



Merging Public Schools to Reduce Financial Costs

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Abstract

Between 1930 and 1970, the mean school size in the U.S increased from 87 to 440 students, and the mean district size also increased from 170 to 2300 students. This was the result of 120,000 schools and 100,000 districts being mitigated through merging. These mergers impacted students, and schools' personnel. Some researchers suggest that students who are educated in states with small school size gave higher returns in education (Duncombe & Yinger, 2007). On the other hand, larger districts were related to average returns on education and increased educational achievements. Various states in America have experienced considerable increases in the mean size of schools, as well as a decrease in the average number of schools. While many claim that students and societies suffer from these mergers, others argue that public school consolidation reduces the costs of operation. Despite the controversy surrounding the issue, there is no concrete evidence for how school consolidations impact students' performance (Fairman, 2003). However, public school mergers can have impacts on students, teachers, and administrators. This paper demonstrates the impact of school consolidation in the United States and recommendations are provided to enhance the positive effects of school mergers in the Kingdom of Saudi Arabia.

Keywords: School merger, School consolidation, Merging schools, School improvement, Student achievement, School cost.



Introduction

Public school education is an important part of the education system. Many schools in the United States have experienced consolidation and mergers to reduce the financial costs associated with running the schools. The Ministry of Education in the Kingdom of Saudi Arabia has established an urgent announcement to start public school mergers in schools that have low student' enrollment. Due to these low enrollment numbers, these schools will be merged into nearby schools starting Fall 2018 to reduce the financial loss (Education, 2018; Alghasham, 2018). The Ministry of Education in Saudi must provide additional accommodations to ease the changes and support students. More importantly, the impact of school consolidation and effectiveness should be learned from other countries that have implemented successful mergers.

The United States has a long history regarding school consolidation. School mergers in the United States started in the early 19th century with the aim to advance education and reduce the financial costs associated with the running of public schools. This paper illustrates the impact of school mergers in the United States and lessons learned to apply them effectively in the Kingdom of Saudi Arabia.

There have been related impacts of the school mergers on teachers, students, and the administration as will be addressed in this research paper. For instance, a case study on the impacts of school merging on Catholic schools suggests adverse implications for teachers' experiences at various levels. One of the factors that has triggered school mergers in the U.S is the ever-increasing cost of running public schools and a low number of students per school, which also elevates the operational costs of schools. As a result of



the high financial costs associated with running public schools, school mergers were seen to be helpful in addressing the issue. This paper is therefore focused on outlining the impacts of school mergers to cut financial costs and its corresponding effects on teachers, students and the administration in the United States. Additionally, the research will provide insight and recommendations for school consolidation in the Kingdom of Saudi Arabia. The paper uses the following research questions:

1. xDo school mergers have significant effects on the financial costs of schools?
2. What are the teachers' experiences as a result of school mergers?
3. What are the effects of school mergers on the administration?
4. What are the effects of school mergers on students' performance and achievements?

Consolidation of schools has an extreme effect on the education environment, which also affects students, teachers, and administrators (Lawrence et al., 2002). The people against school mergers claim that it can negatively affect students' learning. Additionally, they argue that there are various ways in which school mergers can impair the quality of education. Consolidation can be taken to mean an enlargement of the school size. One of the primary sources of the adverse implications of school mergers is its tendency to reduce the teacher-to-student ratio, which impairs teaching and supervision in the classroom.

On the other hand, school closures are usually caused by fewer numbers of students than the required minimum by the Department of Education. Consolidation is, therefore, necessary to increase the number of students and prevent school closures. However, small classes increase the quality of learning and ease teachers' supervision of the class



(Lawrence et al., 2002). School consolidation constitutes a total change in the learning context and therefore must affect both teachers and students. The impacts of school closures may be temporary and applicable to the students who are shifted from one school to another in the event of a shutdown. Adjusting to a new learning environment, teachers and administrators are likely to affect students who regularly shift to schools at the event of closure. School mergers have both negative and positive consequences on the stakeholders involved.

