative community reaction happened in the state of New Jersey. The state’s largest public school district is the Newark Public School System, with 71 schools, 7000 employees, and a student population of nearly 40,000 (Newark Public Schools, 2014). Nonetheless, low test scores, poor graduation rates and crumbling buildings brought many challenges for the district, which has been under state control because 1995, despite the fact that it spends nearly \$24,000 a year - more than twice the national average - per pupil (Henry, 2012). As a result, public officials decided, after two years of discussions and town hall meetings, to close seven consistently underperforming schools with declining enrollment and reshuffle existing resources in the district to boost academic equity (Calefati, 2012; Henry, 2012).

As is often the case with the closings of schools as well as the consolidations of them, the community pushed back against the school board decision. Hundreds of angry school patrons, many of whom apparently first learned from a newspaper report of a plan to close several city schools and merge others, attended a public meeting to show their resistance to the closings and consolidation (Henry, 2012). Though the superintendent had planned to give a detailed report outlining of the school closings and consolidation, she left the stage before the allotted hour was finished because she was repeatedly shouted down (Henry, 2012).

Perhaps the greatest cause of the angst among community members was the lack

of communication and consultation. Many citizens expressed dismay that the decisions on school closures appeared to have been made without public input and, according to the teachers union president, “teachers, parents and many school officials were not consulted in the decision process and they were furious” (Henry, 2012). As the president stated, "There were absolutely no community meetings or discussions with the union about this endeavor. It is catastrophic because what it actually does is take a city that's in trouble and exacerbates the problem; as we close these schools, we close what were beacons in the community" (Henry, 2012). Furthermore, the union president claimed that test schools at Newark schools are improving, and perhaps reducing class sizes, not closing schools, was a better solution (Henry, 2012).

Parents of students who attend the schools also were resistant to the plan to close and consolidate schools. Many whose children were affected expressed dismay over the toll the closures will take on their children, some of whom have succeeded in schools that are failing overall (Calefati, 2012). Furthermore, many parents felt that sending their children to school with greater populations would not be beneficial to learning. As the mother of a second-grader enrolled at a closing school stated, "More kids in the school means more kids in the classroom means more problems for my son's teacher to worry about. This plan is going to take away from the kids who do want to learn" (Calefati, 2012).

Garrett County (MD) public schools school consolidation. An in-state situation in which school consolidation caused a great deal of community anxiety and angst was in Garrett County, MD. The Garrett County Public School (GCPS) system faced an estimated \$2.2 million deficit for the 2014–2015 school year, resulting in the decision to

proceed with the school closure process for Crellin, Friendsville, and Route 40 Elementary Schools (Garrett County, 2013). Citizens of the county resisted this idea and requested town hall meetings with policymakers, elected and appointed officials, to further understand the financial crisis in their county. An accountant who looked at the county's financial reports confirmed at the Finzel Fire Hall town meeting that Garrett County did not have \$2.2 million to help the school system, a statement which caused great strife to citizens in regards to the proposed closings of Route 40 Elementary and two other schools (Blaisdell, 2013, November 22).

Because Maryland schools are funded primarily through state and local governments, the Garrett County Board of Education and GCPS needed to make amends to their current system to accommodate the shortage of funding. Basing their strategies on a \$61,680 study that recommended closing three elementary schools and reconfiguring all grades in the remaining schools and adjusting school boundary lines, board members released information concerning the elementary school facility needs assessment and master plan study for its public schools (Garrett County, 2013).

Keeping the public aware of actions regarding the schools in the county, GCPS frequently published articles in the newspapers and sought members within the community to serve on committees. School advisory committees were developed to consider the impact of student enrollment trends, age or condition of buildings, transportation, educational programs, racial composition of the student body, financial considerations, student relocations, impact on the community in the geographic attendance area of the school(s) proposed for closure and the schools to which students will be relocated, and such other factors enumerated by the superintendent, or which the

advisory group recommends. In addition, School Consolidation Impact committees were established for schools not directly involved in school closures, but that may be affected by grade level and redistricting (Garrett County, 2013).

The pushback from the county citizens was significant, and the elected officials realized that the school system was of vital importance to their constituents. Within a month of declaring lack of local funding, the Garrett County Commission voted unanimously to conditionally give the board of education \$2.2 million for fiscal 2015 (Blaisdell, 2013, December 19).

School officials and community members were relieved to see their efforts to save their schools rewarded. As the elected school board president said, “It sounds like we will be able to continue to nurture grade-school students in their community schools, as was always our intention” (Blaisdell, 2013, December 19).

Maryland consolidation process. Regardless of whether a school is rural, urban, or suburban, the necessary process to close a school is very detailed in the state of Maryland. As noted in the Adoption of Procedures to Govern School Closings 13A.02.09 in the Code of Maryland Regulations (1982), the procedure is specifically scripted, and the local board of education must establish procedures to make decisions on school closings, giving deliberation to the following seven factors:

1. student enrollment trends
2. age or condition of building
3. transportation
4. quality of educational programs
5. racial composition

6. financial considerations

7. impact of the community in geographic attendance area for school proposed to be closed and school, or schools, to which students will be relocating.

Furthermore, this same Maryland State Regulation (1982) requires specific procedures for the Local Education Agency (LEA) to follow when school consolidation is being considered:

1. A public hearing must be held before the final decision to close a school so citizens may voice their concerns.

2. Parents and guardians of students affected by the closing must be notified at least two weeks before the public hearing on the school consolidation, and the intentions of the decision-makers must be made public through notification in at least two newspapers having general circulation in the geographic attendance area for the school or schools proposed to be closed and for the school or schools to which the students will be relocating.

3. The final decision must be made in a meeting as well as in writing, and it must include notification of the right to appeal to the State Board of Education.

Once the decision to close a school has been made, protocol must again be followed. As stated in Date of Decision 13A.02.09.02 of the Code of Maryland Regulations (1982), the decision must be announced at least 90 days before the date the school is scheduled to be closed, but not later than April 30 of any school year. If any individual or group disagrees with the decision, an appeal may be submitted to the Maryland State Board of Education

in writing within 30 days after the decision of a local board of education; however, the local board's decision will be upheld by the State Board of Education unless the facts presented indicate the decision was arbitrary and unreasonable or illegal (Maryland State Board of Education, 1982).

Case study district history of school consolidation. The locale of this case study is within a rural area of Maryland. According to the 2010 U.S. Census, this area has a population of 75,087 and a median household income of \$39,087. The 2010 U.S. Census also notes that the county is comprised racially of a Caucasian population of 89% and has 16.1% people living below the poverty level. In addition, the school enrollment declined 15% since the year 2000, with an average annual decline of approximately 165 students (Comprehensive Utilization Study, 2010).

This rural school district has addressed school closings multiple times within the past 30 years due to typical situations, such as aging buildings, declining populations, and challenging budget shortfalls, that required such considerations. Beginning in the 1980s, school officials decided to consolidate elementary schools, which created a snowball effect throughout the county that, in some cases, resulted in newly formed middle schools and, in other cases, the transformation of K-12 school to K-8 schools. Most recently, in 2008, school officials closed and consolidated two of the county's high schools, Public High School 1 and Public High School 2, and sent those students to the newly created high school.

School consolidation reform in this particular area began in the 1980s with elementary schools. This action created an overcrowding situation in those schools, which resulted in a complete restructuring of the school system. The junior high school

concept was eliminated and those schools were restructured to become middle schools by moving the sixth grade students into buildings with 7th and 8th grade students.

Consequently, middle schools were now used to house students in grades 6-8.

Once the new middle and elementary schools in the urban areas of the county were arranged, school officials decided to consider reorganization of the outlying rural school communities. School officials again used the idea of consolidation in the 1985-1986 school year when Public High School 3 was closed and reopened as a middle school, and the Public High School 3 students were sent to Public High School 4 (Tasker, 1995). This situation created much tension in the surrounding communities due to the “some win, some lose” mentalities. The community associated with Public High School 3 experienced much angst because those members lost not only their school building, mascot, and colors, but also their sense of identity. On the other hand, the Public High School 4 community members seemed to gain from the consolidation, keeping their school intact, including its name, mascot, and colors. The school name change from Public High School 4 to Public High School 2 did not occur for several more years, well after the students had acclimated to the new setting and the Public High School 4 students were forced to share their school (Cheshire, 2010). Needless to say, this consolidation was painful because one community was viewed as the “losing” side, and the other was viewed as the “winning” side.

Approximately 15 years later, the area was again faced with financial strife and the need to act. In the 2000-2001 school year, high school students at Public High School 5, which was a K-12 school, were reassigned to Public High School 1, and Public High School 5 was restructured to become a K-8 school. In addition, two elementary schools in

the area were changed from K-6 schools to K-5 schools, with the 6th graders reassigned to attend the middle school section of the newly created K-8 school. Another elementary school at the western end of the area was closed at the end of the school year, and the students were sent to one of two nearby elementary schools, depending on their home location.

However, this restructuring seemed to progress smoother than the previous high school consolidation due to student displacements seeming more equally distributed. The school that had previously been a K-12 school became a K-8 school, gaining not only students from the junior high school but also from the elementary schools in the western part of the area who lost their 6th graders. Public High School 1's new high school population filled the rooms previously designated for the junior high students who were relocated to the K-8 school. In this case, both schools lost and gained an aspect of identity, making the reform effort more balanced than previous secondary school consolidations.

As the schools were restructuring in the western portion of the area, the high school students on the eastern end also felt the effects of consolidation. The secondary students who attended the two rural K-12 schools in the eastern part of the area were sent to a nearby high school and a middle school. In turn, one K-12 school was closed, and the other was restructured to become a K-5 school.

The community resistance to these school closings, consolidations, and restructurings was powerful. Town meetings were held to discuss the decisions before they were made, and these meetings had high attendance from community members who often gave emotional speeches to officials. In May 2000, shortly after the decision was

finalized and announced, a case was filed by a group comprised of six community groups who made an appeal to the MSBE to determine if the official decision by the local Board of Education to close, consolidate, and reconfigure schools was arbitrary, unreasonable, or illegal. The opinion of the MSBE was that although the local board and school system staff could have been more diligent in allaying public concerns as the redistricting process moved forward, the written rationale provided by the school board was sufficient (Slider, II, et al., 2000).

The most recent consolidation in the county began in January of 2002, when the local BOE received a report containing a facilities utilization and educational adequacy study of the schools in its district. This report recommended closing some facilities and renovating others. On June 11, 2002, the Board of Education directed the Superintendent of Schools (“Superintendent”), to formulate and present recommendations for school consolidation/reconfiguration, based on the assumption that the county would move to a three high school district (*Marsh v. Allegany County Board of Education*, 2003). The Superintendent asked all schools to form committees to review issues affecting schools and to consider solutions that would be favorable to their communities. These committees were comprised of school administrators, teachers, students, and parents. The committees then submitted formal reports with recommendations for the Superintendent to consider. After reviewing these committee reports, an audit of the schools, the facilities utilization and educational adequacy study of the schools and public input, the Superintendent presented a plan to the local BOE members.

Based on the Superintendent’s recommendations, the BOE decided to pursue a plan merging Public High School 1 and Public High School 2, transferring the combined

student population to a renovated Public High School 1, converting Public High School 2 into kindergarten through eighth grade elementary/middle school, and closing the current middle school that feeds into Public High School 2 (*Marsh v. Allegany County Board of Education*, 2003).

As in past consolidations, the community resisted the closings of their schools, showing deep attachments for the iconic buildings. A few cases were appealed by a group of community members contending that the public school officials acted in an arbitrary, unreasonable, and illegal manner. One of the cases specifically focused on the need to hold off on consolidation until a new school that could accommodate students from the two closing schools could be built. It was the outcome of this case that resulted in the building of the New School.

