

**Memorandum
For the Public Record**

Re: Proposed Adoption of Block Scheduling at Colonial Forge and Stafford High Schools	Date: March 14, 2009
To: Stafford County School Board	From: Edward Hendrie

Public Kept in the Dark Until the Last Opportunity

On February 9, 2009, letters were sent to Colonial Forge High School (and presumably also Stafford High School) parents notifying them that the staff was researching alternatives to the current schedule, in particular A/B block scheduling. The letter announced an informational meeting for February 18, 2009. That was the first indication that any member of the public had that Colonial Forge (and presumably Stafford) was planning to change from a traditional schedule to a block schedule. The Stafford High School principal also held an informational meeting on February 18th at Stafford High School.

By deciding on the A/B block schedule, it seems that the Stafford and Colonial Forge principals have rejected the 4x4 block schedule, which is presently the schedule at the three other Stafford high schools. As explained below, there would be good reason for that rejection. Although the announcements to adopt an A/B block at the two schools were made before the block schedule 2009 evaluation report was published, it would seem that the two principals were privy to the dismal results for the 4X4 block schedule reported in the prior 2007 block scheduling report.

In addition, the recently published 2009 block scheduling evaluation report shows lower SOL scores for the 4X4 block schools. Oddly, the SAT data comparing the block schools to the traditional schedule schools was not included in the February 19, 2009, report. The previous 2007 report showed that the block schools had lower SAT scores than the traditional schedule schools. Are the two principals going to the A/B block because they are being pressured by the central office to adopt a block schedule and they are trying to avoid going to the 4X4 block, which has been a proven failure?

It seems that the school district is trying to keep the public in the dark about the contents of the block scheduling report by waiting until the announcements by the Stafford and Colonial Forge principals before publishing its 2009 block schedule report. In the two previous years (both 2006 and 2007) the block scheduling evaluation was published during the latter part of October. However, the most recent report was not published until February 19, 2009, which was one day after the February 18th block scheduling informational meetings by the school principals. That

assured that the public would not have the block scheduling report for the informational meetings.

Furthermore, once the report was published the school district waited until February 23rd (one day before the school board hearing) to post the report on the school district website. With only a day to find out about the report, almost none of the citizens were privy to the report during the February 24th hearing. There could be any number of reasons for this delayed publishing and posting of the report, however, the school district has a long history of concealing facts from the public while they convince the school board to approve a measure. In fact, they did that very thing when they initially pushed block scheduling through the approval process at the other three high schools several years ago.

If the report was published on schedule, it would have been issued in October 2008. That would have given the Stafford parents 4 months to review the report. However, by waiting until the day prior to the school board hearing to post the report, the citizens only had one day prior to the school board hearing to find out about it. The result was that most citizens (including this author) did not even know the report was published and posted until after the February 24, 2009 school board presentation by the school principals.

Report Does Not Provide SAT Score Comparison

The February 19, 2009 report has a glaring omission. There is no comparison of SAT scores between the block and non block schools. The block scheduling evaluation plan specifically states that it will review and compare SAT scores of the block and non-block schools. On February 28, 2006, the school board unanimously ruled that “the evaluation plan prepared by the staff will serve as a guideline for the evaluation process.” The reference to the evaluation plan was to the revised evaluation plan contained in action item 13A prepared for the January 10, 2006 school board meeting. That evaluation plan states:

Student academic success will be compared by analyzing the following indicators: SOL end-of-course test results, **SAT scores**, advanced placement results, credits earned, grade promotion rates, graduation rates, and the percentage of students entering two- and four-year colleges. A specific student achievement focus will be the percentage of students scoring at the highly proficient level on SOL end-of -course tests in the years 2004-05 and 2005-06 in the block schools. In addition, each of the NCLB subgroups will be compared. (emphasis added)

In fact, the measurement of academic achievement as measured by SAT scores was to be a “significant aspect of this evaluation.” The evaluation plan states:

In addition, the review of student achievement as measured by test results will be a significant aspect of this evaluation. While higher student achievement

as measured by test results has not been the principal catalyst for the scheduling change, a complimentary purpose of this evaluation is to analyze specific student academic measures (i.e. - SOL end-of-course results, **SAT scores**, advanced placement results and graduation rates), including analyzing subgroup data (i.e.- socio-economic status, demographics, and students with disabilities).

There was a comparison done in SAT scores in the 2007 report, yet there is no comparison in the 2009 report.