Significance of the Study

A merger is a form of an organizational change that involves the combination of two or more organizations to operate as one. Most studies suggest that the people who encounter the stress of an organizational change, as in the case of a merger, show high levels of anxiety. This research is therefore relevant since it informs the school administrators of the current and future impacts of school mergers on schools' administrators, teachers, and students. Analyzing a merger through teachers and students' experiences will aid the school administrators in looking for the most appropriate ways of implementing a school merger process. In the event of an educational change, teachers' involvement is critical; lack of their support has always led to a failure in the merging process.

The majority of the studies have placed emphasis on the financial benefits and economies of scale that result due to school merging, but little focus has been laid on the impact of school mergers on teachers, students and the school administration at large. The implementation strategies are not for formulators, but for those who will be involved in implementing the change. In other words, teachers and other stakeholders' involvement is an important aspect for the implementation of any merging plans. This research on school



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mergers in the United States provides a comprehensive analysis of how teachers, administrators and students experience merger changes.

Literature Review

The reduction of the quantity of public school districts in America since 1940 was triggered by the claims based on the economies of scale. Duncombe and Yinger (2007) suggest that merging is used to take advantage of economies of scale by spreading the administrative costs over an immense student body without diminishing quality. Moreover, merger supporters argue that bigger districts can hire a more competent teaching staff that are highly specialized in specific fields. Bigger districts can also enhance collaboration from a variety of teachers. However, the merging policies have always had opponents. For instance, Duncombe and Yinger (2007) observe that the individuals against consolidation claim that larger districts encounter diseconomies of scale in their operations based on higher transport expenses, a robust union intervention, and little buy-in from guardians and teachers. Regardless of the fight against the consolidation policies by the opponents, the merging of public schools has influenced many districts in the United States over the past years.

Based on these disputes, many researchers have pointed out various social and economic factors that hamper the consolidation of public schools. Alesina, Baqir, and Hoxby (2004) suggest that income and racial differences are relevant in determining the number and sizes of schools and districts. Consequently, Brasington discovered that the variation in size between two districts increases the probability of deciding to consolidate for a larger district and reduces this probability for smaller districts (2003). The main aim of policy formulators who support school consolidation in the U.S is to target the cost benefits,



which come as a result of economies of scale. In various states in the U.S, the policy formulators have made use of various fiscal and regulatory incentives to make sure school consolidation policies are implemented effectively.

The research reviewed based on consolidation and economies of scale is cross-sectional, and the approaches do not recognize the effect of size and educational attainment. However, Kuziemko (2006) is among the researchers who approach the issue in depth. The author succeeds in the analysis of the effect of school mergers and attainment using a two-step least square (2SLS) method. Kuziemko observes insignificant outcomes in the initial year following an enrollment change. Consequently, she discovers adverse implications on both attendance and mathematics scores in the second and third years following the reform (2006).

The little research that assessed the impacts of school consolidation on students' outcomes is unclear. An analysis of 500 school districts in New Jersey based on production function methodology, found concrete evidence of moderate diseconomies of scale. On the contrary, Kuziemko examines data on three study groups of students born in the year 1920 to 1940 based on 1980 U.S census and notices an increase in district registry of 947 students with a 2.1% increase in the future incomes which suggests fewer impacts on students' attainments in future (2006).

Lawrence et al. (2002) indicate that small schools offer a safer and friendlier environment than larger schools do, which improves students' outcomes. Additionally, the author suggests that in small schools, the percentage of graduates is higher, and the rate of



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dropout is drastically reduced as compared to larger schools, which also oppose school consolidation. Furthermore, Lawrence et al. (2002) confirm that small schools portray greater teacher satisfaction, enhance teachers' associations, and improve team teaching. They also argue that students in small schools have a better sense of belonging, which leads to higher attendance rates. In other words, small schools are easy to manage and supervise as compared to large schools where the teacher-student ratio is reduced. Andrews, Duncombe, and Yinger (2002) investigate 10 best cost studies and 12 best production-function studies of school size. The study displays the optimal school size that balances costs and benefits should be 300 to 500 students for elementary schools and 600 to 900 students for high schools. The result indicates that elementary and high schools that exceed 600 and 1000 students respectively may experience declining outcomes (Andrews, Duncombe, & Yinger, 2002).