The process of consolidating the two schools and the building of the new school took approximately five years, and in the fall of 2007, a newly-built school was filled with the students from Public High School 2, which became a middle school, and Public High School 1, the latter being razed to the ground. This consolidation had potential to be extremely difficult due to deep-seated emotional connections between community members and schools, but overall, the transformation ran smoothly.

The new high school. In August 2007, a new high school opened its doors to the students who previously attended Public High School 1 and Public High School 2. Currently, the student enrollment is approximately 865 students who hail from a minimum of nine surrounding rural communities (Maryland State Department of Education, 2013). The percentage of students who are eligible for Free and Reduced Meals (FARM) is 38.6 (MSDE, 2013). The current graduation percentage is 93, drop-out

percentage is 3.8, and the attendance rate is 93% (MSDE, 2013).

The three largest communities making up the school population have a variety of characteristics. The New High School was built in an area that was originally a mining town, is now home to a state university, and has nearly 9000 residents, 28.7% who live below the poverty level (U.S. Census, 2013). The next largest community to feed the school was once a bustling industrious area whose population decreased to a current 2100 citizens, 16.5% of whom live below the poverty level (AmericanTowns.com, 2014). The third largest community has a population of 1100, with 19.6% of its people living below the poverty level. According to Burney (2010), the proportion of students from poverty within a school affects student achievement levels because “higher performing students tended to come from higher income and more highly educated families;” therefore, individual students are often at a disadvantage when coming from an impoverished background or attending a school with large numbers of students from poverty (p. 3).

Summary

The case study of the consolidation of Public High School 1 and Public High School 2 to the New High School offers the opportunity to view a consolidation through a unique lens. Existing research about small and large school programs as well as consolidation, including studies concerning the impact on finances, student achievement, teacher effectiveness, community support, and social outcomes is abundant. Despite a variety of literature and findings, significant information that is lacking but could give valuable insight is “conclusive evidence of how consolidation affects education over an extended period” (Cox & Cox, 2010, p. 3). The opening of the New High School in the fall of 2007 marked the consolidation of Public High School 1 and Public High School 2,

and the perspectives of the students, faculty, and community members has shifted since that time. A study that reports student outcomes and other factual information about general perceptions of consolidation effects could be useful to gain deeper understanding about the realities, and not the fears, of school consolidation. Furthermore, an in-depth study of the closing and consolidation of two rural high schools in Maryland with what appears to have resulted in communities that have embraced the New High School and avoided the angst and community resentment at losing an identity is worthy of study.

Chapter 3 – Research Design and Methodology

School consolidation is a process that will undoubtedly persist if funding for education continues to decline, school building updates become more frequent, and rural economies increasingly decline. Because of the reality of future consolidations, this study focused on understanding how to approach the process of consolidation and to proceed through such an effort with community concordance and with increased educational opportunities for stakeholders.

Role of Researcher

Skolits, Morrow, and Burr (2009) claimed that the overriding role of the researcher is to manage the study through the complex process of planning, implementing, and bringing closure to the research. My particular role as the researcher was to conduct the study to gain a greater understanding of the entire process of the school consolidation, the effects in terms of student achievement, and the reasons why these specific rural communities may have unconventionally supported the new school, even though individual community schools were closed. Though my specific role was of an interviewer, surveyer, and data compiler, I was also a participant observer because I actually engaged in activities at the study site (Creswell, 2008). As a teacher who had worked at both Public High School 1 and the New High School, I had a unique insider perspective of the consolidation. Skolits et al. (2009) also noted that the researcher should establish social relations with stakeholders and monitor those relations throughout the study. As a faculty member of both Public High School 1 and the New High School, I built relationships with my past and current co-workers, many of whom are members of the local communities, and developed a trusting rapport with them.

Mixed Methods Research Design

For this study, a sequential exploratory mixed methods design which includes both qualitative and quantitative methods was used. Creswell (2008) stated that mixed method designs allow a researcher to take into consideration several perspectives to answer a research question. Because the research question focused on determining the process of a school consolidation in terms of unusually concordant communities and stakeholder perceptions, which required qualitative data, as well as school achievement, which was based on quantitative data, a mixed method design seemed appropriate. Furthermore, a mixed methods design “forces the methods to share the same research questions, to collect complementary data, and to conduct counterpart analyses” (Yin, 2009, p. 63). Specifically, a sequential exploratory mixed method design was used to gather data. Qualitative data was gathered initially to understand the process of school consolidation which allowed for rare amiability within local communities as well as stakeholder perception regarding that process. Then, quantitative data was sought to determine the level of success in terms of overall school achievement (Mertens, 2012; McMillan, 2008).

In order to delve deeper into a research question, a case study approach was used. As Yin (2009) noted, rationales for a case study include testing a well-formulated theory, examining a specific situation for information, and studying how conditions change over time. These rationales apply to this study because it related the implementation of the school consolidation to Spector’s change theory and penetrated the surface of the school consolidation to see stakeholder perspectives. Also, the study took into account the time period from when the consolidation decision was determined to the present day, which

accounted for a nearly 14-year time span.

To gather qualitative data, 10 participants were interviewed to gather information as to how the process of consolidating two rural schools was conducted. Then, surveys were dispersed to 90 parents who had the unique perspective of knowing and experiencing the process of this specific school consolidation. These survey participants were chosen based on the determinant of having a child in either Public High School 1 attendance area or Public High School 2 attendance area when decisions and consolidation efforts were taking place. Also, qualitative data were gathered through perusal of historical documents to determine overall student achievement.

To triangulate these qualitative data, quantitative data were also collected. To determine the overall student achievement levels of the consolidated school, quantitative data of High School Assessment (HSA) proficiency rates from all three schools involved in the consolidation were used.

Qualitative

Interviews, participant observations, surveys, and document analysis comprise the qualitative phase of the mixed method case study design.

Interviews. Qualitative data was collected through interviews with 10 persons who experienced first-hand the consolidation that resulted in the new high school. Creswell (2008) noted that interviews with open-ended questions allow participants to best voice their experiences unconstrained by any perspectives of the researcher or past research findings. In this case, interviews with open-ended questions were used to gain a greater understanding of how the consolidation was implemented, if the transition occurred smoothly, if aspects of change theory were present or absent, and whether the

consolidation created a positive learning environment and experience for the stakeholders. For this study, school leaders, community members of the New High School as well as administrators and teachers who previously were assigned to either Public High School 1 or Public High School 2 and came to the New High School as a result of the consolidation were interviewed.

Participant observation. Through participant observation, the researcher can gain a fuller understanding of human behavior in a specific context by immersion and participation (Gest, Name, & Mitchell, 2013). As an English teacher who had worked at the New High School since it opened in the fall of 2007, and three years prior to that, taught at Public High School 1, I had a unique insider perspective of the consolidation, especially because I had resided in the area since 1998. Social relations with stakeholders should be established by the researcher and these relations should be monitored throughout the study (Skolits et al., 2009). I built relationships with my past co-workers at Public High School 1 as well as my co-workers at the New High School, many of whom transitioned along with me through the consolidation, and developed a trusting rapport with them. This perspective allowed me to observe and reflect retrospectively not only during the interview process but also during the entire study.

Surveys. In addition to interviews, surveys were used to collect qualitative data in the form of descriptive statistics and individual opinions. Surveys were dispersed to 90 parents who had the unique perspective of knowing how the consolidation was determined because they had at least one child in the school system when the decision was considered and made. These participants were chosen based on the determinant of having a child in any school in either Public High School 1 district or Public High School

2 district when decisions and consolidation efforts were taking place.

Documents. Analysis of historical documents, such as public records, school yearbooks and newspapers, was also used to collect qualitative data. Documents from years 2003 to 2014 were examined to determine how the consolidation affected student achievement in terms of curricular and extra-curricular activities. Information was culled by means of searching through public records and annually-published yearbooks from all three schools.

Setting. Setting is the context and place where the research occurs, and a distinguishing trait of most qualitative research is that behavior is studied as it occurs naturally (Creswell, 2009; McMillan, 2008). The school consolidation situation that was studied in this research was specific in that it involved the closings and consolidation of Public High School 1 and Public High School 2 that resulted in the New High School. The setting for these three high schools was a rural area comprised of small, close-knit communities.

Participant selection. In qualitative research, participants are chosen based on the overall purpose of the research (Rovai, Baker, & Ponton, 2013). For this study, purposeful homogeneous sampling was used because particular individuals were selected due to their knowledge of the topic (McMillan, 2008; Rovai et al., 2013). For the open-ended interviews, 10 participants were selected from a population of school system leaders, community members, and faculty members at the consolidated school to be interviewed. The population is racially homogenous, composed primarily of a Caucasian population.

The purposeful criterion sampling for the survey included 90 community

members, specifically parents, who had first-hand experience in this particular school consolidation (Rovai et al., 2013). Participants were narrowed to parents who had a child who attended a school that was a feeder school to either Public High School 1 or Public High School 2 when decisions regarding the consolidation were made as well as attended the New High School. The 10 interview participants were ones who were directly affected by this consolidation and had unique knowledge and experience and, therefore, could offer the most insight on the procedures that were followed in this consolidation and about the existing learning atmosphere and experience that exists at the New High School.

Materials. According to Creswell (2008), one-on-one interviews can provide useful information if observations are not complete or possible and allow for detailed descriptions of personal information. Furthermore, this type of data collection is ideal for in-depth interviewing of participants who are particularly knowledgeable and articulate and who can provide insights and understandings (McMillan, 2008). Therefore, interviews that inquired about the process and transition of the school consolidation were used to gather qualitative data.

Also, surveys with both closed-ended and opened-ended questions were used in this study to gather qualitative data. As noted by Creswell (2008), surveys with predetermined closed-ended responses can give useful information to support theories and concepts. When a researcher does not want to constrain individual responses or does not know response possibilities and wants to explore the options, open-ended questions can be useful to provide information when observations are not available and when the questions allow participants to describe detailed personal information (Creswell, 2008).

Because of these reasons, a survey with both closed-ended as well as opened-ended questions was developed to understand stakeholder perspectives regarding how the consolidation process was conducted.

Finally, McMillan (2008) noted that documents represent a good source for text data for qualitative study without the necessary transcription that is required with interview data. Public documents and Public High School 1 and Public High School 2 yearbooks as well as yearbooks from the New High School were used to determine the effects of school consolidation on students in terms of curricular and extra-curricular opportunities.

Procedures for data collection. Before a researcher begins collection of data, participants should sign forms that state specific guaranteed rights and that they agree to be part of the study (Creswell, 2008). Therefore, prior to the interviews, informed consent forms were distributed to the participants. No incentives were used, although participants were hand selected based on specific characteristics such as first-hand knowledge and personal experience of this particular school consolidation. Once each participant read and signed the consent form, the interview began. The 10 interviews were recorded and transcribed.

As for the participant observations, I brought an insider perspective to the study. I worked at Public School 1 for the three years prior to the consolidation and was transferred to the New High School upon its opening, along with several other faculty members from the two closing schools. This unique position served both as an asset to the research process and a liability. Because some level of trust was established with many participants, greater depth of conversation in many interviews was possible.

For collection of data from surveys, the email addresses of 90 parents of current seniors at the New School were accessed. According to the U.S. Department of Education (2014), schools may disclose basic “directory information” such as the student's name, address, e-mail address, telephone listing, date and place of birth, participation in officially recognized activities and sports, dates of attendance, degrees and awards received, the most recent previous educational agency or institution attended, grade level or year (such as freshman or junior), and enrollment status. Participants were made aware before completing the surveys of any risks associated with the completion of the surveys as well as specific guaranteed rights. Once each participant read and acknowledged all rights and risks, the survey was taken.

Public documents regarding Advanced Placement (AP) classes and exam pass rates as well as published yearbooks of the three schools were located and used for determination of student effects. For Public High School 1 and Public High School 2, data for the school years of 2003, 2004, 2005, 2006, and 2007 were used for data collection. For the New High School, data for 2008, 2009, 2010, 2011, 2012, 2013, and 2014 were utilized for the qualitative portion of this study.