This does not appear to be an oversight since aggregate SAT scores for the entire school district are discussed and graphed in the 2009 report. The aggregate graph and discussion, however, are wholly irrelevant to a discussion of the effectiveness of block scheduling, because there is no comparison of block and traditional scheduling. Why is there no SAT score comparison? The report contains the following statement:

Because the population of SAT test-takers is self-selected, the College Board, which administers the SAT, states that “using aggregate SAT Reasoning Test scores to compare or evaluate districts is not valid.” However, because “the college-bound population is relatively stable from year to year,” it is valid to “look at year-to-year educational and demographic changes in this population, along with changes in test performance.” SAT data included in this evaluation consisted of participation and mean scores.

That statement is equivalent to Consumer Reports stating that Ford, GM, and Toyota have stated that because the purchase of their vehicles is self-directed and in addition the decision to take part in the survey is self-directed, they discourage the reporting of the reliability of their cars in consumer reports. Would Consumer Reports go along with that? Of course not! It is as ridiculous as the school district not using the SAT tests to compare block and traditional scheduling.

In fact the school district used all sorts of self directed surveys in the report, where only a very small proportion of a sample actually decided to respond. Obviously, the self-directed status of the SAT tests is not the reason the school district decided not to compare the block and traditional schedule SAT results.

In addition, that very SAT data was published and released by the school district in an August 28, 2008 press release in which the district compared the Stafford high school SAT scores to both the Virginia and national SAT averages. How can the SAT data be appropriate for one report (the August 28, 2008 SAT press release) and not appropriate for the same purpose in another report (the February 19, 2009 block scheduling evaluation report)?

Furthermore, the school district did not have discretion to suddenly change the evaluation criteria and decide not to compare SAT scores. The school district was under specific orders from the school board to compare SAT scores as indicated in the January 10, 2006 revised evaluation

plan.

Lower SAT Scores Under Block Scheduling

SAT Scores	2005-06 Verbal/ Reading	2005-06 Math	2005-06 Writing	2006-07 Verbal/ Reading	2006-07 Math	2006-07 Writing	2007-08 Verbal/ Reading	2007-08 Math	2007-08 Writing
Block▶	508	503	488	506	498	476	511	506	482
Traditional▶	521	520	501	510	507	489	516	514	497

The previous 2007 report showed that in combined Verbal/Reading and Math scores there was a 7 point (.7 %) reduction in SAT scores at the block schedule schools from 1,011 in 2005-06 to 1,004 in 2006-07. There was also a 24 point (2.3 %) reduction in the traditional schools from 1,041 in 2005-06 to 1,017 in 2006-07. There was a steady decline in SAT scores in all schools over the years from 2004-05 to 2006-07.

For 2007-08 the block schools bounced back in combined Verbal/Reading and Math scores from 1,004 to 1,017, which was a 13 point (1.3%) increase in SAT scores over the 2006-07 scores. The traditional schools also bounced back from 1,017 in 2005-06 to 1,030 in 2006-07, which was a 13 point (1.3%) increase.

The real difference is in the performance of the block schools vs. the non-block schools for each year. The combined verbal/math scores from 2005-06 were 30 points (2.9 %) lower than the 2005-06 non-block school scores. The combined verbal/math block scores from 2006-07 were 13 points (1.3 %) lower than the 2006-07 traditional school scores.

The traditional schools retained their advantage over the block schools in SAT scores in 2007-08. The block schools scored an average of 1017 in the combined Verbal/Reading and Math scores and the traditional schools scored an average of 1030, which was a 13 point (1.3%) higher score than the block school SAT scores.

The block SAT writing scores went down 12 points (2.5 %) from a score of 488 in 2005-06 to a score of 476 in 2006-07. The block scores bounced up to 482 in 2007-08, which was a gain of 6 points (1.3%). The traditional schools gained 11 points (2.3%) over their 2006-07 score and climbed to a score of 497 in 2007-08.

The block schools scored 13 points (2.6 %) lower (488 vs. 501) in writing than the traditional schools in 2005-06. The block schools scored 13 points (2.7 %) lower (476 vs. 489) in writing than the non-block schools in 2006-07. The writing portion of the SATs saw the most significant

difference between the traditional and block schools in 2007-08. The traditional schools had an average of 15 point (3.1%) higher scores in the written portion of the SAT tests (497 vs. 482).

The average verbal/reading SAT scores for both block and traditional schools scored above the national average in 2007-08. However, the average SAT scores for the block scheduling schools were below the national average in math and writing in 2007-08. Whereas, the traditional school average math and writing SAT scores were above the national average in 2007-08.

The evaluation plan stated that “higher student achievement as measured by test results has not been the principal catalyst for the scheduling change.” Since higher student achievement was not an expected result of block scheduling, the lower scores for block scheduling are probably not a surprise to the school district.