Methods

The research paper relied entirely on previous studies about the impacts of school mergers. For instance, different schools in the United States, such as Catholic schools that have experienced a school merger, were reviewed. Consequently, great emphasis was laid on the teachers', administrators', and students' experiences because of the Catholic school mergers (Logan, 2018). The Catholic schools' experience was beneficial in answering research questions, which examine the impact of school mergers on schools' administrators, teachers, and students, coupled with showing the effects of mergers on the



financial cost. The study focused on the leadership practices used during the school merging process, the impacts of effective communication in the merger process, and the part teachers play in the merging process. The study also focused on teacher anxiety, pressure and overall satisfaction at large. The study framework, therefore, examined school consolidation, as well as how it affected the financial costs, teacher morale, students' outcomes and achievements (Lawrence et al., 2002). The leadership strategies employed during a school merger are a significant subject of discussion. Additionally, various Catholic schools in the United States experience closure and therefore merging was seen as an effective way to make them thrive in the future (Logan, 2018).

Results

Based on the review of the Catholic schools' mergers, it was found that the leaders change strategies significantly, which affected teachers' morale (Logan, 2018). The teachers experienced anxiety, stress, and lack of confidence following the mergers. The school merging also had impacts on students' performance because of poor quality of education. However, the financial costs associated with the operation of the schools decrease, which suggests benefits for the administrators due to economies of scale. Teachers and students were the stakeholders affected to a vast extent following the merging process (Logan, 2018). In other schools where different stakeholders were involved in the change, the merging process was seen to be successful.

Merging of public schools also had some negative repercussions on students' performance and achievement in the future. Additionally, a combined school could host better facilities at a considerably lower cost of operation, which is the main topic of focus in this study. In other words, merged schools provided economies of scale in



administration and the facilities used in learning. Consolidated schools also allowed for a more centralized administration over public schools, which also contributed to a lower cost as compared to operating small schools (Lawrence et al., 2002). Regional resistance to merging in the U.S was also evident especially in rural areas where the schools were administered.

Diversity was also a hindrance to an effective merging of public schools. In response to resistance to consolidation and amalgamation of public schools, the administration of the state made use of financial rewards to encourage fusion. Additionally, they were forced to restructure the districts to ensure that the successful consolidation of schools was plausible. The number of students in public schools also increased because of merging to reduce the operational costs. The merging of schools led to a reduction in the number of schools and increased attendance generated bigger schools in the 20th century. Merging of public schools formed a significant portion of school reform (Lawrence et al., 2002). The primary aim of the merger was to change the small schools into larger ones that were associated with considerably lower financial costs. The American public educational system has therefore experienced drastic changes in the late 19th century to date.

Discussion

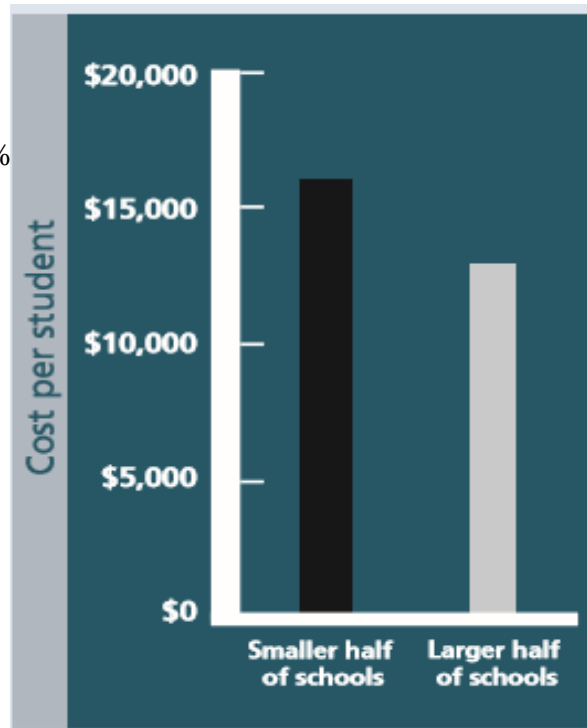
1. Impact of School Merger on Financial Cost

