

School Size and Student Achievement

An ELA Performance Task



Student Directions

School Size and Student Achievement

Task:

Over the past several decades, there has been a great deal of debate about how to “fix” our nation’s schools and maximize student learning. One trend, which seems to be supported by extensive research studies, is to reduce school size, particularly at the high school level, where the large school environment appears to have a negative effect on student performance and engagement.

You will be reading four articles relating to high school size, each presenting issues that are factors in this discussion. You will read the first article and discuss it as a group, then read three additional articles and respond to several questions about them on your own. In a separate session, you will write your own argumentative essay that expresses your own position on the debate over school size.

Classroom Activity

The reading selection and the directions for administering the classroom activity portion of this task are on the following three pages.

School Size and Student Achievement

Directions for Classroom Activity:

1. Distribute copies of the first article relating to school size: "What's the Right Size?" Students should be given about 5 to 10 minutes to complete this reading and to jot down any margin notes that might occur to them during their reading.
2. Have students divide into small groups of about 4 or 5 individuals each. Each group should designate a "recorder" and a "reporter."
3. On a piece of scratch paper, the recorder of each group should create a chart that has two columns, one labeled "Advantages of Smaller Schools" and the other labeled "Advantages of Larger Schools." In their small groups, have the students complete this chart. Students should include information taken from the article they have just read, but they can also add any that they can think of themselves that are not discussed in the article.
4. Have the reporter for each group report out on their group's findings. To avoid lots of repetition, you may instruct each group just to cover a portion of the chart (e.g., just the "Advantages to a Large School" taken from the article, or "Advantages of a Small School" identified by the group but not in the article).
5. During this reporting out, capture the main ideas by writing them on a chart pack, white board, or by entering them into a document projected through a PC viewer or on an overhead.
6. At this point, students are not taking a stand or formulating, as individuals or as a group, a position on this topic. They are just brainstorming ideas. Students should not engage in a debate about the topic or be asked to weigh the evidence or evaluate its quality.
7. After this brainstorming activity is completed, students should hand in the group work, and the summary sheet created by the teacher should also be removed. In keeping with Smarter Balanced tasks, the copy of the article might also be collected and securely disposed of. For practice purposes, the article, even with the student notes, could be retained by the student and used as part of Part 1 of the task.

Classroom Activity

Article 1: "What's the Right Size?"

The following article was posted on the GREAT SCHOOLS website, which describes itself as "a national nonpartisan nonprofit that helps millions of parents find great schools, support great learning, and guide their kids to great futures." Read what this group has to say about the school size debate.

Notes on my thoughts, reactions and questions as I read.

WHEN IT COMES TO SCHOOL SIZE, there is no right size that works for every student. Some students thrive in a smaller environment where they get lots of attention, while others prefer the variety of activities and peer groups available in a larger school. Certainly, small and large schools each have their pros and cons.



Small Schools, A Growing Trend

In the 1960s the general thinking was that larger schools offered more comprehensive instructional programs of greater quality at lower costs than small schools (generally defined as schools of less than 400 to 500 students at the high school level) did. But in recent years researchers have discovered that the cost savings provided by large schools have had a negative effect on student achievement and graduation rates. As schools get bigger, student achievement declines and larger schools have higher rates of absenteeism, dropouts and discipline problems. In addition, "Dollars and Sense II," a 2005 study of 25 different small schools across the nation found that, on average, small schools spent 17 percent less per student than comparable schools in their districts while achieving equivalent or better results.

As a result, there has been a growing trend toward creating small schools, and schools within schools, (particularly in high schools) to better engage students and give them more attention. The federal government has issued more than \$94 million a year in experimental grants for small learning communities or "SLCs." School districts may use these grants to create smaller schools within schools. Since 1999, the Bill and Melinda Gates Foundation has committed more than \$1.8 billion to creating 1,500 small high schools around the country, and the Michael and Susan Dell

Foundation has committed an additional \$32 million to further their efforts, particularly in urban areas.

How Have Small Schools Fared?