SOL Passage Rate Lower at Block Schools

There were 33 SOL tests listed in the 11 subjects taken over 3 years. The tradition schools had higher passage rates than the block schools in 22 out of the 33 SOL tests. The block scheduling schools had higher passage rates than the traditional schools on only 7 of the tests. The block and traditional schools had equal passage rates on the remaining 4 tests.

In the 2007-08 school year the block schools did not have higher passage rates than the traditional schools on any of the 11 SOL tests. The traditional schools had higher passage rates on 8 tests out of the 11 tests during 2007-08, with the remaining 3 tests being equal passage rates.

2007-08 SOL Total Pass Rate	Eng. Read	Eng. Write	Algebra. 1	Geometry	Algebra 2	VA & US Hist.	W.Hist.&Geog.- 1500	W.Hist.& Geog.1500+	E. Science	Biology	Chemistry
Block▶	95	95	89	87	85	96	96	96	92	92	93
Trad.▶	97	97	93	89	94	98	96	96	92	95	97

The more significant statistic is the SOL advanced passing rate. The traditional schools had a higher percentage of students with advanced passing scores in 31 out of the 33 tests! The block scheduling schools had a higher percentage advanced passing in only 1 out of 33 tests. The remaining test had an equal percentage advanced passing rate between block and traditional.

In 2007-08 the traditional schools had a higher percentage of advance passing in 10 out of the 11 SOL tests.

2007-08 SOL Advanced Pass Rate	Eng. Read	Eng. Write	Algebra. 1	Geometry	Algebra 2	VA & US Hist.	W.Hist.&Geog.-1500	W.Hist.& Geog.1500+	E. Science	Biology	Chemistry
Block▶	47	30	6	12	15	44	40	37	26	18	11
Trad.▶	49	34	12	16	26	45	42	34	36	24	19

Why is the advanced passing rate so significant? Because it is not subject to change through retesting. Typically people pass with advanced scores after the first test and do not retake the SOL tests. However, a student who does not pass the SOL test can retake the test two, three, four, or more times until he passes the test. Consequently the total passage rate changes over time as students are given remedial courses and retake the tests.

For example the test scores for 2005-06 SOL tests were reported by the school district in the October 23, 2007 block scheduling review. In that review the passage rates were listed in a similar grid as was found in the February 19, 2009 report. However, when comparing the 2005-07 passage rates in the October 23, 2007 report with those scores in the February 19, 2009 report we see that the scores are different. Checking back against the October 24, 2006, draft block scheduling study report one can see that some of the rates changed from October 2006 to October 2007. As the below chart shows, the passage rate changes from 2006 to 2007 were not as significant as the changes from 2007 to 2009.

The 2005-06 SOL passing rates had increased from October 2007 to February 2009 for all the tests except one (chemistry under the traditional schedule where there was no change), which suggests that there were SOL retakes for students who did not pass the SOL tests from two school years prior. This constant changing in the total passage rate for the SOL tests from year to year makes them an unreliable measure of the effectiveness of instruction.

The passage rate from the first time students takes the SOL exams would be the best measure of instructional effectiveness. However, the first take scores are not typically reported by the school district. The 2005-06 SOL scores reported on February 19, 2009, reflect the added benefit of tutoring and restudy. The unreliability of the total passage rate for SOL tests can be seen in the chart below. The traditional schedule schools had a higher passage rate in 9 out of the 11 SOL tests reported in October 2006. However, as a result of retesting, by 2009 the passage rate of the block schools had increased and the traditional school advantage had dropped to a higher passage rate in 7 out of the 11 categories. That ratio change was not manifested until over two years after the 2006 scores were reported. That new ratio does not truly reflect the qualitative differences between block and traditional scheduling. The ratio change from 9 out of 11 to 7 out of 11 reflects the benefits of the remedial studying and tutoring done over a two year period.

The only consistent measure of teaching effectiveness would be the SOL advance passing percentage, since by its nature it almost always reflects the scores of students without the benefit of retakes. It is unlikely that a student who did not pass an SOL exam the first time will pass the test with an advanced score upon retaking it.