Procedures for data analysis. For analysis of interviews, surveys, and documents, a specified sequence was followed. Rovai et al. (2013) noted the following procedures for qualitative data analysis of interviews: (a) read all of the text; (b) develop a list of codes; (c) code the data; (d) review the codes and coding process; (e) recode the data; (f) develop themes; and (g) develop thematic relationships. For this study, multiple and close readings of participants’ responses to each question of the interview were necessary to gain an understanding of how and why the implementation of the school

consolidation decision proceeded as it did. Then, a list of codes was created, and data were coded. All codes and coding processes were reviewed, which resulted in recoding of the data. Themes were then developed based on the coding of the data and relationships were determined regarding those themes.

Validity and reliability risks/threats. In terms of threats to validity, there are two areas: external and internal. Creswell (2008) defined threats to internal validity as the problems that threaten the ability to draw correct cause-and-effect assumptions due to procedures or participants. One threat of concern to the study was the problem of making inferences. In qualitative research, a researcher must sometimes infer that a particular event resulted from some earlier occurrence, based on qualitative data (Yin, 2009). Thus, when the responses to the interviews and surveys were analyzed, care was used in looking for patterns, which often involved reanalysis and multiple readings of interpretations.

Additional internal threats to be considered for this study were descriptive validity, which Maxwell (1992) described as factual accuracy, and interpretive validity, which is defined as making sure that all data is consistently reflected upon from the perspective of the participants. In order to overcome these threats to validity, after I received and read the responses from the participants, I took special care in coding and recoding data from interviews to ascertain the accuracy of not only the responses themselves, but also my interpretation of those responses.

External validity refers to the possibility of the study being replicated elsewhere, and is also known as generalizability (Rovai et al., 2013). A threat to replication and generalization was the very specific demographics of the New High School. If a school

district chose to consolidate schools in a manner that replicated the process that was used for the schools in this study with expectations of results, the schools and communities affected must be similar in terms of locale and demographics.

Reliability is the measure of which participant or rater scorers are free from error and data are reliable (McMillan, 2008). In order to reduce the risk of error, participants, though chosen based on their experience with the consolidation, were selected based on their association to specific local communities in order to solicit a variety of viewpoints. Therefore, the perspective of several communities was represented.

Measures for ethical protection of participants. Ethical considerations for qualitative research study were informing participants of their voluntary roles in the study, using ethical interview practices, maintaining confidentiality, and when collaborating with participants for information (Creswell, 2008). Because of these factors, care was taken obtaining informed consents from each participants and confidentiality was protected in all forms of communication. During the interview process, if requests were given by participants for any comments to be “off-the-record,” those directions were honored and the given information was not included in the study. Because the location of this case study is in a small, close-knit, rural community, vague references in terms of participants’ places of residence, activities and habits, and experiences and training were used to disguise the participant more effectively.

Quantitative Hypothesis

To understand effectiveness in terms of learning, a statistical test was employed. English 10 High School Assessment (HSA) proficiency rates from the New High School were compared to rates from Public High School 1. Then, Biology HSA proficiency rates

from the New High School were compared to the rates from Public High School 1. In addition, the English 10 HSA proficiency rates from the New High School were compared to the rates from Public High School 2. Finally, the Biology HSA proficiency rates from the New High School were compared to the rates from Public High School 2. The statistical hypothesis for each comparison was $\mu_1 \neq \mu_2$.

Null hypotheses (H_0) for this study in terms of mean scores $\mu_1 \neq \mu_2$ were as follows:

1. There is no difference between the English 10 HSA proficiency rates for the New High School and those of Public High School 1.
2. There is no difference between English 10 HSA proficiency rates for the New High School and those of Public High School 2.
3. There is no difference between the Biology HSA proficiency rates for the New High School and those of Public High School 1.
4. There is no difference between the Biology HSA proficiency rates for the New High School and those of Public High School 2.

The alternative hypotheses (H_a) were as follows:

1. There is a difference between the English 10 HSA proficiency rates for the New High School and those of Public High School 1.
2. There is a difference between the English 10 HSA proficiency rates for the New High School and those of Public High School 2.
3. There is a difference between the Biology HSA proficiency rates for the New High School and those of Public High School 1.
4. There is a difference between the Biology HSA proficiency rates for the New

High School and those of Public High School 2.

Typical for social science, the significance level to reject null hypotheses is set at .05 and the desired statistical power is .80 (Rovai et al., 2013). A census of the entire student population for the studied years was used.

Design. To determine how the consolidation of Public High School 1 and Public High School 2 affected overall achievement levels of the schools, proficiency rates of English 10 and Biology High School Assessments of each closing school whose student populations were sent to the New High School were compared to the rates of the New High School. According to McMillan (2008), the type of quantitative data-collecting used in this study is called a comparative design, which is a nonexperimental design that compares two or more groups on one or many variables. The New High School's student body was comprised of students from communities whose populations made up the student bodies of Public High School 1 and Public High School 2. Therefore, the New High School achievement level was based on the performance of students, who all reside within the same areas. Comparing English 10 and Biology High School Assessment (HSA) proficiency rates of the New High School to English 10 and Biology HSA proficiency rates of Public High School 1 as well as Public High School 2 provided a measure of academic differences between students before and after consolidation.

Setting. For this study, the time period in which data were collected ranges over a 10 year period. English 10 and Biology HSA proficiency rates for both Public High School 1 and Public High School 2 were collected from the years 2003, 2004, 2005, 2006, and 2007. For the New High School, English 10 and Biology HSA proficiency rates were collected for the years of 2008, 2009, 2010, 2011, and 2012. Thus, proficiency

rates from Public High School 1 as well as Public High School 2 were used to compare similar rates from the New High School.

Sample and sampling procedures. For quantitative research, the sampling frame can be individuals, organization, or other units of analysis from the experimentally accessible population (Rovai et al., 2013). For this study, the three schools involved in the consolidation were unit sites: Public High School 1, Public High School 2, and the New High School. Students from the surrounding rural, racially homogenous communities that have moderate to high poverty rates, ranging from 16.5% to 28.7%, comprised the population of the schools (U.S. Census, 2013). Therefore, these schools shared a common trait in that student bodies from the New School and closing schools hail from the same rural communities with similar demographics. In addition, all students of these schools were required by state law to participate and show proficiency in all Maryland High School Assessments in order to qualify for a Maryland diploma.

Data and data collection. Descriptive statistics are mathematical procedures that “transform a set of numbers into indices that summarize characteristics of a sample” (McMillan, 2008, p. 134). English 10 and Biology High School Assessment proficiency rates are examples of descriptive statistics. These rates were chosen due to the fact that these mandatory assessments had been consistently administered to all Maryland secondary students since May of 2003, which covers the time scope of the study. Though the actual content of these assessments change annually, the skills and knowledge required to be proficient were assessed in a consistent manner over the years.

Performance measures “assess an individual’s ability to perform on an achievement test, intelligence test, aptitude test, interest inventory, or personality

assessment inventory” (Creswell, 2008, p. 161). Proficiency rates for the New High School, Public High School 1, and Public High School 2 in regard to the state-mandated English 10 and Biology HSAs are performance measures used in this study.

MDReportcard.org is a publically accessible website that provides a variety of statistics pertaining to the performance of Maryland public schools and was the primary source for English 10 and Biology HSA proficiency rates for Public High School 1, Public High School 2, and the New School.

Electronic data collection in quantitative research is popular, including using existing databases for analysis (Creswell, 2008). In Maryland, a publically accessible online database, MDReportcard.org, is posted by the Maryland Department of Education and provides data on all of its public schools in terms of standardized test proficiency rates, attendance rates, dropout rates, and graduation rates. MDReportcard.org (2013) was accessed for English 10 and Biology HSA proficiency rates for the New High School for its first five years of existence: 2008, 2009, 2010, 2011, and 2012. English 10 and Biology HSA proficiency rates for Public High School 1 and Public High School 2 for years 2003, 2004, 2005, 2006, and 2007 (the five years prior to the consolidation) were also accessed through the MDReportcard.org website.

Procedures for data analysis – Comparison of difference. Once data were assessed from MDReportcard.org, difference tests were used to analyze the proficiency rates of the schools. Rovai et al. (2013) noted that difference tests “are used to determine if two or more groups differ from each other on one or more variables or whether there are differences in one or more groups measured repeatedly over time” (p. 257).

The Welch’s *t*-test was the most appropriate means of measurement for this study.

According to Rovai et al. (2013), the independent t -test is a parametric statistical equation used to see whether the means of two independent groups are statistically different from each other. However, when the populations appear to have unequal variances, a t -test would be inappropriate, thus the statistic most appropriately used for this situation is Welch's t -test (GraphPad, 2014). Therefore, a Welch's t -test was utilized because unequal variances were observed in data. Welch's t -tests were used to determine whether student achievement was improved after consolidation by comparing the level of student proficiency for the English 10 HSA and the Biology HSA for Public High School 1 as well as those of Public High School 2, schools that closed as a result of the consolidation, to the level of proficiency of students who took the English 10 HSA and the Biology HSA at the New High School.

Validity and reliability. Two threats to validity and reliability are present in relation to quantitative data, one external and one internal. Threats to internal validity are defined as the problems that threaten the ability to draw correct cause-and-effect assumptions due to procedures or participants (Creswell, 2008). The internal threat was to address group composition bias. To address that threat, overall population data were used, rather than a sample from the overall school population. According to Rovai et al. (2013), increasing sample size reduces sampling error, and therefore, English 10 and Biology HSA proficiency rates appeared to be valid means of measurement because they represent data from entire grade levels in populations of Public High School 1, Public High School 2, and the New School.

A threat to external validity would be the very specific demographics of the New High School. If a school district chose to consolidate schools in a manner that replicated

the process used for this specific school consolidation with expectations of similar results, the schools and communities that would be affected must be similar in terms of locale and demographics.

Measures for ethical protection of participants. Because units were in the form of publically available proficiency rates, measures for ethical protection of participants was assumed to be considered by the state administering agency that archives rates.

Chapter 4 – Results and Interpretation

School consolidation is an ongoing process throughout the United States that will continue as buildings age, populations shift, and finances dwindle. Because of this reality, research to better understand the process and overall effects of school consolidation holds promise to ensure the most positive outcomes for all stakeholders. The purpose of the study was to provide data and information related to the impact and acceptance of a rural school consolidation on students, teachers, and community members.

For the mixed methods study, the qualitative component was comprised of interviews, surveys, and document analysis. Data was collected through interviews with 10 persons who experienced first-hand the consolidation that resulted in the new high school. Interviews with open-ended questions were used to gain a greater understanding of how the consolidation was implemented, if aspects of change theory were present or absent, and whether the consolidation created a positive learning environment and experience for the stakeholders. School leaders, community members of the new school as well as administrators and teachers who previously were assigned to either Public High School 1 or Public High School 2 and were employed by the New High School as a result of the consolidation were interviewed.

In addition to interviews, surveys were also utilized for data collection. Surveys were distributed electronically via SurveyMonkey (2014) to a purposive sampling of 90 community members who had insight due to the fact that they were parents of students who would be affected by the consolidation; 34 participants responded by answering at least one question from the survey. These surveys focused on the community members' individual perceptions regarding the process and overall effects of the school

consolidation. Analyses of historical documents, such as public records, school yearbooks and newspapers, were also used to collect qualitative data. Documents from years 2003 to 2014 were examined to determine how the consolidation affected student achievement in terms of curricular and extra-curricular activities. Information was collected by means of searching through public records and annually-published yearbooks from all three schools.