The strict educational budgets at the national and state level have stimulated the urge to encourage school consolidation as a way of reducing financial costs. Mathis (2003) illustrates that Kansas's district consolidation saved only 1.6% of its original cost. According to Mathis (2003) "Consolidating central functions does not eliminate them" (p. 122). Two pieces have made persistent efforts in examining the effects of consolidation.



For instance, Duncombe and Yinger (2007) utilize the cost function method to investigate the fiscal impacts of merging schools using a matched panel of rural districts in New York. They obtained concrete evidence of considerable cost savings at the district level. Based

on their findings, enrollment of 300 district led to a 61.7% operational costs. doubling of 1500 district resulted in a 49.6%. Even succeed in relating consolidation on their findings fail to endogeneity of the enrollment. On the



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Lawrence et al. (2002) examine data for 489 schools from 1990 to 2001 to find the financial cost difference between small and large schools. The result (see Figure1) illustrates that there is 20 percent difference in cost per student to build smaller schools compare to larger ones (\$15,709 and \$12,977, respectively). The difference in cost per student is considered minor variance reflecting the general advantages of small schools and their affiliated investments to the community (Lawrence et al., 2002).



Figure1. Data for 489 Schools in Study Database. This figure shows cost per student: \$15,709 for smaller schools and \$12,977 for larger schools. Greater half is schools larger than median size of schools in study database (Lawrence et al., 2002).

Regardless of consolidation's financial usefulness, there is little research to back up the impact of school merging because of data scarcity. Instead, the available research on the topic targets the effect of merging based on economies of scale to cut the financial costs of running public schools. There are impacts of consolidation both at the district and school level, with most research approving economies of scale at the district level and diseconomies of scale at the school level.

2. Impact of School Merger on Teachers

There are various ways in which the teachers' experience changes as a result of the merging of schools. For instance, Lawrence et al. (2002) argue that small schools show



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better teacher satisfaction, advanced teachers' associations, and more team teaching as compared to large schools. In other words, merging schools reduces the degree to which teachers are satisfied in their career. Additionally, (Fairman, 2003) support the idea that small schools help teachers to spend more time with each student and create individual learning plans to meet students' needs. The idea is right since large schools are difficult to supervise as a result of the reduction of the teacher-to-student ratio. Teachers also undergo emotional changes while reacting to a merger, the manner of which impacts teachers' morale and teaching ability.

The teachers should therefore be involved in the decision-making process during policy formulation in the event of consolidation of schools. School merging leads to an elevated amount of stress and anxiety among teachers. It is evident that a school cannot function well without teachers and should therefore be involved in all the processes that lead to the merger. All the stakeholders involved in the school merging processes should be informed to understand the processes and respond positively to the change. According Logan (2018), the teachers are the stakeholders significantly impacted by the change and should, therefore, be involved since they might have different opinions based on the change. Teachers have extreme anxiety, stress, and loss of confidence through the transition process of combining schools. Additionally, the mergers can also have enormous effects on the teachers who were initially committed, which increases their fears about job security, and their satisfaction is significantly impacted (Fairman. 2003). A portion of the teachers may experience difficulties trusting the transformations as a result of the merger and may take a considerable period to recover from the loss of confidence.



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The school leaders should therefore exercise caution while making decisions to merge schools. In other words, some interest groups should be consulted before making any profound decisions to merge schools. How do leaders convey information about an impending merger and avoid the negative implications to teachers? As suggested by Blase and Blase (1999), it is an important aspect to make sure that the teachers are happy, inspired and positive since this will contribute to a positive influence on students, parents and the society.