Chart of Changes in 2005-06 SOL Percentage Passing Scores from October 24, 2006 to October 23, 2007 and February 19, 2009

2005-06 SOL Percentage Passing	2005-06 ALL Passage Rates Reported in October 2006 Changed→	2005-06 ALL Passage Rates Reported in October 2007 Changed→	2005-06 ALL Passage Rates Reported in February 2009	2005-06 Block Passage Rates Reported in October 2006 Change→	2005-06 Block Passage Rates Reported in October 2007 Changed→	2005-06 Block Passage Rates Reported in February 2009	2005-06 Traditional Passage Rates Reported in October 2006 Changed→	2005-06 Traditional Passage Rates Reported in October 2007 Changed→	2005-06 Traditional Passage Rates Reported in February 2009
English Reading	87 →	88 →	93	89 →	90 →	95	85 →	87 →	93
English Writing	85	85 →	91	85 →	86 →	90	86	86 →	92
Algebra 1	73	73 →	81	71	71 →	80	77	77 →	86
Geometry	71 →	72 →	81	68	68 →	79	77 →	79 →	84
Algebra 2	79	79 →	84	76 →	77 →	83	83	83 →	85
VA and U.S. History	94	94 →	96	93	93 →	97	95	95 →	96
World History & Geography to 1500 A.D.	80	80 →	87	78 →	79 →	88	82 →	83 →	87
World History & Geography 1500 A.D. to Present	87 →	88 →	93	89	89 →	96	86	86 →	90
Earth Science	75 →	76 →	86	75	75 →	85	76	76 →	87
Biology	80 →	81 →	90	79	79 →	89	82 →	83 →	91
Chemistry	94	94 →	97	93	93 →	96	97	97	97

The exact same phenomenon was evidenced for the 2006-07 SOL scores reported in the 2009 report. The different is that the 2006-07 SOL results listed in the October 2007 report were described as preliminary passage rates. The new passage rates in the 2009 report were suggestive of retakes of the SOL tests, since in every instance the passage rates increased for the 2006-07 SOL tests in the 2009 report.

Lower SOL and SAT Scores in Stafford Block Schools Confirms Results in Other Studies

Block scheduling interferes with the natural learning processes of children. The lower scores on standardized tests in Stafford County for the block schools confirms the results seen in other large studies. Those other studies have shown that block scheduling causes a reduction in learning that is measurable in standardized academic achievement tests. The school district expressly stated in its initial block scheduling evaluation plan that higher student achievement was not their reason for adopting block scheduling. Does the school district think that the affect of block scheduling on academic achievement is somehow outweighed by the alleged benefits? What benefit could possibly outweigh the core purpose of a school?

Empirical Studies that have addressed issue of block scheduling prove that block scheduling results in children learning less. The largest scientific study comparing objective student performance in block classes with student performance in full year classes involving 30,000 10th grade students in British Columbia **"found that the full year (two semester) students outscored the block students on every measure."** <http://www.jefflindsay.com/Block.shtml>.

Another Canadian study **"found that academic achievement was significantly lower under block scheduling and found either adverse effects or no benefit in student attitudes about mathematics (contrary to the common claim that block scheduling improves 'attitudinal' scores). They also confirmed that block scheduling resulted in fewer hours of actual instruction. Overall, block scheduling was detrimental to student achievement."** <http://www.jefflindsay.com/Block.shtml>.

"Gordon Gore has also examined extensive data from British Columbia and found further evidence of harm caused by block scheduling. One recent report found at <http://www.sciences.drexel.edu/block/canadianstudy/1996ExamResult.html>, reviews twelfth-grade Provincial examination results in 1996 for English, mathematics, biology, chemistry, physics, French , history, geography, and literature. Full-year (conventional timetable) classes are compared to semester and quarter classes. Testing was done at the end of each course, regardless of which timetable students were on. **Full-year students outperformed block scheduling students (semester or quarter) IN EVERY SUBJECT.** For example, in mathematics, mean scores of full-year students were 69.41% compared to 64.63% for semester students and 62.85% for quarter students. Looking at grades given on the mathematics exam, 24% of full-year students received A's, compared to 14% of semester students and about 11% of quarter students. **While**

performance dropped significantly for the quarter students, this was not necessarily reflected in the marks students received in their courses. Grade inflation appears to occur in schools on the block - an important factor to remember when administrators claim that the block works because of the higher grades that students receive."

<http://www.jefflindsay.com/Block.shtml>

Supporters of block scheduling are quick to dismiss the Canadian studies because they are not studies of American schools. However, studies of American schools show the same detrimental impact of block scheduling. An objective empirical study published in the *Journal of Instructional Psychology* involving a statistically significant sampling of hundreds of high school students from North Carolina, found that those students subjected to block scheduling had "significantly" lower scores on standard aptitude tests, across the board. The researchers found:

"The statistical analyses on the four null hypotheses showed that in each case, the mean score for the traditional schedule was consistently higher than the mean scores for the block schedule. Based upon the results of the t-test and its application, traditionally scheduled students rather than the anticipated block scheduled students demonstrated significantly higher scores for Algebra 1, Biology, English 1, and U. S. History."