The qualitative section was complemented by the quantitative portion of the study which focused on Maryland English 10 HSA proficiency rates as well as Maryland Biology HSA proficiency rates of five consecutive years from each closing school and the new school. These rates were measured for difference using the Welch's *t*-test because their variances were unequal. The quantitative testing was used to address the question of whether the consolidation affected student achievement.

The quantitative and qualitative data analyses were utilized to answer research questions of the study. These questions were designed to develop an understanding of the effects on stakeholders and the process of consolidation that occurred in a rural Maryland school district. The central question to be answered was: Can consolidation of two rural schools, resulting in a new entity, offer a better educational experience and can such a controversial process be completed with concordance?

In addition, the following sub-questions assisted in guiding the study:

1. How did the rural high school consolidation affect student curricular and extra-curricular opportunities?
2. How did the consolidation affect student achievement?
3. How did the process used to create a change in schools and their communities

conform to prevailing change theory?

4. How did stakeholders perceive the outcome of the consolidation?
5. What leadership strategies were used to facilitate this consolidation?

This chapter reports findings from interviews, surveys, and document reviews as well as proficiency rates from state-mandated standardized assessments. The chapter is divided into two sections: Section 1 entails a summary of all qualitative data, including interviews, surveys, and document reviews. The second section presents statistical summaries of the quantitative data. Through triangulation of the data, the results might be used to better inform future consolidation practice in educational settings.

Interview Findings

A total of 10 stakeholders were interviewed face-to-face, and these people were selected as a homogeneous group based on their unique insights on consolidation from various leadership positions and individual perspectives. The stakeholders consisted of five administrators, three teachers, one parent, and one business leader. All except two interviewees were also community members of the new school. The summary of interview responses focuses on Research Sub-Question 3, which relates the process used to determine and implement the school consolidation to a change theory concept; and Research Sub-Question 5, which concentrates on leadership strategies used to facilitate the consolidation. Responses represent coded themes of transcribed audio recordings.

Responses for interview question 1. A majority of interviewees perceived the reasoning behind the decision to consolidate to be caused by the decreasing enrollment in the two closing schools. Some other causes that several stakeholders believed were behind the decision to consolidate included: difficulties in meeting school budgets,

building conditions of the two closing schools in terms of size and age, limited choices in curriculum due to low enrollment, and a decision that was in response to a facility utilization study completed by a consulting company. Other responses included maintaining extra-curricular opportunities and a motive to redistrict students to fill seats in other schools. Most participants agreed that the need for consolidation was determined 10-15 years prior, and one believed that the decision was made over 50 years ago.

Responses to interview question 2. In terms of who was involved in the decision to consolidate the two schools, most believed that the Board of Education and the school community committees made the determination. Two stakeholders also named the school superintendent as a decision maker in the process, and three variant interviewees perceived that school principals, the state superintendent, and the county commissioners were instrumental in the decision. Though several interviewees did not respond when asked why other methods were not used, two indicated that the decision was dictated by the recommendations of the facility utilization study conducted. One respondent felt that the consolidation decision was the best when all factors were taken into consideration, another believed that other methods would have the detrimental result of job losses to school employees, and a single participant declared that the decision had already been made by the administration and other methods were not even considered.

Responses to interview question 3. Over half of interviewees believed that people were made aware of issues and the consolidation decision through public meetings, such as Board of Education meetings or the school committee meetings, as well as staff meetings held by principals. Three stakeholders felt that issues and decisions were made known to the public through media outlets like newspapers, radio

announcement, television and internet news, school newsletters, and notices from the Board of Education. One person believed that the information was given through word of mouth, and another cited the use of surveys.

Responses to interview question 4. In order to create a sense of unity and ownership prior to the New High School opening, the majority of interviewees believed that the ability to participate on a school committee allowed community and school members to feel connected to the New High School. School committees were formed to determine the new school's name, mascot, colors, what to do with the memorabilia from the closing schools, bus transportation, and building design. Also, half of the stakeholders noted that the idea of a new school with a new identity and updated technology instilled a sense of hope and pride that the school would offer an authentic and relevant educational experience. Several others discussed the invitations to community members for building tours of the new school, as well as the open houses held to create a welcoming atmosphere. One person mentioned the official groundbreaking ceremony, being attended by public figures, both at the local and state level, which was used as a public relations tool to promote the New High School. Another mentioned public fundraisers that were used within the community to allow individuals to be a part of the New High School through donations or volunteering. Finally, an interviewee remembered that in the final homecoming game, which put the two closing schools as rivals, all football players, cheerleaders, and band members were given shirts with the new school's name, colors, and mascot. In addition, for every team in every sport, after the final game of the season in which the two schools played each other, a pizza and wing party resulted, and the students were encouraged to collaborate to make plans for the following season when

they would be teammates.

Responses to interview question 5. When asked about the selection process to staff the New High School, the majority of the interviewees seemed to believe that the process followed contract procedures that dictated steps: first, interested persons needed to apply, and then interviews with school administration and a content supervisor would be held. It was mentioned a conscious effort was made to give preference to the staff from the closing schools and bring equal numbers of employees from those schools to the New High School. At the same time, no positions were lost in the consolidation, and if any teachers from the closing schools did not go to the New High School, they would be reassigned to another school in the district. One interviewee noted that seniority was not used, and any person holding a teaching license could apply. Three participants said that the school administration was selected from the closing schools: both assistant principals from the closing schools came to the New High School with the same position; one principal of a closing school retired, and the other was named as the New High School principal.

Responses to interview question 6. When asked if decisions that allowed for input from persons outside the administration were made, four interviewees stated that the process to determine the New High School's name, colors, and mascot gave a voice to community members in the consolidation process. School committees were formed by volunteers within the school as well as the community to give recommendations regarding the name, colors, and mascot as well as how to handle the closing schools' memorabilia, such as banners, trophies, and other awards. In addition, students and community members were given opportunities to vote upon many of these decisions.

Four interviewees noted that teachers were asked to make a “dream sheet” of technological resources as well classroom, office, and field designs.

Responses to interview question 7. During the first year of the New High School, a majority of interviewees believed that unity and ownership was established through the promotion of the wide-variety of extracurricular activities. In addition, many cited the fact that the fall sports season was a successful one, which may have also helped to promote unity within the student body. Extra-curricular activities helped to promote a sense of team, and those members spent time together on and off the field and would sit together in the cafeteria. Three interviewees mentioned that many in-school meetings focused on how to help students unify and collaborate within the classroom and with extra-curricular activities. Special care was taken with the senior class to not overlook the fact that they were spending their last year of high school in a new building. For that reason, two senior class presidents and vice presidents were elected, as well as two homecoming courts, two student council representatives, and two varsity team captains.

A few interviewees cited that the school tours for community members, like alumni and local civic groups, also assisted in creating a sense of ownership. Two participants believed the availability of apparel with the New High School’s name, colors, and mascot helped students and their families feel connected to the New High School. One mentioned the sense of pride that was created when attending the opening ceremony, in which several state and local dignitaries participated. Finally, one stakeholder noted the fundraising efforts that enabled the athletic fields to be built allowed community members to be tied to the school, thus creating a sense of unity and ownership.

Responses to interview question 8. The majority of participants believed that new identity of the school with updated technology was a positive aspect of the school consolidation. The New High School's name, mascot, and colors were all chosen specifically based on the geography and history of the school community. Half of interviewees cited the school staffing as a component that was positive in the consolidation. Community members were comfortable with the staff due to the familiar faces from the closing schools. Four interviewed stakeholders said that the fact that the community collaborated, came together, and agreed to the terms of the New High School was a positive reflection of the consolidation. Three noted the student ownership of the school, leading by example in the care of the building and attitudes toward each other. Two interviewees stated that the increased availability and variety of curricular courses were benefits of the consolidation. More advanced classes with more sections were available to students for better preparation for life after high school.

Responses to interview question 9. Many interviewees did not list ways in which the consolidation process could have been improved, but those who did, cited a range of possibilities. Two mentioned that more input from school-based personnel would have been beneficial to decisions made at meetings held at the Central Office. One mentioned that the New High School could have been built in a more centralized location between the two closed schools. Another participant stated that more emphasis on staff unity to create a better transition to the New High School should have been created. Though student unity was made a focal point, the adults often found themselves divided into groups based on closing schools. A stakeholder pointed out the lack of storage space in the school as a challenge, and another thought that establishing new traditions should

have been organized. Finally, one participant noted that a straw ballot vote should be used so the community members can determine the kind of education system they desire for their children.

Survey Responses Summary

The sample consisted of 34 participants who answered at least one of the questions on the voluntary survey. The summary of survey responses is reported by dividing the responses into two subsections. The first subsection focuses on responses to the survey questions that address Research Sub-Question 3, which relates the process used to determine and implement the school consolidation to a change theory concept. The second subsection focuses on responses to survey questions that address the Research Sub-Question 4, which concentrates on the perceptions of stakeholders in terms of the consolidation outcomes. Additionally, optional comments by participants for any of the survey's seven questions are included in the table description.

Survey responses relating to consolidation process. This subsection reports all responses to the survey questions that relate to Research Sub-Question 3. The table contains the questions from the survey followed by the total number of stakeholders responding to the item (n). The responses are displayed as a percentage of the total.

Table 1

Responses Regarding Consolidation Process (Research Sub-Question 3)

Question	Yes	No	Undecided
Were you ever made aware consolidation was being considered for the two high schools? (n=34)	41%	21%	38%
Were you ever aware of meetings that you could attend where consolidation would be the topic? (n=34)	32%	29%	38%
Did you agree with the idea of consolidating the two high schools? (n=33)	70%	27%	3%
During the consolidation consideration, did you feel you had an opportunity to voice your feelings to someone in the school system? (n=32)	63%	12%	25%
Did you believe that the school system would consider the concerns of the parents whose children would attend the new school? (n=33)	55%	45%	0%

As shown in Table 4.1, 41% of respondents were aware that consolidation was being considered for the two high schools. Optional comments for this question included: “did not like the idea,” “there had been talk for years,” “had heard about this briefly in the early stages due to population decline.” In terms of awareness of meetings regarding the consolidation topic, 32% of participants knew of them, and the optional comments for this question were: “vaguely remember a meeting but don’t remember a date,” and “participated on a school consolidation committee.”

The idea of consolidation had more defined answers, as only 3% were undecided as to whether or not they agreed with the idea of joining the two high schools. A majority of participants agreed with the idea of consolidation, although the optional comments were more plentiful and drew more details to understand respondents’ answers: “I don’t think that anyone is ever happy with the idea of losing their schools. However, I believe that there have been many more opportunities available to our children due to

consolidation”; “I did not agree with it at first, but I think things have come along well with the consolidation”; “result in much larger class sizes, causing added stress to teachers as well as students who struggle and need more individualized attention”; “especially where they planned to locate the new school”; “I do now. I see the benefits that were derived from it. During the process, I believe I was blinded by my allegiance to my community and my own graduating school.”

Findings in this subsection also show that 63% of respondents perceived that they had an opportunity to voice their opinions during the process, and the optional comments included: “I didn’t think it was heard that a new high school should have been put in a more central location,” “I emailed all the board of education members,” and “I am aware of the ability to attend a Board of Ed meeting or speak to a board member directly.” However, only 55% of participants felt that the decision-makers for the consolidation would consider their concerns, and the optional comments were: “I believe that the Board may have offered meetings to hear the concerns that parents had about the idea of consolidation, however I feel that the concerns had very little impact on the Board’s decision to consolidate”; “if they had, the school would have been put in a different location”; and “their minds were already made up about the schools.”

Survey responses relating to consolidation effects. This subsection reports all responses to the survey questions that relate to Research Sub-Question 4. The table contains the questions from the survey followed by the total number of stakeholder responding to the item (n). Each response is provided along with the percentage for each response.