The Gates Foundation sponsored a study of 24 small schools in 2005 to look at their effects. The study found that some students talked about their teachers as having higher expectations for them because teachers knew more about the students' capabilities. The 2005 Gates report found that students in small learning communities increased their English test scores but showed a slight decline in math.

In the NEWSWEEK 2007 list of top high schools in the U.S., 22 of the top 100 schools had fewer than 100 students in their graduating class; the number of small high schools on that list (which is based on the number of students taking college-level tests: Cambridge, International Baccalaureate and Advanced Placement) has dramatically increased over the past 10 years.

However, overall research on the effect of school size on student achievement has been limited. Most recently, another Gates Foundation study looked at the first graduates of 14 of New York City's new small high schools in 2006. The study shows that attendance was high, ninth-grade promotion rates were high and a majority of the students graduated. A significant number of those graduates were accepted by colleges and more than half of them were the first in their family to attend college.

But other Gates-funded small schools have run into trouble. In Denver, Colorado, the district used \$1 million of Gates Foundation money to convert the 1,100-student Manual High School into small schools. In the process, electives, advanced placement and foreign language courses as well as popular activities like choir, debate and athletic teams were cut back. Many unhappy students left causing enrollment to plunge as well as graduation rates. Denver eventually closed the small schools. The Gates Foundation has realized that curriculum and instruction may be as important as school size.

Is Small the Answer?

"Small is not enough," reports Diana Oxley of the University of Oregon in a report entitled "Small Learning Communities." "Small size creates the conditions to carry out student work that is active and collaborative. However, small size is not an end in itself." Common planning time, development for teachers and high-quality curriculum are all necessary to make small learning communities work.

It may not be possible to create small schools or small learning communities in every school district. "There's not a sufficient number of school leaders and educators to scale up and sustain the small school movement once foundation funding dries up," says David C. Bloomfield, professor and head of the educational leadership program at the Brooklyn campus of the City University of New York. He is concerned that these issues need to be addressed before the small school movement is expanded and says there are other issues that also demand attention.

"The small school movement is just nibbling around the edges," he says. "Small schools, like charter schools, are beacons. But we need to address class size, union contracts and school infrastructure problems—such as inadequate aging science labs—in order to really make a difference." The movement to create small high schools may succeed in lowering dropout rates but it's not clear that the students who stay in school will be able to pass high-stakes high school exit exams. "The data is inconclusive as to whether kids will achieve more rather than just staying in school longer and not dropping out," says Bloomfield.

Part 1: Three more articles and constructed response questions

Directions for Beginning:

You will now examine several more articles relating to high school size. You can re-examine the articles as often as you like as well as refer back to Article 1 read during the classroom activity.

Initial Questions:

After examining the research articles, use the rest of the time in Part 1 to answer the two questions about them. Your answers to these questions will be part of your score for this assessment. Also, your answers will help you think about the information you have read and viewed, which should help you write your argumentative essay. Both your margin notes and your answers to the questions will be available to you as you work on your essay.

Article 2: Argument in Support of Large High Schools

The following article was written as part of a seminar at California State University for a course called “Educational Leadership and Policy Studies.” It was written by the course’s instructor, Dr. Rosemary Papalewis.

*Notes on my thoughts,
reactions and questions as I
read.*

THROUGHOUT THE UNITED STATES school districts are struggling with increased student body enrollment. Unfortunately, as the population has risen, the number of new schools fails to keep the same pace. This phenomenon is especially true with high schools. One can claim that the answer is simple –build more schools to reduce the number of large, overcrowded schools. Although there is much evidence to support small high schools and their benefits, many communities lack the resources



necessary to build more schools. And, most importantly, large high schools offer many benefits over smaller ones.

Large high schools offer a wider range of courses that reflects the interests of a diverse student body. For

example, Evanston Township High School located in Illinois has an enrollment of 3,100 students and a budget of \$67 million, which allows them to offer four years of Latin, German, Hebrew and Japanese, and two years of American Sign Language. In addition to foreign language, the social studies department offers a popular course on Asian history and

many students are studying African history as part of their global studies curriculum (Allen, 2002). Likewise, with a large student body, the number of athletic and co-curricular programs opportunities increase. These large high schools can carry approximately 20 different teams.