* * *

"The mean scores on the traditional schedule were consistently higher than the mean scores on the block schedule which came as a surprise. Algebra 1, Biology, English I and U. S. History each had higher traditional mean scores than the block mean scores and revealed significant statistical differences in favor of the traditional schedule."

W. Lawrence, D. McPherson, A Comparative Study of Block Scheduling and Traditional Scheduling on Academic Achievement, *Journal of Instructional Psychology*, September 2000, http://www.looksmartsience.com/p/articles/mi_m0FCG/is_3_27/ai_66355137.

A review of the actual statistics in the North Carolina study reveals that the difference in mean aptitude scores between block scheduling and traditional scheduling as follows: Algebra I - 11% lower mean score for students instructed under block scheduling; Biology - 12% lower mean score for students instructed under block scheduling; English I - 19% lower mean score for students instructed under block scheduling; U.S. History - 16% lower mean score for students instructed under block scheduling.

"A University of Florida study has found that 10th-graders in schools with block schedules did not perform as well on the FCAT, Florida's assessment test, as 10th-graders in schools with the traditional schedule of shorter class periods. This study is important because it is one of the first studies that has looked carefully at academic achievement in block vs. traditional schedules as measured by standardized test scores." FCAT scores lower for schools with block schedule, *Miami Times*, 09-04-2001, <http://www.highbeam.com/doc/1P1-79463079.html> (last visited

March 13, 2009).

A recent article in the Washington Post revealed:

Einstein Principal James G. Fernandez said he is unconvinced that block scheduling, used in his school for several years, raises student achievement. He suggested that the format might lead some students to drop out because of long classes. So why have so many schools adopted it? "Other than it was the fad, I'm not really sure," he said. He said he switched back to a traditional schedule because it allowed a longer lunchtime for one-on-one work with students and because it might help prevent students from dropping out.

"Show me some data that indicates kids perform better" with block scheduling, Fernandez said. No such research has materialized, several experts said. In some cases, including a 2006 University of Virginia-Harvard University study of high school science courses, students on block schedules appeared to be doing worse than those on traditional schedules.

The study, by U-Va. researchers Kirsten M. Dexter and Robert H. Tai, joined by Harvard researcher Philip M. Sadler, was notable in part because U-Va. is considered the cradle of block scheduling, influenced by Prof. Robert Lynn Canaday's studies on the most effective ways to organize school days.

"We were quite surprised to see that block scheduling didn't play out in our research," said Tai, an associate education professor. One problem, he said, was that science teachers, despite being strong supporters of longer periods to allow lecture and laboratory time, could not sustain student interest for 90 minutes. "You have to do something with that time," he said. "Otherwise, the kids are going to be sitting there staring at you, and that is an unhappy situation."

Jay Mathews, *Class Schedulers Think Outside the Blocks*, Washington Post, Monday, March 10, 2008; Page B01.

<http://www.washingtonpost.com/wp-dyn/content/story/2008/03/09/ST2008030901472.html> (last visited March 5, 2009).

No Comparative Graduation Data in the Report

The school board on February 28, 2006, ruled that the evaluation of block scheduling should be in accordance with the 2006 evaluation plan. That plan specifically states that it would analyze the following data: "The graduation rates in 2005-08 compared to 2004-05 (sic) in the block schools and to 2005-08 in the non-block schools."

In fact, there is no comparative graduation data listed in the 2009 report. That is a notable omission since the evaluation plan states that the schools decided to change to block scheduling because “students who fail courses can repeat them the next semester thereby staying on-track with his/her cohort to graduate in four years.” That reason is also listed as an expected outcome.

The 2006 evaluation plan elaborates further states:

The research clearly substantiates that each of these expected outcomes are correlates for indicators of student achievement such as more students taking higher-level courses, **more students graduating**, and higher standardized test results. This evaluation plan which focuses on the 2005-06 implementation of block scheduling will analyze separately each of these reasons for changing the scheduling format. The primary purpose of this evaluation is to determine to what degree the expected positive outcomes were realized during the first three years of implementation of the hybrid block scheduling format.

It is clear that primary purpose of the 2009 evaluation report was supposed to be to determine to what degree the expected positive outcomes, such as higher graduation rates, were realized. It is puzzling why the primary purpose of the evaluation was not performed in the 2009 report. There is no explanation for this clear oversight other than a statement made on page 29 of the 2009 report that “producing graduation rates . . . is more difficult with the division high schools operating on different schedules.”

It is rather disturbing that the school district finds it difficult to determine the graduation rates for its schools. It would seem that number of students that have graduated from their high schools would be the easiest set of data for any school district to keep track of. Yet, the Stafford School District finds that difficult.