Table 2

Responses Regarding Consolidation Effects (Research Sub-Question 4)

Question	Yes	No	Undecided
Do you believe that the consolidation has provided a quality educational experience for your child(ren)? (n=32)	88%	6%	6%
Would you be supportive of an effort to break apart the new school, reopen the two closed schools, and send students back to those original school communities? (n=32)	6%	81%	13%

As shown in Table 4.2, 88% of respondents believe that the consolidated school has provided a quality educational experience, although the optional comments was limited to only one: “the school just has too many students. My son did great, but I have seen way too many students falling thru the cracks.” In terms of reversing the consolidation to resume the operation of the two previous schools, 81% would not be supportive of such an effort, citing optional comments such as: “I think the blend is fine”; “the schools are consolidated and just now settling down into acceptance of the two merged schools becoming one. Changing that setup seems simply disruptive and an entire waste of money at this time”; “I’m not sure this would make a positive impact – I feel consolidation has been cost effective...and this doesn’t quite seem appropriate”; and “damage is done, move on.”

Document Review Summary

The documents used to review for student opportunities and achievement included published yearbooks from Public High School 1, Public High School 2, and the New High School. In addition, several public documents, such as Board of Education meeting minutes and newspapers, were gathered from school offices or online sources. The document review summary has been divided into two sub-sections. The first sub-section

reports data that relates to Research Sub-Question 1, which focuses on the effects of consolidation on curricular and extra-curricular opportunities. The second sub-section provides data for Research Sub-Question 2, which concentrates on the effects of consolidation on student achievement.

Consolidation effects on extra-curricular and curricular opportunities.

Published yearbooks and public documents from Public High School 1, Public High School 2, and the New High School were used to cull data to answer Research Sub-Question 1. Table 4.3, Table 4.4, and Table 4.5 show data from these yearbooks and documents that relate to this question.

Table 3

Data Regarding Consolidation Effects on Extra-Curricular Clubs/Groups

	Clubs	Participants	Percentage of School
2007 Public HS1	20	445	74%
2007 Public HS2	18	277	68%
2008 New School	29	583	55%
2014 New School	33	725	75%

As shown in Table 4.3, Public High School 1 had 20 clubs, which included cheerleading, drill team, performance groups, publishing groups, academic groups, and common interest groups, with 445 participants for a total of 74% of the student population involved. Public High School 2 had 18 clubs with 277 participants for a total of 68% of the student population involved. During the first year of the New High School, there were 29 clubs with 583 participants for a total of 55% of the student population involved. The most recent yearbook showed the New High School with 33 clubs with 725 participants for a total of 75% of the student population involved. Some clubs that have been added in the New High School that were not previously available to students in

the closing schools were: JV and freshmen cheerleading squads, French club, Spanish club, Chinese club, concert band, orchestra, percussion, concert choir, men's ensemble, women's ensemble, all-county chorus, Fellowship of Christian Athletes (FCA), Model United Nations, and Science Bowl.

Table 4

Data Regarding Consolidation Effects on Extra-Curricular Sports

	Sports	Participants	Percentage of School
2007 Public HS1	23	416	69%
2007 Public HS2	17	213	52%
2008 New School	23	511	52%
2014 New School	28	528	55%

As shown in Table 4.4, Public High School 1 had 23 sports teams with 416 participants for a total of 69% of the student population involved. Public High School 2 had 17 sports teams with 213 participants for a total of 52% of the student population involved. During the first year of the New High School, there were 23 sports teams with 511 participants for a total of 52% of the student population involved. The most recent yearbook showed the New High School with 28 sports teams with 528 participants for a total of 55% of the student population involved. Some teams that have been added in the New High School not previously available to students in the closing schools were: freshman boys' basketball team, unified track, unified tennis, and bocce ball. The last three teams in the preceding list were newly created teams that included students with and without disabilities.

Table 5

Data Regarding Consolidation Effects on Curricular Opportunities

	AP Courses	AP Students	Percentage of School
2007 Public HS1	7	130	22%
2007 Public HS2	8	76	19%
2008 New School	10	203	19%
2014 New School	14	377	39%

As shown in Table 4.5, Public High School 1 offered 7 AP courses with 130 participating students for a total of 22% of the student population taking these advanced courses. Public High School 2 had 8 AP courses with 76 students for a total of 19% of the student population taking advanced courses. During the first year of the New High School, 10 AP courses were available with 203 participating students, reflecting a total of 19% of the student population. The most recent data showed the New High School with 14 AP courses with 377 participating students for a total of 39% of the student population taking these advanced courses. Some AP courses that have been added in the New High School that were not previously available to students in the closing schools were: AP Human Geography, AP Government, AP Physics, AP Statistics, AP World History, and AP Spanish.

Consolidation effects on student achievement. Public documents with aggregate data from Public High School 1, Public High School 2, and the New High School were used to cull data to answer Research Sub-Question 2. Table 4.6 shows the data from these documents related to this question.

Table 6

Data Regarding Consolidation Effects on Student Achievement

	AP Exams	Passing Exams	Pass Percentage
2007 Public HS1	93	50	54%
2007 Public HS2	67	19	28%
2008 New School	154	66	43%
2014 New School	295	162	55%

As shown in Table 4.6, Public High School 1 had a total of 93 AP exams taken in 2007, with 50 of those exams resulting in passing scores, making the pass percentage 54%. Public High School 2 had a total of 67 AP exams taken in 2007, with 19 of those exams having passing scores, making the pass percentage 28%. During the first year of the New High School, 154 AP exams were taken, with 66 of those exams achieving a passing score, making the pass percentage 43%. The most recent data showed the New High School with 295 AP exams were taken, with 162 of those exams achieving a passing score, making the school's pass percentage 55%.

Quantitative Data Findings

The quantitative portion of the study focused on Maryland English 10 HSA proficiency rates as well as Maryland Biology HSA proficiency rates of five consecutive years from each closing school and the new school. These rates were measured for difference using the Welch's *t*-test because their variances were unequal. The quantitative testing was used to address the question of whether the consolidation affected student achievement.

English 10 HSA proficiency rates. Proficiency rates for Public High School 1, Public High School 2, and the New High School in regards to the state-mandated English 10 were performance measures used in this study. MDReportcard.org is a public website

that provides a variety of statistics pertaining to the performance of Maryland public schools. This was the primary source for English 10 HSA proficiency rates for Public High School 1, Public High School 2, and the New High School.

The English 10 HSA proficiency rates for Public High School 1 and Public High School 2 were based on the last five years of the school's existence, 2003–2007; the rates for the New High School were based on the first six years of its existence, 2008–2013. Although upperclassmen students may retake the English 10 HSA to achieve a higher score, only proficiency rates for students in grade ten were used for all schools. Using the rates of grade ten students, the tests would remain valid as those students would have attended the school in which they tested. Because of the consolidation, a student who may have failed the test in grade ten would have the opportunity to retake the test in grade 11 in the New High School. Because such a situation could potentially create problems in the analysis of the data, using only grade ten proficiency rates provides more reliable data.

A Welch's t -test was used to test for statistically significant differences between English 10 HSA proficiency rates because variances were not equal between the two sets of scores, representing a closed high school's rate and the other set the New High School's rate. According to Hanover College (2014), when the variance of the two groups is different, the p -value reported by Student's t -test will be artificially high or low; therefore, in those cases, it is safer to use Welch's method, which reports a more unbiased estimate of the probability of falsely rejecting the null hypothesis. Because the outcome of this test was to show the effect of consolidation on student academic achievement, the proficiency rates of each closed high school were tested along with the rates of the New

High School. Thus, two individual sets of results are reported: one showing the rates of Public High School 1 and the New High School, and one showing the rates of Public High School 2 and the New High School.

Table 7

English 10 HSA Proficiency Rates for Public HS1 and New High School

Public High School 1		New High School	
Year	Proficiency Rates	Year	Proficiency Rates
2003	38%	2008	83%
2004	57%	2009	88%
2005	69%	2010	85%
2006	64%	2011	81%
2007	78%	2012	83%
		2013	87%

Note. Adapted from MDReportcard.org, 2014

Table 8

English 10 HSA Proficiency Rates Stats: Public HS1 and New High School

	Public HS1 (n=5)	New High School (n=6)	Difference in scores
HSA Mean	61.2	84.5	23.3
Standard Deviation	14.9	2.7	

Note. graphpad.com/quickcalcs/ttest.1cfm used as calculation

According to Rovai et al. (2013), a p -value of .05 or less indicates a level that is needed to reject the null hypothesis for social science research. The significance level for the difference between the Public High School 1 English 10 HSA proficiency rates and the New High School English 10 HSA proficiency rates was 0.0263, which indicates the difference to be statistically significant. Thus, the null hypothesis is rejected.

A statistically significant difference between the Public High School 1 and the New High School English 10 HSA proficiency rates was observed ($p < .05$). As can be

noted on Table 4.8, the difference for the overall rates was 23.3 and the standard deviation of New High School rates was much lower than those of Public High School 1, showing a decrease of variability in scores ($t = 3.44$; $SE = 6.77$). These results indicate that the English 10 HSA proficiency rates in the New High School were statistically higher than the rates from the closed school of Public High School 1.

Table 9

English 10 HSA Proficiency Rates for Public HS2 and New High School

Public High School 2		New High School	
Year	Proficiency Rates	Year	Proficiency Rates
2003	29%	2008	83%
2004	35%	2009	88%
2005	39%	2010	85%
2006	43%	2011	81%
2007	66%	2012	83%
		2013	87%

Note. Adapted from MDReportcard.org, 2014

Table 10

English 10 HSA Proficiency Rates Stats: Public HS2 and New High School

	Public HS2 (n=5)	New High School (n=6)	Difference in scores
HSA Mean	42.7	84.5	41.9
Standard Deviation	14.4	2.7	

Note. graphpad.com/quickcalcs/ttest.1cfm used as calculation

The significance level for the difference between Public High School 2 and the New High School English 10 HSA proficiency rates was 0.003, which indicates the difference to be very statistically significant.

A statistically significant difference between English 10 HSA proficiency rates of the two schools was observed ($p < .05$). As can be noted on Table 4.10, the difference for the rates was 41.9 and the standard deviation of New High School rates was much lower

than those of Public High School 2, showing a decrease of variability in scores ($t = 6.43$; $SE = 6.51$). These results indicate that the English 10 HSA proficiency rates in the New High School were statistically higher than the rates from the closed Public High School 2.

Biology HSA proficiency rates. Proficiency rates for Public High School 1, Public High School 2, and the New High School in regards to the state-mandated Biology HSAs are performance measures used in this study. MDReportcard.org is a public website that provides a variety of statistics was the primary source for Biology HSA proficiency rates for Public High School 1, Public High School 2, and the New High School.

The Biology HSA proficiency rates for Public High School 1 and Public High School 2 were based on the last five years of the school's existence, 2003-2007; the rates for the New High School were based on the first six years of its existence, 2008-2013. Although students may retake the Biology HSA to achieve a higher score, only proficiency rates for students taking the high school assessment for the first time were used for all schools.

A Welch's t -test was used to test for statistical significance (Hanover College, 2014). As with the English HSA scores, the outcome of this test was to show the effect of consolidation on student academic achievement, so the proficiency rates of each closed school were tested along with the rates of the New High School. Thus, two individual sets of results are reported: one showing the rates of Public High School 1 and the New High School, and one showing the rates of Public High School 2 and the New High School.

Table 11

Biology HSA Proficiency Rates for Public HS1 and New High School

Public High School 1		New High School	
Year	Proficiency Rates	Year	Proficiency Rates
2003	60%	2008	93%
2004	67%	2009	94%
2005	60%	2010	92%
2006	63%	2011	87%
2007	83%	2012	93%
		2013	89%

Note. Adapted from MDReportcard.org, 2014

Table 12

Biology HSA Proficiency Rates Stats: Public HS1 and New High School

	Public HS1 (n=5)	New High School (n=6)	Difference in scores
HSA Mean	66.6	91.2	24.6
Standard Deviation	9.7	2.7	

Note. graphpad.com/quickcalcs/ttest.1cfm used as calculation

According to Rovai et al. (2013), a p-value of .05 or less indicates a level that is needed to reject the null hypothesis for social science research. The significance level for the Public High School 1 and the New High School Biology HSA proficiency rates was 0.0056, indicating the difference to be very statistically significant.