Instead of focusing on the fiscally improbable solution of building enough high schools in California, attention should be drawn to making large high schools function better for students and teachers. One method of creating a small school feeling in a large school environment is implementing Schools-Within-Schools (Berkey, 1996, October). A small school population is less of a factor in improving the academic, personal, and social development of students than investing resources in improving school programs. The Schools-Within-Schools organizational model restructures the institution to provide students with individual attention while capitalizing on the vast array of opportunities provided by large schools.

Opponents of large high schools criticize that students are alienated and not fully engaged, therefore, high drop out and failure rates occur at these school sites. The structure and organization of large high schools make them more susceptible to many problems (Noguera, 2002). If large high schools are restructured into environments similar to the Schools-Within-Schools model, students will receive more individual attention and experience an increased sense of belonging.

Let us not forget the vital role that teachers play in touching the lives of students. At the top of the list of concerns expressed by teachers each year, class size rather than school size is at the top. In addition, parents often worry more about the increase in class size than the growth of large high schools (Johnson, 2002). Although the size of the school is important, it is the experience students undergo in the classroom that makes the most significant difference. Teachers are responsible for creating a positive classroom culture where their students feel recognized and valued (Allen, 2002). A more practical and fiscally responsible means of improving high schools is restructuring and improving them to capture the benefits of both large and small effective schooling practices.

Article 3: High School Reform

This next article is from the August 4, 2004 issue of EDUCATION WEEK magazine. This publication is one of the most respected journals dealing with policy issues in the area of education.

*Notes on my thoughts,
reactions and questions as I
read.*

EACH WEEKDAY MORNING, more than 13 million teenagers report to public high school classrooms across the United States (National Center for Education Statistics, 2002). Although federal legislation has stressed the standardization of student learning, researchers continue to debate several key aspects of these students' high school experiences, specifically, school size, curriculum focus, school structure, and philosophical mission.

First, experts are concerned about how school size affects students' perception of their education as well as their academic performance. Seventy percent of U.S. students attend high schools with 900 or more students, and hundreds of schools have enrollments in excess of 2,500 students (*Quality Counts*, 2004). Teachers worry about students in such environments. For example, teachers in large schools (1,500 or more students) were more likely than teachers in small ones (500 or fewer students) to say that "students fall through the cracks, high dropout rates are a problem, and overcrowding is a problem" (*Public Agenda*, 2002).

Recent findings from a study conducted by the National Research Council (2003) substantiated such teacher concerns. The study found that students in large, urban high schools think their educational environments are uncaring and unresponsive to their needs. Many students also reported feeling a sense of alienation in their schools. The report identifies some potential causes of students' feelings of alienation including: a lack of qualified teachers and inadequate school resources. A possible solution, the study suggests, is the division of large high schools into smaller, more personal, learning communities.

Smaller high schools have been credited with improving student achievement. Studies conducted in Chicago and New York City have shown that smaller schools resulted in improved student achievement as measured by test scores and dropout rates (Stiefel, 1998; Wasley, 2000). A recent study of urban, suburban, and rural schools in four states found that smaller schools helped close the achievement gap—as measured by test scores—between students from poor communities and students from more affluent ones (Howley, 2000). Based on such successes, the Bill & Melinda Gates Foundation has begun a campaign to finance the establishment of many more small high schools in the United States (Gates Foundation, 2003).

The concept of "schools within schools" has also gained momentum as an alternative to the traditional high school structure. The purpose behind the movement is to form smaller, more personal educational settings by dividing large, comprehensive high schools into smaller, autonomous subunits organized around central academic themes (McAndrews, 2002).

The numerous debates over these issues reinforce the complicated nature of high school reform. Whether a reduction in size, an increase in the number of computers, a shift in the focus of the curriculum, or a commitment to post-secondary transitional programs will actually improve America's system of high schools remains to be seen. For their part, the U.S. Department of Education has created a leadership initiative for high schools called, "Preparing America's Future." In addition, the Department announced that it will award grants totaling \$11 million to programs designed to increase the number of students from low-income families who enroll and succeed in advanced courses as well as \$2.4 million to expand a business-led effort to better prepare students for post-secondary success.