Among the research conducted in the U.S, there is still less work done on the effects of school mergers on teachers and students. However, most researchers emphasize the effect of school mergers on the administration based on the economies of scale perspective. However, the research on the Catholic school mergers suggests adverse implications on teachers' performance. Communication was found to be critical in dealing with teachers' satisfaction in the event of the merging of public schools.

However, the available studies on school mergers suggest different details on the impacts on teachers' performance. There is a suggestion for increasing teachers' pay and teamwork in larger schools as compared to smaller schools (Lawrence et al., 2002). Lawrence et al. (2002) associate school mergers with poor teachers' satisfaction and poor team teaching. Teacher supervision in a larger school is not easy and, in most cases, leads to stress and anxiety on the part of the teachers. Additionally, a high number of students per class offers a great hindrance to student-teacher interaction and therefore results in a poor quality of education. Larger schools perform poorly as compared to smaller ones. (Fairman, 2003) adds that small schools enable teachers to have enough time for direct



interaction with the students, which improves the students' outcomes.

3. Impact of Public School Mergers on Administrators

The school administrators are impacted by school mergers as well. For instance, the financial costs associated with larger schools were reduced following the merger, which had a positive effect on the school leaders. However, the administrators also experienced challenges in coming up with a practical approach to communicate an impending school merger to enhance teacher satisfaction (Jabbour, 2013). Additionally, the school leaders were also concerned with assessing students' achievements and performance following the adoption of the school merger reform. It is true that poor communication on the part of the school leaders contributed significantly to negative implications following a school merger.

The administrators, therefore, encounter diverse problems in effectively communicating to build trust and ensure that the merger did not affect the teachers' morale. Fairman (2003) affirms that school merging affected the administrator's flexibility in revising course offerings each year based on students' needs, which also impacted negatively on the school climate. Consequently, small schools are easier to manage as compared to larger ones. However, Mathis (2003) provides a contrary view that consolidation accomplishes a better range and variety of course offerings. Organizational change plans should be focused on the implementers and not the planners (Logan, 2018). The school administrators were therefore supposed to choose between ignoring the teachers and other stakeholders in the change and face the consequences or consult them to ensure a successful merger. The administrators also had to research on the politics behind school



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consolidations, which was believed to restrain costs in the pursuit of school reforms. In other words, disputes, stress, successes, and challenges followed school mergers and the administrators were held accountable. Typically, school merging comes with many uncertainties and the school leaders should research thoroughly to ensure the success of the process.

Moreover, the school administrators are important in initiating any change in the schools since they make important decisions in place of other stakeholders. In the process, the school leaders should focus on making the changes while focusing on students' outcomes and teachers' experiences following the merging process. Again, research based on school consolidation and its impacts on the leaders is limited. The majority of the studies have laid emphasis on the effects of school mergers on the community and economies of scale at large. The available literature does not provide comprehensive guidance to the administrators in the considerations for a successful school merger. The school leaders should therefore exercise creativity to ensure the success of school mergers failure to do so results in adverse effects in the entire process (Jabbour, 2013). The schools usually have a well laid out procedure of affecting a school merging process. The staff union members, teachers and other stakeholders who are affected by the organizational change were involved in making the merger successful.

4. Impact of School Mergers on Students

School merging has both negative and positive effects on students' performance based on the findings of the research. For instance, large schools are associated with a considerably poor performance of students because of the inadequate quality of education. Additionally,



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the students are denied the chance of direct consultation with the teachers since the teacher-to-student ratio is reduced. Lawrence et al. (2002) show that graduation rates are higher and dropout rates are lower in small schools compared to the larger ones. The school climate is negatively affected by increasing students' population. The U.S. Department of Education compares large schools with a student population of 1,000 or more to small schools with a student population of fewer than 300 students. The report shows that large schools have 10 percent more weapons incidents, 3.94 percent more physical fights, and 8.25 percent more violent crime (Lawrence et al., 2002).