A statistically significant difference between proficiency rates was observed ($p < .05$). As can be noted on Table 4.12, the difference for the scores was 24.6 and the standard deviation of New High School rates was much lower than those of Public High School 2, showing a decrease of variability in scores ($t = 5.42$; $SE = 4.54$). These results indicate that Biology HSA proficiency rates in the New High School were statistically higher than rates from the closed school of Public High School 1.

Table 13

Biology HSA Proficiency Rates for Public HS2 and New High School

Public High School 2		New High School	
Year	Proficiency Rates	Year	Proficiency Rates
2003	42%	2008	93%
2004	40%	2009	94%
2005	37%	2010	92%
2006	57%	2011	87%
2007	75%	2012	93%
		2013	89%

Note. Adapted from MDReportcard.org, 2014

Table 14

Biology HSA Proficiency Rates Stats: Public HS2 and New High School

	Public HS2 (n=5)	New High School (n=6)	Difference in scores
HSA Mean	50.1	91.22.7	41.04
Standard Deviation	16.1		

Note. graphpad.com/quickcalcs/ttest.1cfm used as calculation

A p-value of .05 or less indicates a level that is needed to reject the null hypothesis for social science research (Rovai et al., 2013). The significance level for the difference between Public High School 2 and the New High School Biology HSA proficiency rates was 0.0048, indicating the difference to be very statistically significant.

A statistically significant difference between proficiency rates was observed ($p < .05$). As can be noted on Table 4.14, the difference for the scores was 41.04 and the standard deviation of New High School rates was much lower than those of Public High School 2, showing a decrease of variability in scores ($t = 5.66$; $SE = 7.26$). These results indicate that the Biology HSA proficiency rates in the New High School were statistically higher than the rates from the closed school of Public High School 2.

Summary

The information collected across the four data collection methods triangulate and form answers to the research questions posed. One could postulate that the New School, in seven years since its debut, has developed a united support of the communities which it serves and appears to be serving stakeholders well. In the next chapter, a detailed review of how the data informs research questions will be explained along with findings they suggest.

Chapter 5 – Findings and Conclusions

The purpose of this study was to provide data and information related to the impact and acceptance of a specific rural school consolidation on students, teachers, and community members. The data collected across several methods gave insight into the views and thoughts of participants. From the information collected, a picture of the entire process through the lens of change theory helps confirm the need for involvement of both internal and external stakeholders. Within the following chapter, this researcher will attempt to show how the data collected reveals what was in the background of the effort and how the dynamics of change and leading change resulted in a consolidation effort that ultimately created a better educational environment and program.

From each of the several data gathering attempts, a synopsis of findings will be determined which in turn will inform the answers to the sub-questions. Following the answers to the sub questions, an answer to the overarching question will be shaped using the total accumulation of the findings. Next, a short section of questions that surfaced as the research moved forward that have been left unanswered will be presented. Answers to such questions could further inform subtleties and possible other information that might further illuminate issues hidden in such a complex change endeavor. Finally, a conclusion of the aspects of the consolidation that one could use as future consolidation efforts will be expressed.

Outcomes and Relation to Change Theory and Literature

The results of this study are intended to provide information and insight of the process to consolidate schools in a rural area with average to high levels of poverty in a congenial manner that would result in a positive learning environment and student

experiences. Having a greater understanding of the effects and process of school consolidation can inform school leaders about challenges, opportunities, and expectations of such an effort.

Interviews. To gain a greater understanding of the process, implementation, transition, and outcome of the school consolidation, 10 persons with first-hand experience of this occurrence were interviewed. Interview data show that change theory and various points from the literature review are relevant to this school consolidation.

Outcomes in relation to change theory. According to Spector (2010), a successful change must be driven by shared diagnosis and mutual engagement of all stakeholders as well as the following components: strategy, purpose, and alteration of behavior patterns. Furthermore, Spector (2010) notes that the implementation of this change must be advanced in the following specified steps: Redesign, Help, People Alignment, and Systems and Structures.

Through the analysis of answers from several interview questions, it is clear that Strategy, Purpose, and Alteration of behavior patterns, along with shared diagnosis and mutual engagement, were present during this school consolidation. The use of these components helped to create a sense of openness and an atmosphere of trust. The majority of the interviewees stated that the decision to consolidate was driven by a decreasing student population in both schools, and although this consolidation came about due to a variety of reasons, it was clear that the need for consolidation was driven by enrollment and in this case, declining enrollment. Over half of the interviewees noted that people were made aware of issues and the consolidation through public Board of Education meetings, school committee meetings, and staff meetings at the schools. Many

interviewees made note of the fact that any community member could volunteer to be part of a school committee, and by doing so, that person could have input on the name, mascot, and colors of the New High School. Also, similar committees were formed to determine how to handle closing schools' memorabilia. These findings reinforce the fact that the community was aware of the factors leading up to the consolidation, was involved in the decision to consolidate, and contributed to its process.

In addition to having the necessary components for successful change, the steps as described in Spector's (2010) "Sequential Model of Effective Change Implementation" were also used in this consolidation. Many interviewees noted the option of volunteering to be a part of a school committee, which reflects the "Redesign" step of shaping new behaviors to meet an organization's goal. With the formation of the new committees, community members were given a voice in shaping the culture of the New High School, and positively promoted the idea of the New High School.

The analysis of the interview data shows that communication was open between stakeholders and leaders, reflecting that the second step of "Help" was present. All interviewees noted that the idea of consolidation and the issues leading up to that decision were made public through meetings, media, and/or word of mouth. Furthermore, the option of attending school board meetings to voice an opinion was also available to any community member. Finally, many interviewees stated that serving on a school committee was also a way to keep the lines of communication open.

Spector's (2010) third step in his model for implementation of effective change deals with "People Alignment." Though the majority of interviewees said that the process to select people who would work in the New High School was dictated by contract

procedures, many noted that a conscious effort was made to bring equal numbers of employees from the closing schools to the New High School. Half of the interviewees believed that the familiar faces in the New High School gave a sense of comfort to community members. Three interviewees specifically mentioned that the administration for the New High School was selected from the closing schools. Interestingly enough, three participants had cited the principal of one of the closing schools as one who championed the decision to consolidate into a new school; this person was indeed selected as the principal of the New High School.

The final step in Spector's (2010) model is "Systems and Structures," which works to reinforce desired behaviors. Many interviewees noted the sense of unity and ownership which was promoted before and even after the opening of the New High School. This was encouraged through open house tours of the New High School, creating opportunities for extra-curricular groups to connect and build relationships, and community-wide school fundraisers which united the community members in focusing on a common goal.

Additional analysis of the interview data. School consolidation is a controversial topic mainly due to the emotional ties community members have with schools. Often, identity is linked with the local school, and the severance of this connection can be met with resistance and angst (Cox & Cox, 2010; Howley et al., 2012; Schafft & Jackson, 2010). In the final interview question which asked how the consolidation could have gone better, many interviewees stated they could not name any possibilities. There were several isolated comments, such as allowing more input from school-based personnel at Central Office meetings, erecting the New High School in a more centralized location,

emphasizing staff unity within the New High School, establishing new traditions rather than carrying on ones from closing schools, and utilizing a straw ballot vote for community members to determine their children's education system. It would seem, by the majority of respondents verbalizing no possibilities for improvement and the singularity of only a few other comments, that those participants, nearly all of whom were community members in the two areas affected, no longer hold onto controversies or angst associated with the process.

Finally, the Center for the Study of Educational Policy (2009) notes that angst and resistance associated with school consolidation can be lessened when the action is supported by the citizens. This view proved to be present with this school consolidation because when the interviewees were asked about ways in which the school consolidation went well, the majority of the interviewees perceived the New High School as having several positive aspects for the community, especially noting the updated technology for student use within the new building. Many participants stated that the community member involvement on the school committees promoted feelings of unity and ownership of the New High School. Half of the interviewees saw the staffing of the New High School with employees from the closing schools as a positive aspect that lessened anxiety over the consolidation. Three interviewees noted that students seemed to take ownership of the school, leading by example in terms of building care and attitude. The increased availability and variety of curricular courses were noted by two interviewees as being benefits of the school consolidation.

Surveys. A voluntary survey that asked a variety of questions relating to the decision and implementation of the school consolidation as well as its perceived

outcomes was answered by 34 participants. As with the interview analysis, many findings for the survey data revealed the presence of change theory components in a moderately positive direction. The most significant of the survey results was that 70% of respondents agreed with the idea of consolidation for the two schools, 63% felt that they had an opportunity to voice their opinions to someone in the school system, and 55% believed that the school system would consider concerns of parents. These survey findings show that Spector's (2010) components of strategy, purpose, shared diagnosis and mutual engagement, were considered in this consolidation.

Research has clearly demonstrated that school consolidation is often associated with anger, resistance, and sorrow. In most consolidations, students from small schools are moved to much larger buildings, and when this happens, many serious and emotional issues, such as a lost sense of belonging for students, overlooked traditions, and severed identity links, become realities for the closing school's community members (Cutshall, 2003; Howley et al., 2012; Cox & Cox, 2010). Though the survey results show support for the consolidation effort, the optional comments reveal some deep emotions in regard to the change. The comment "damage is done, move on," clearly shows some remaining angst regarding the consolidation. Two respondents commented that the New High School had "too many students" and that many are "falling through the cracks." These comments tend to keep alive the prevailing belief that parents view a larger school as providing a less personal education, giving students less individualized attention.

Yet, research has also found that when community members are included in the decision, implementation and transition, the consolidation can be achieved with less angst and resistance (Miller, 1993; Center for the Study of Education Policy, 2009). The survey

data show that 88% believed the consolidation has provided a quality educational experience for children, and 81% would not be supportive of an effort to break apart the New High School. Though some emotional ties remain, most respondents seem to understand the purpose of the New High School and focus on what those advantages have brought to their communities. The optional comments support this as well. At least 3 participants noted the negative emotions felt when they lost their community schools, but now support the New High School and the various benefits associated with it.

Document review. Documents were reviewed to gather data in regard to student opportunities and achievements for each of the closing schools and the New High School. According to Nitta, Holley, and Wrobel (2010), large schools offer more options unavailable to small school students. The data for the extra-curricular clubs/groups as well as for sports show this to be true in this consolidation.

In terms of curriculum, research shows that larger schools offer a broader choice of courses, including a wider variety of advanced courses (Nitta, Howley, & Wrobel, 2010; Haddad & Alsbury, 2008). The data from this study were consistent with this research. The number of Advanced Placement course offerings increased by nearly 100% from 7 and 8 in the closed schools to 14 available in the New High School in 2014. More importantly, the number of students participating in advanced coursework doubled from one school and nearly so for the other by the year 2014, only seven years after opening. Additionally, when considering student achievement in those advanced courses, Public High School 1 had 54% of its tested students receive passing scores, Public High School 2 had 28% of its tested students pass, and in 2008, the New High School had 43% of tested students receive passing scores. In 2014, 55% of the tested students in the New

High School passed AP tests. Clearly, the consolidation effort has resulted in additional advanced curriculum offerings for students, and the students are, in fact, taking advantage of those courses.

English 10 HSA and Biology HSA proficiency rates. Proficiency rates for Public High School 1, Public High School 2, and the New High School in regards to the state-mandated English 10 and Biology HSAs were the quantitative performance measures used in this study. These rates were gathered from the MDReportcard.org site, a public website that provides a variety of statistics pertaining to the performance of Maryland public schools.