The school district’s explanation that the data is difficult to produce is simply not credible in light of the fact that all of the data to produce that graduation rates for the different schools is found on the Virginia DOE website at <http://www.doe.virginia.gov/VDOE/Publications/>. The Stafford School District Department of Strategic Planning and Accountability, who prepared the 2009 report, knows the website contains the necessary information, because they furnished this author with that website as the source for graduation rates for the Stafford Schools when I asked them to provide me with that information.

It is particularly hard to swallow the school district’s statement, since the data on the DOE website came directly from the school district. The school district provided the DOE with the data that it claims is too difficult to produce in their report for the school board and citizens who pay their salaries.

This author had no difficulty obtaining the graduation rates from the website identified for me by the school district. The chart below lists the graduation rates by year for each year the data was

available. Notice that the the graduation rate went down 3 % for the class that began in its sophomore year under the block schedule in 2005-06 graduated in 2007-08. The 2007-08 block graduation rate, is the most revealing because it shows that after the students had been exposed to block scheduling for three years the graduation rate for those students dropped from 96% to 93%. That is contrary to the promised benefit of block scheduling. Block scheduling has had a detrimental affect on the graduation rate. It is unimaginable that the school district did not know about this data.

Since instituting block scheduling the average graduation rate for all high schools in Stafford has declined from 96% in 2004-05, which was the year before block scheduling was instituted, down to 94% in 2007-08. The higher graduation rate promised from block scheduling was a apparently a phantom. This school district should stop chasing phantoms offered by every new educational trend to come down the pike and get back to basic fundamental education.

Graduation Rates	2004-05	2005-06	2006-07	2007-08
Block Schools	#	##	96%	93%
Traditional Schools	#	##	94%	94%
All Stafford Schools	96%	95%	95%	*94%

No block schools in 2004-05.

Mountain View (block) had no senior class in 2005-06; that was its first year as a high school.

*Rounded up from 93.5%

The Virginia Department of Education defines graduates as students having received one of the following:

- Standard Diploma
- Advanced Diploma (count includes those students who receive the International Baccalaureate Diploma)
- Special Diploma – for students with a disability who complete the requirements of their individualized education programs (IEP)
- Modified Standard Diploma

This author obtained the graduation rate by adding up the total above listed diplomas earned for each school for each school year. I then added together the block school graduates and divided that number by the total number of block school seniors contained in the census of seniors for that school year as listed by the Virginia Department of Education at <http://www.doe.virginia.gov/VDOE/Publications/>. I repeated that equation for the traditional schools to arrive at the graduation rate for the traditional schools. The same process was followed using the data for all schools to arrive at the total graduation rate for all schools.

Extra Expense of Block Scheduling

The 2009 report states: “With regards to financial issues, participants relayed that there is not a significant difference in the budget of block high schools as compared to traditional high schools with the exception of paper due to the additional grade reporting that occurs with courses operating on a 4x4 format.”

In fact, there are significant added costs incurred by the county attributable directly to the implementation of block scheduling. For example, the 2009 report states: “Participants also commented that due to the opportunity students have to retake courses during the school year, there has been a decline in the amount of block high school students who take summer school.”

What that means is that the cost of summer school has been shifted from the families of the students who have failed a course and placed directly on the tax payers. Ordinarily, a student who fails a course and must retake the course during summer school must pay for that summer school course out of his own pocket. With block scheduling that cost is shifted to the taxpayers who pay for the student to take that course during the school year. With the parents, who are in the best position to motivate the student, not feeling the financial burden of their child’s poor academic achievement, they have less reason to motivate their child to improve. Arguably, block scheduling acts as an enabler to students who are not motivated.

In addition, on page 28 the report states: “Further, participants remarked that students who have not been able to graduate in four years have an option to graduate in four years and one semester under the 4x4 semester block format.” What the school district is doing is offering a student to stay in high school at taxpayer expense for an extra semester. Such a student would have taken 8 extra courses (a full academic school year) in four years under block scheduling (28 traditional vs. $32 + 4 = 36$ under block) all at taxpayer expense.

This seems yet another example where block scheduling is an enabler to students who feel they can sit back with minimal effort secure in the knowledge that can return for an extra semester and retake courses they need to graduate.

The report states: “Currently, the students who do travel for classes require a schedule that builds in travel time from one school to another, and in creating that schedule, time has to be cut from other classes on the students schedules.” Not only is the travel time infringing on the course time, it is also very expensive. Since, the block scheduling creates a need for more courses, the need for students to travel between school is exacerbated. If block scheduling were ended the need to travel between school would be significantly reduced.