Article 4: Take a Second Look

This final article was written by a parent on a blog site dedicated to a discussion about improving the U.S. educational system.

*Notes on my thoughts,
reactions and questions as I
read.*

AS AN INCOMING JUNIOR IN HIGH SCHOOL, my multi-dimensional daughter (who some might describe as restlessly precocious) plans to sign up for an eclectic class schedule that includes classes in World Religions, Advanced German, and Symphonic Band. Unless she is too overwhelmed by her trigonometry homework, after school she has the option to join the swim team or to pursue her thespian leanings by trying out for the school production of "Our Town." Even though she has not expressed an interest, she could even join her high school's chess club or drill team. I list these opportunities not to point out the versatility and intellectual capacity of my youngest child, but to illustrate all of the options she has available to her as one of the 2,000 students enrolled in her high school.

Over the past couple of decades, a flurry of research has been conducted and published extolling the virtues of smaller schools. This research tells us that students frequently perform better in smaller learning communities, feel more comfortable in these environments, and are less likely to drop out prior to graduation. While I can't fully dispute this research through my own exhaustive studies or by citing contradictory evidence, I would contend that whatever gains might be made by breaking

larger high schools into smaller “centers for learning,” particularly without a massive infusion of additional funding, would be counteracted by a reduction in academic and extra-curricular opportunities.

The reality is that there are major trade-offs when you start reducing the size of schools and the student body that is being served. Schools that enroll a large, diverse array of students can offer a broader spectrum of classes because there is much more likely to be a fuller component of students who will fill up a classroom and justify staffing assignments. This same sort of range of curricular offerings could not occur in a smaller school unless the courses were tailored practically at the individual student level, an extremely costly proposition. In a time when schools are struggling to stretch budgets to retain teachers, remain current on technology, and maintain facilities, can they really afford to support this sort of overhaul to the educational system?

Also a consideration would be students’ after-school options, activities that are critical in terms of keeping kids engaged and going to school. Team sports immediately come to mind as an area that would suffer greatly. True, there are smaller school classifications for many team sports, but the level of competition is most certainly lower and athletes with aspirations of college scholarships are unlikely to encounter the quality of coaching and challenge from adversaries they would experience in a larger school. Participating with and against athletes of exceptional talent will assist them in developing their own skills, and this is more likely to occur in a larger school environment.

This same consideration can be extended to arts activities such as drama. Yes, productions on a smaller scale could still be mounted, but for a richer learning experience, participation in a large-cast production (think *“Fiddler on the Roof”* or a Shakespearean comedy) could be a once-in-a-lifetime opportunity for many students. This is a chance they might never have in a smaller school environment.

It is difficult to dispute the research that has been released in support of smaller schools. Who can argue against a proposal that would increase student achievement and could foster student engagement and success? However, closer examination reveals that there are significant trade-offs when implementing such a system, including a steep price to be paid not only financially, but in terms of student opportunities.

Question 1: Articles 2, 3 and 4 present a variety of arguments relating to school size, some that were discussed in our classroom activity and most likely some that were not. From the sources you have read (including Article 1), summarize 3 major arguments that support smaller school size and 3 major arguments that support larger schools. For each of the arguments, cite at least one source that supports this point of view.

Argument for Smaller Schools	Article Supporting this Argument
1.	
2.	
3.	
Argument for Larger Schools	Article Supporting this Argument
1.	
2.	
3.	

Question 2: Evaluate the credibility of the arguments and evidence presented by these articles. Which of the sources are most trustworthy and why? Which of the sources are less reliable because of potential bias or insufficient evidence?

Part 2: Argumentative Essay

Imagine that you are attending a school with over 1500 other students. In order to increase student achievement, your local school board is considering asking voters to approve a bond issue to build another, smaller high school. They propose to split the student body in half, with each half attending one of the two schools. Write an argumentative essay either in support of the plan to create smaller schools or to support keeping the single, larger high school. Support your stance with information taken from the research articles.