According to much research, students have increased amounts of academic success in smaller schools, particularly in terms of standardized testing (Cox & Cox, 2010; Center for the Study of Education Policy, 2009; Cutshall, 2003; Viadero, 2001). The quantitative data results show inconsistency with this research. In the tests pertaining to the English 10 HSA proficiency rates, for every data set, the New High School's rates were higher, and at a statistically significant level. The results for the Biology HSA proficiency tests were also inconsistent with the research discussed. Similar to the English 10 rates, the Biology HSA rates were higher at the New High School. With every data set tested, the rates for the New High School were statistically different than from the closed schools. Furthermore, in 3 out of 4 tests on data sets, the difference between rates from a closed school and those from the New High School were very statistically significant.

Answers to Research Questions

The findings of the study are based on data derived from interviews, surveys,

document reviews, and state-mandated standardized test proficiency rates. The following conclusions address the central question in this study: Can consolidation of two rural schools, resulting in a new entity, offer a better educational experience and can such a controversial process be completed with concordance? These additional sub-questions that assisted in guiding the study are addressed as well:

1. How did the rural high school consolidation affect student curricular and extra-curricular opportunities?
2. How did the consolidation affect student achievement?
3. How did the process used to create a change in schools and their communities conform to prevailing change theory?
4. How did stakeholders perceive the outcome of the consolidation?
5. What leadership strategies were used to facilitate this consolidation?

The resulting conclusions by the researcher, which are based on the data results of the study, are informed by research as discussed in Chapter 2.

Effects on student curricular and extra-curricular opportunities. For many rural schools, the size of the student body means that limited possibilities exist for curricular and extra-curricular opportunities. Teams must have a minimum number of players, and classes often require a minimum number of enrolled students to be effective. Therefore, a small school may not be able to offer the range of courses, sports teams, or groups that a larger school can.

In the findings from the document review, the number of clubs increased by at least 50% from the closed schools. In addition, the New High School in 2014 had 75% of its student body participating in groups, which was a slight increase from the closing

schools. In sports, however, the results show that even though the New High School in 2014 had 28 teams, as compared to the 23 and 17 from the respective closed school, the percentage of students who participated did not necessarily increase. In the New High School, 55% of the student body participated on sports teams, compared to 69% of the students in Public High School 1 and 52% of Public High School 2. The decreased percentage of sports team participation in the New High School may be a reflection of the limited number of spots on a given sports team, and regardless of school size, most teams have a maximum number of participants. The data does show that the New High School has more extra-curricular options for student participation than was offered by either of the closed schools.

Concerning the curricular opportunities, the document review shows that advanced course offerings increased in their availability and number. In addition, the number of students taking and successfully passing those advanced courses increased by nearly 100%. It would seem that the New High School was able to offer a greater selection of advanced courses to a higher percentage of the student body as compared to the closed schools.

One can conclude the answer to the question “How did the rural high school consolidation affect student curricular and extra-curricular opportunities?” is that it increased the number of clubs and sports teams to select from and significantly increased the advanced curricular opportunities.

Effects on student achievement. Much research exists that shows the detrimental effect that school consolidation has on student achievement. With larger schools, the possibility of getting “lost in the crowd” is a real one, and often schools with an increased

population means that class sizes will grow, lessening the powerful relationship between student and teacher that necessitates learning. Yet, the findings from the document review and the Welch's *t*-tests on state-mandated standardized tests are not consistent with the research.

Aside from the increased passing rates and increased number of students taking advanced placement tests, the quantitative data from the Welch's *t*-tests of the English 10 and Biology High School Assessment proficiency rates show statistically higher rates than those from the closed schools. The answer then to the question "How did the consolidation affect student achievement?" must be that the effects on those achievements were very positive.

Process used as compared to prevailing change theory concepts. Spector's (2010) change theory focuses on the importance of shared diagnosis and mutual engagement. Furthermore, Spector notes that several components, such as strategy, purpose, and alteration of behavior patterns are necessary for effective change. His model follows a well-structured order of Redesign, Help, People Alignment, and Systems and Structures. Finally, Spector (2010) describes the three key aspects to organizational change as Strategic renewal, Strategic human resource management, and Leadership.

In this particular case study, the consolidation process seemed to take Spector's change theory into account. As indicated through the findings of interviews and surveys, the consolidation was initially determined through exposing data from multiple sources to the community, which lead to shared diagnosis with those all stakeholders. Though anxious and grieving over the closing of their community schools, many appeared to understand the factors leading up to the decision. The findings show that many were

aware of the issues and had ample opportunity to voice opinions to decision makers and even take part in school committees. In fact, the findings reveal that several community members seemed to find a way to mitigate the effects by agreeing to consolidate under the terms of a New High School. Thus, using mutual engagement among stakeholders, the consolidation moved forward only when it was agreed upon to not consolidate into a currently existing school, but rather, hold off on consolidation until a New High School that could comfortably fit and effectively educate all students was built.

With the school committees, mutual engagement and shared diagnosis was again used to determine many decisions affecting closing schools and especially the New High School. Committees were formed for New High School colors, mascots, and name as well as what to do with the memorabilia from the closing schools. Since the New High School was to have its own identity separate from that of the closing schools, a decision had to be made to determine what to do with past banners, trophies, and other showcases of achievement. This instilled a sense of purpose for many community members in terms of the New High School while still showing respect for the prevailing sense of loss.

One strategy for promoting student unity and ownership of the New High School was through extra-curricular activities. For the final year of the closing schools, the final game in which the closing schools played each other ended in a party to allow players to mingle and meet future teammates for the following season. Apparel for the New High School was distributed to many players to allow a sense of school spirit to evolve. Such actions allowed for a change in behavior patterns that allowed students to envision themselves as part of the New High School.

A major strategy for instilling a community sense of pride and ownership of the

New High School was through open houses, school tours, and fundraising opportunities. Any community member could request and gain entrance to the New High School to catch a glimpse as to the type of education with updated technology that was now possible in an area whose last new school had been well over 50 years prior.

Stakeholder perception of outcomes. Understanding perceptions of stakeholders in a consolidation can reveal information useful for other districts faced with school consolidation. Through data derived from surveys, it can be inferred that many community members seemed not only to understand the factors that ultimately led to the decision to consolidation, but also to agree with that controversial decision. Furthermore, most community members seem to resist the idea of breaking apart the New High School, reopening the closed schools, and send students back to those original communities.

The findings from the interviews further infer much community member support for the consolidation. Many participants listed the updated technology and the wider range and availability of classes, especially advanced ones, in the New High School as major benefits for the students to better prepare them for the future. Several viewed the involvement of the communities as positive, especially in terms of the school committees, and the fact that the name, mascot, and colors were all specifically chosen due to the fact that each related directly to the geography and history of the school community.

Leadership strategies. In a controversial situation such as school consolidation, leadership is a very courageous trait to find, and often in the heat of the moment, leadership can morph into dictatorship where directives are given without explanation. People tend to faction off into groups based on school communities, and feelings of mistrust and anger often prevail. Therefore, leadership is vital in school consolidation,

especially to establish and maintain a positive atmosphere of trust and openness.

The leadership in this school consolidation, as noted in the interviews and surveys, seemed to stem not only from the State Superintendent, Board of Education, and District Superintendent but also from the principal of the New High School. The District Superintendent established school committees that promoted collaboration amongst community members as well as the school system. The New High School principal, who came from a closing school, added to this sense of trust and openness by promoting transparency and honesty at the school. He sought and hired those who he believed would assist in not only a smooth transition for the consolidation but also an overall unification of the various communities for the New High School. Special care was taken to hire faculty and staff from the closing schools in equal numbers to allow community members to have a sense of familiarity with the New High School. Though seniority did not seem to be taken into account, contract procedures were followed, including interviews with the administration.

Likelihood of concordance and a better educational experience. Research has shown that rural school consolidation is a difficult process due to stakeholders' emotional attachment to closing schools. Typically, schools are the center of rural communities, and many community members base their identities on their alma maters. Therefore, the controversial decision to close buildings long associated with youth, heritage, and identity is often met with anger, hostility, and grief. Nonetheless, this study contains findings that indicate that a rural consolidation resulting in a new school can be completed with concordance and can offer a better educational experience.

For this school consolidation, it is clear from the data gathered in the interviews

and surveys, that many stakeholders reacted with angst, as the research predicted. In fact, a few stakeholders seemed to hold onto those feelings of loss and anger, even 12 years after the decision was first announced. The majority, however, seemed to have resolved the initial feelings of negativity and view the New High School with dignity and respect.

In contrasting this consolidation process with Spector's change theory, it is clear that many necessary components, such as shared diagnosis and mutual engagement, were present. In addition, this consolidation appeared to follow many of the suggested steps of change theory. Steps 1 and 2 of Spector model are "Redesign," in which new behaviors are shaped, and "Help," a step that emphasizes communication and collaboration among stakeholders and leaders. As noted in the interviews and surveys, community members were involved in the shared diagnosis in the decision to consolidate schools. Meetings regarding school consolidation were made public and open for any stakeholder voice an opinion. School committees, formed by volunteers from closed school communities, assisted in determining many decisions, from the consolidation itself to the specifics of the New High School.

At one point, a lawsuit that united closed school communities behind a common goal of not consolidating the schools into an existing school became a trigger that moved the prospect of a new building into a firm reality. Various behind-the-scenes people were working toward the vision of a new school, and although their efforts may not have seemed to be coordinated, the common vision of what was needed – a new learning environment – brought forth a change that could be seen as acceptable to most. These strategies allowed for mutual engagement of all stakeholders, as well as a sense of purpose, throughout the consolidation process. Such opportunities for ownership and

voice helped to align stakeholder behaviors to the same goal.

Steps 3, “People Alignment,” and 4, “Systems and Structures,” of Spector’s model of effective change focuses on how to best fulfill the roles to make the change effective as well as how to sustain and reinforce the change. The findings from the interview data reveal that much reflection and research were used to determine the administration and staff at the New High School. The principal was selected based on his experience and knowledge of the closed school communities. As a lifetime school community member and leader of one community, and even a short-time leader in the other school community, the New High School principal was viewed by stakeholders as credible and trustworthy. In addition, the faculty appeared to have been specifically chosen based on their expertise in given content areas as well as on the fact that they could offer a sense of familiarity for students and community members. This is evidenced by the effort used to bring equal numbers of teachers to the New High School from the closing schools.

The premise behind many consolidation decisions is to create an improved educational experience for the students. Though research shows a school consolidation may have negative effects on student achievement, this situation shows a very different effect. As noted by the comparison of state-mandated standardized tests and document reviews, this school consolidation has positively affected student achievement.

Besides student achievement, educational experience can also be defined by a school’s curricular and extra-curricular opportunities. As noted by the document reviews, the New High School offered a greater variety of rigorous courses, and more students opted to enroll in these classes. In addition, the New High School had a larger number of

clubs and sports that resulted in an equal percentage of student participation.

Much research shows that school consolidation is wrought with resistance, angst, and grief and such negative feelings can have an impact on the effectiveness of a new school. However, in this case, although community members did have emotional connections to their respective closing schools, this study shows that it is possible to consolidate schools with concordance and to have a better educational experience with a new school.

Recommendations

The recommendations by the researcher for this study were informed by the literature review, change theory, data summary, and final conclusion presented.

Recommendations are reported in two subsections. The first subsection includes recommendations for future studies about rural school consolidation. The second subsection includes recommendations for rural school district administrators, elected officials, and community leaders who have determined that school consolidation must take place in their district.

Future studies. During the course of the study, some concerns and issues were raised by participants that can serve as a basis for further research. Recommendations for future study include the following:

1. A study of financial costs of consolidating schools calculated across operational costs to include staffing, maintenance, support services, and other such costs.
2. A meta-analysis of school consolidation studies to create a dynamic model that could be helpful for practitioners or policy makers.