I question whether the school district can effectively teaching block scheduling without hiring additional teachers.

A 2007 cost comparison in Stafford County between a non-block high school, Colonial Forge, and

a block high school, North Stafford, resulted in a finding of a 4.6 % added cost due to the additional teachers needed to teach at the block scheduling school. North Stafford has 118 teachers for 1,626 students. That is a ratio of 13.8 students per teacher. Colonial Forge has 128 teachers for 1,847 students. That is a ratio of 14.4 students per teacher. That is a 4.6 % added cost at North Stafford for block scheduling.

Assuming the average salary of \$ 46,841 for teachers, as reported in the 2005 Stafford County School Budget, the total additional cost in teacher salary, not including benefits, at North Stafford for block scheduling comes out to \$234,205 per year. Assuming a similar cost differential at the other two block scheduling schools and we arrive at a total additional costs per year in teacher salary alone for the three block scheduling schools to be approximately \$700,000.

It is unclear why is the cost difference in Stafford so much less than the 14 % cost difference that has been the case in other school districts throughout the country. The Stafford school district told this author that they did not know the number of teachers they had at each high school. Consequently, it was left to this author to sift through the master schedules and count the teachers one by one at each school. There is a possibility that there was an error due to imperfect information.

School Districts Across the Country Dropping Block Because of Extra Expense

All other districts that have instituted block scheduling have incurred extra costs. That extra cost is why all across the country school districts are dropping block scheduling.

“School board members from across the country say local school budgets are in for a hit, and they’re bracing for leaner times forced by the nation’s economic downturn. . . . A block scheduling program, in which students study subjects for longer periods, might be scrapped altogether because it relies on extra teachers to make it work.” School board officials brace for budget cuts, *eSchool News*, February 14, 2009 , <http://www.eschoolnews.com/news/top-news/index.cfm?i=52396> (last visited March 14, 2009).

“[Reed-Custer School District (Illinois) Superintendent John] Asplund said not only is block scheduling expensive, as far as Reed-Custer High School is concerned, it's not producing the academic results that justify the expense. According to the school's most recent assessment by the state, RCHS has not shown a significant amount of growth in Prairie State Achievement Exam scores between 2002 and 2008. But, according to Asplund, the school spends more instructional dollars per student than it did 10 years ago. . . . ‘We've taken and basically told the taxpayers, 'we're going to raise your taxes... and we're going to spend a lot more per kid, and we're going to give you... nothing,’ Asplund said. ‘Sorry, I can't say it any other way. We've spent money and produced little.’ . . . Switching to a traditional ‘bell’ schedule would immediately save the district \$380,000 in wages and benefits, which would get the district out of the current financial crisis.” Marney Simon, School district expected to drop block schedule

Money woes blamed for need to switch back to traditional schedule at RCHS, *Braidwood Journal*, January 20, 2009,
<http://www.braidwoodjournal.com/main.asp?Search=1&ArticleID=3430&SectionID=13&SubSectionID=143&S=1> (last visited March 13, 2009).

“A block scheduling program, in which students study subjects for longer periods, may be scrapped altogether because it relies on extra teachers to make it work.” Schools expect budget cuts as economy sours, *Associated Press*, February 11, 2008,
<http://www.msnbc.msn.com/id/23116409/> (last visited March 13, 2009).

“The [Hayward] board also voted 3-2 to shift its high schools back from the popular ‘block’ schedule to the previously used system, meaning another 25 to 30 teaching positions can be cut, according to the 1,300-member Hayward Education Association. The move will save the district \$1 million annually, the board said.” Eric Kurhi, Hayward school cuts a grim reality for teachers, students, *Oakland Tribune*, February 12, 2009,
http://findarticles.com/p/articles/mi_qn4176/is_20090212/ai_n31365300 (last visited March 13, 2009).

“The switch [from block to traditional schedule] was the result of a lengthy investigation into the two instructional forms conducted by superintendent John Asplund and RCHS principal Eric Bernstein. According to the board, the switch will save the district \$300,000 in salaries and benefits next school year, which will help trim the budget and recoup some of the district's financial losses.” Marney Simon, Schedule change will benefit students, finances, *Braidwood Journal*,
<http://www.braidwoodjournal.com/main.asp?SectionID=13&SubSectionID=143&ArticleID=3605&TM=83591.73> (last visited March 13, 2009).

Manteca Unified School District, California, lists among proposed budget cuts: “Eliminate block schedule contribution from general fund. Savings: \$210,000.” MUSD proposed budget cuts, *Recordnet.com*, January 8, 2009 (last visited March 13, 2009).