Studies have attempted to claim that merging schools make education more efficient. However, the classes become larger with no proportionate increase in the number of teachers and quality of learning. Students also experience stress in adapting to a new learning environment. However, poor performance was more pronounced in young children than in older ones. In other words, little children experience difficulties in switching to a new learning environment as compared to the old ones (Lawrence et al., 2002). Moreover, school mergers can have emotional effects on students in the long run. The school leaders should therefore exercise caution in the event of school merging so as not to impair the academic performance of students.

The number and diversity of the co-curricular activities which students get involved in are more pronounced in small schools than in large ones. The findings suggest that school mergers limit the co-curricular activities that the scholars are exposed to. However, some studies suggest that large schools can provide a better curriculum quality (Jabbour, 2013). The research based on the impacts of school mergers on students' performance does not



agree therefore. For instance, other studies suggest no relationship between quality of education and school size. However, the idea of cost effectiveness in operating larger schools is right since the administration is centralized. The idea of economies of scale and numerous school closures is what has stimulated school mergers in the past years. Additionally, there is no link between students' achievement and school size.

Research Limitations

There is a lack of research regarding school mergers in the Kingdom of Saudi Arabia. Additionally, most of the studies have placed emphasis on the economies of scale that result due to school consolidation, but little attention has been placed on the impact of school mergers on school climate and student's achievement. The research only examined teachers', administrators' and students' experiences in a few Catholic schools (Logan, 2018). The findings also lay a vague generalization based on a few schools; the data may be hindered since different schools have different administrators and leaders. Additionally, the participants in the study have only engaged in the school for a few years and therefore might have provided limited information based on their experiences. The findings of the survey were also limited because of scarce literature on the topic.

Recommendations

The need to reduce the financial cost related to the operation of small schools has shown the necessity of school mergers. However, school mergers are seen to have negative implications for teachers and students as well. Administrators and policy-makers should follow alternative modifications to accommodate school consolidation. The National Conference of State Legislators affirms that "In the last 10 years, there has been a movement toward breaking up large schools into smaller schools with no more than 400



students” (NCSL, 2011). School personnel are required to enhance education quality by reshaping the classroom environment and teacher-to-student ratio within a school. According to Overbay “Two of the most promising school-level reforms include schools-within-schools and class size reduction” (2003, p. 9). Having school within a school (SWaS) is one approach for achieving school size reduction. It is suitable only to benefit from an existing large school building instead of building a new facility so that it can reduce financial spending (Lawrence et al., 2002). Although more research is required to guarantee the effectiveness of such reforms, they could show significant possibilities for large schools looking for replacements to forming smaller schools.

The administrators should therefore use effective communication approaches while communicating an impending school consolidation to the teachers and other relevant stakeholders. Additionally, the school leaders are urged to involve teachers in the decision-making process since the organizational changes affect more the implementers than the planners themselves.

Additionally, the Ministry of Education in the Kingdom of Saudi Arabia should research the impacts of school mergers on students and teachers before making the organizational change policies. There is a need to determine the optimal school size to maintain school environment effectiveness for all students. School mergers have been effective in reducing the operational cost associated with small schools, as the paper has shown. The public education system in the U.S has experienced changes back from the 19th century, which today’s policy-makers can look to for guidance.

Conclusion



Many people claim that students and societies have suffered from school mergers in different ways. However, some also argue that public school consolidation reduces the cost of operation. Regardless of the considerable extent and arguments, there is no concrete evidence about the way school consolidations can impact students' performance. However, school mergers have been shown to be an effective way of cutting down on substantial costs related to running small schools. Consequently, studies have shown increased school mergers over the past years and an anticipated increase in the coming years. However, public school mergers can have some impacts on students' performance, administrators and teachers. In conclusion, "The explicit assumption is that consolidation is desirable but not always practical" (Mathis, 2003, p. 125).

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