3. A study of how technology could be used to enhance and sustain the shared diagnosis and engagement process in a school consolidation.
4. A historical study that determines trigger events that precipitate the need for consolidating schools.
5. A study of the economic impact on a community due to school consolidation.

Further research on the process and effects of school consolidation will provide additional information to district administrators, elected officials, and community members. Since school consolidation seems to occur frequently, such research can allow such a controversial change to proceed with less disruption and angst and have more positive effects for all stakeholders and, in particular, the students.

Implications for school districts. Though controversial, school consolidation appears to be a viable solution to overcome various issues facing rural school districts. Because of this, school administrators, elected officials and community leaders need to be well-informed about best practices for a consolidation process and the possible post-consolidation effects. The purpose of this research study was to provide information to school district leaders who have determined that school consolidation may well be a necessary option to resolve issues facing the school.

Though the term consolidation brings negative emotions to the surface for any community member, the process itself can offer an outlet for those emotions. Leaders must create opportunities for community members to share in the diagnosis of the issues so that the decision is better understood. With input from stakeholders, plans can be put into place that account for issues which lay below the surface. Even though one might pay attention to a model or plan, the events of the plan, as they unfold, can create

direction.

In school consolidation, it is important to make every effort to avoid a plan that will cause one school to feel like the “winner” and the other school to feel like the “loser.” Such situations often occur with school consolidation, when one school closes, and the student population of that school will attend another nearby school. Decision makers should consider how to make a school consolidation a positive change for all stakeholders. One way to do so is to create a new identity for the new combined student body that is not associated with previous schools. Such considerations would be a new school name, new school colors, and a new school mascot.

Engaging stakeholders in shared diagnosis resulting in the decision to consolidate as the best option to negative school issues is important, as is stakeholder input and opportunity for input throughout the process as well. By creating continued opportunities for the school community to voice their opinions and suggestions for any decisions regarding the school consolidation, trust and support are generated. Also, chances to be a positive and integral part of the new school, to include such opportunities as fundraisers, patronage and/or sponsorship of school clubs, groups, or teams, help bring a sense of ownership to members of the community. These strategies allow for continued mutual engagement, which promotes ownership by stakeholders and aligns their behavior with the goal of acceptance.

One important aspect that cannot be overlooked is the role of the leader. In a school consolidation, several leadership positions are of utmost importance, from the state superintendent, to the district superintendent, to the school principal. In this particular case, and any similar case of rural school consolidation, the role of the

principal as leader appears to be a strong determining factor of its success. Rural schools tend to be located in small, tight-knit communities, and in order to bring such communities together amiably, members must view the administration as trustworthy and credible. Therefore, when a rural district decides to consolidate schools, the next important decision must be in the selection of the principal for the consolidated school, as this person becomes the contact point for the communities in the school itself, embodying its values and beliefs.

As community schools close, the atmosphere of those schools must be allowed to persist in the consolidated school. Strategically selecting familiar faces from the closed schools to be employed at the consolidated school seems to allow students, parents, and community members to feel a sense of comfort with the change. In addition, attention must be given to helping students feel connected to the school.

Summary

School consolidation has been, and will continue to be, a controversial change in any school system. With populations shifting to urban and suburban areas where economic success is more likely, rural areas will face drastic means to meet their budgets. Such a change can be handled with concordance if steps are taken to allow community members and stakeholders to understand, be a part of, and support the effort. Decision makers must consider the steps in a change theory, as well as the fundamental aspects and components of an organization undergoing change. Shared diagnosis and mutual engagement of all stakeholders must be continual throughout the process. Furthermore, a school consolidation can and should result in a positive educational experience that will benefit and please the communities who once felt disadvantaged by the change. By

engaging those people who are part of the school community to assist in making pertinent decisions, behaviors will align and a common vision can be realized.

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Appendix A – Informed Consent for Survey

Informed Consent to Participate in a Research Study

Project Title: A Mixed Methods Case Study of Consolidation Effects on a Rural Maryland School

☐ I am 18 years or older

☐ I have NOT already completed this questionnaire

Purpose of the Study: I am Stephanie Marchbank, a Doctoral Student in Educational Leadership at Frostburg State University, and I am examining the process and effects of school consolidation. You have been selected to participate in this survey because you reside in a school district that has recently experienced school consolidation.

Procedures: You are being asked to complete a 7-item survey that will take approximately 5-10 minutes. This voluntary and anonymous survey asks questions about your experience with school consolidation. You will be asked to respond “yes,” “no,” or “not sure/don’t remember” to each question, with the opportunity to add individual comments, if you like. Should you voluntarily agree to participate in the survey, you will receive two follow-up reminders to encourage completion of the survey after the initial request. Please, read the digital Informed Consent Form completely and print a copy for your records. If you have any questions, please contact me, Dr. Thompson, or the IRB by the information provided below. By clicking on the URL link that accesses the survey, you are acknowledging that you have read this Informed Consent Form, have had all your questions answered, and agree to voluntarily participate in the survey.

Participant Benefits: While you may not benefit directly from participating in this survey, you can help improve outcomes and processes for school districts and communities who may undergo consolidation. The information you contribute may assist school administrators and districts like yours who are considering school consolidation.

Participant Risks: Some questions may make you feel uncomfortable or emotionally distressed due to deep-seated connections with closed schools. You do not have to answer any questions that you are uncomfortable answering and you may stop participating in the survey at any time. Your answers will be anonymous since I do not ask for any specific information that would identify you.

Voluntary Participation and Withdrawal: Your participation in this study is completely voluntary. You may choose not to participate. If you decide to participate, you may stop at any time. While I hope you will answer all questions, you are free to skip any questions. You can decline to participate, or stop at any time with no consequences to you. As the survey will only show one question at a time, only questions that have been

answered will be used for data. Also, keep in mind that you must be at least 18 years old to participate in the study.

Confidentiality: No identifiers are collected for this study, so all data is anonymous. All data will only be accessible to the researcher and the Committee Chair of the study. Data culled from these surveys will be kept “behind two locks”: this data will be kept on a password-protected computer in the Frampton Hall office of my dissertation Chair, Dr. Glenn Thompson. This office is accessible only with a key. Once all identifying information has been removed from the data file, I will analyze the data from a personal password-protected computer. An external hard-drive that is kept in a locked drawer will be used for back-up purposes. Data will be kept for two years beyond the publication of the study, and after two years, the data will be destroyed. Any publication and dissemination of this study will aggregate all data and use pseudonyms for schools and areas.

Contact Information: If you have questions about this research study, please contact:

Stephanie Marchbank
301-689-3170
samarchbank0@frostburg.edu

or

Dr. Glenn Thompson
Frostburg State University
207-4 Frampton Hall
101 Braddock Road
Frostburg, MD 21532
301-687-4366

This research study has been reviewed by the Institutional Review Board (IRB) of FSU. For research-related problems or questions regarding participant’s rights, contact the IRB through the Chair of the IRB, Dr. Beth Scarloss. You can call her at 301-687-4472 or reach her through email at IRB@frostburg.edu. It is suggested that if you have a question that requires anonymity, contact by phone any of the above contacts.

Consent: I have read and understand the explanation provided to me. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in the survey/questionnaire. Please print a copy of this page to keep for future reference, and then click on the link to the survey below.

Appendix B – Survey

SCHOOL CONSOLIDATION SURVEY: This survey contains 7 items.

1. Prior to the fall of 2002, were you ever made aware consolidation was being considered for any specific schools by any part of the school system?

YES

NO

Don't remember

Comments:

2. During the fall of 2002, were you ever aware of meetings that you could attend where consolidation of two high schools would be the topic?

YES

NO

Don't remember

Comments:

3. Did you agree with the idea of consolidating the two high schools?

YES

NO

Don't remember

Comments:

4. During the consolidation consideration, did you feel you had an opportunity to voice your feelings to someone in the school system?

YES

NO

Don't remember

Comments:

5. During the time, did you believe that the school board and administration would consider the concerns of the parents whose children would attend the new school?

YES

NO

Don't remember

Comments:

6. At the current time, do you believe that consolidating the two high schools to create a new high school has provided a quality educational experience for your child(ren)?

YES

NO

Not sure

Comments:

7. Would you be supportive of an effort to break apart the new school, reopen the two closed schools, and send students back to those original school communities?

YES

NO

Not sure

Comments:

Thank you for participating in this research study.

Appendix C – Informed Consent for Interviews

Informed Consent to Participate in a Research Study

Project Title: A Mixed Methods Case Study of Consolidation Effects on a Rural Maryland School

☐ **I am 18 years or older**

Purpose of the Study: I am Stephanie Marchbank, a Doctoral Student in Educational Leadership at Frostburg State University, and I am examining the process and effects of school consolidation. You have been selected to participate in this research project because you may have insight regarding a school district that has recently experienced school consolidation.

Procedures: You have been selected based on your experience and knowledge in school consolidation to participate in an interview that will take approximately 30 minutes. This voluntary interview asks questions about your experience with a specific school consolidation. You will be asked 9 open-ended questions.

Participant Benefits: While you may not benefit directly from participating in this study, you can help improve outcomes and processes for school districts and communities who may undergo consolidation. The information you contribute may assist school administrators and districts like yours who are considering school consolidation.

Participant Risks: Some questions may make you feel uncomfortable or emotionally distressed due to deep-seated connections with closed schools or the controversy that associated with school consolidation. You do not have to answer any questions that you are uncomfortable answering and you may stop participating in the interview at any time without consequences to yourself.

Voluntary Participation and Withdrawal: Your participation in this study is completely voluntary. You may choose not to participate in the interview at all. If you decide to participate, you may stop at any time. While I hope you will answer all questions, you are free to skip any questions. You can decline to participate, or stop at any time with no consequences to you. Also, keep in mind that you must be at least 18 years old to participate in the study.

Confidentiality: All information collected in this study will remain confidential to the greatest extent permitted by law. Your name will not be used in the study. Individual interview participants as well as schools in the region will protected so that no reader can identify people or places. Data culled from these interviews will be kept “behind two locks”: this data will be kept on a password-protected computer in the Frampton Hall office of my dissertation Chair, Dr. Glenn Thompson. This office is accessible only with a key. Once all identifying information has been removed from the data file, I will analyze the data from a personal password-protected computer. An

external hard-drive that is kept in a locked drawer will be used for back-up purposes. Data will be kept for two years beyond the publication of the study, and after two years, the data will be destroyed.

Contact Information: If you have questions about this research study, please contact:

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This research study has been reviewed by the Institutional Review Board (IRB) of Frostburg State University. For research-related problems or questions regarding participant's rights, contact the IRB through the Chair of the Institutional Review Board, Dr. Beth Scarloss. You can call her at 301-687-4472 or reach her through email at IRB@frostburg.edu

Consent: I have read and understand the explanation provided to me. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this study.

I agree/consent to participate:

Signature

Date

(Please PRINT name here)

Researcher: Stephanie Marchbank

Date

Appendix D – Interview Questions

1. Can you tell me how the need for consolidation of the two high schools was determined? When did that occur?
2. Who was involved in championing the decision to consolidate, and why were other methods to solve the issues at hand not used?
3. In what ways were different people (students, faculty, staff, and community members) who would be affected by the consolidation made aware of these issues and the possibility of consolidation?
4. What measures were put into place, if any, to help create a sense of unity and/or ownership (students, faculty, staff, community members) prior to the new school opening?
5. How were the people who would work in the building (administrators, teachers, support staff, maintenance staff) selected from the available pool?
6. What, if any, decisions about aspects of the school allowed for input outside of the administration and how was that input collected (building design, fields, colors, mascots, curriculum, etc)?
7. What measures were taken, if any, to help create a sense of unity and ownership (students, teachers, community members) during the first year(s) of the new school's opening?
8. In what ways do you think this consolidation process went well?
9. In what ways could this consolidation process have been better?