Twin Falls School District, Idaho, ends block scheduling to save money. “With a seven-period schedule, 14 percent less staff is needed [compared to a block schedule] at secondary schools.” Ben Botkin, 'These are not ordinary times'
T.F. schools prepare for staff cuts; district changes class schedule, hopes to cut positions through attrition, *Times-News*, January 28, 2009 (last visited March 13, 2009).

Edgerton (Wisconsin) High School Associate Principal Clark Bretthauer said: “‘We would prefer to be in the [block] model we have, but we can’t afford it,’ he said Monday after the Edgerton School Board meeting.” Stacey Vogel, Edgerton High to drop block scheduling, *GazetteExtra.com*, August 26, 2008,
<http://gazetteextra.com/news/2008/aug/26/edgerton-high-drop-block-scheduling/> (last visited March 13, 2009).

“The Orange County [Florida] School District may be forced to go back to its controversial schedule swap unless it wants to spend more of your tax money.” School Schedules May Have To Switch Back, *WFTV.com*, February 26, 2009, <http://www.wftv.com/education/18804005/detail.html#>- (last visited March 13, 2009).

“[Sarasota, Florida,] School officials say they can no longer afford block scheduling, which requires more teachers. The district projects it could save \$5 million by going back to seven 50-minute periods.” Tiffany Lankes, Sarasota school board may end block schedule, *HeraldTribune.com*, February 26, 2009, <http://www.heraldtribune.com/article/20090112/ARTICLE/901120346/0/SPORTS0301> (last visited March 13, 2009).

“Cutting the [block scheduling] program would save \$11 million and reduce staffing by 160 positions.” James Haug, \$120 Million Estimate: School Budget Plan Advances, *Las Vegas Review-Journal*, Dec. 12, 2008, <http://www.lvrj.com/news/36038649.html> (last visited March 13, 2009).

“Due to budget cuts and lack of personnel, Wetumpka High School Principal Richard Dennis announced Jan. 26 at a meeting of the Elmore County Board of Education that he and school officials are considering adopting a seven-period school day [in place of block scheduling] at the high school. Brittany Sawyer, Budget cuts may force 7-period school day, *Prattville Progress*, March 13, 2009, <http://www.prattvilleprogress.com/apps/pbcs.dll/article?AID=/20090204/PROGRESS01/902040312/1041/progress01> (last visited March 13, 2009).

“As we have already reported here, one change being considered is to do away with block scheduling and the 8 credit program and return to a 7 credit program. . . . This change would save the school system approximately \$10 million dollars as they would be able to do away with teachers no longer needed.” School Board Budget Cut Workshop, January 22, 2009, <http://jaxpolitics.wordpress.com/2009/01/22/school-board-budget-cut-workshop/> (last visited March 14, 2009).

Clear Creek Independent School District in Texas reported that same 14% increase in teacher cost as a direct result of block scheduling. The Clear Creek Independent School District was using AB block scheduling. The impact on the budget is the same under both AB block scheduling and 4 X 4 block scheduling. See <http://www.window.state.tx.us/tspr/clearcreek/appa7.htm> . See also Linda Chion Kenney, Back From the Block - or Not, The Administrator, American Association of School Administrators, <http://www.aasa.org/publications/saarticledetail.cfm?ItemNumber=1583&snItemNumber=950&tnItemNumber=1995> .

"[Citrus County School Superintendent Sandra] Himmel said that switching to the six-period day would mean a savings of about \$2.6-million in payroll costs. That is because, under the block

schedule, at any one time, one quarter of the teachers are in their planning periods. In other schedules, planning periods are shorter and the amount of student contact time is extended and fewer teachers are needed. 'A lot of districts are coming off of the block and a lot of it is money,' she said." Barbara Behrendt, Return to Shorter Classes Examined, St. Petersburg Times, February 28, 2005, http://www.sptimes.com/2005/02/28/news_pf/Citrus/Return_to_shorter_cla.shtml .

"School Board president Linda Darnell said she wants costs on the options. She also wanted to know how much money would be saved by dropping block scheduling at the high school and returning to a seven-period day. [Madison Superintendent Tom] Patterson said a seven-period day allows the teaching of more subjects with fewer teachers than the four-block schedule the high school uses." Peggy Vlrebome, Patterson Offers 'Worst-case' Budget Cut Ideas, The Madison Courier, November 20, 2005, <http://www.madisoncourier.com/main.asp?SectionID=4&SubSectionID=253&ArticleID=27156&TM=54559.63> .

Teacher Workload Will Increase Under Block

The proposal for the A/B Block Schedule at the two remaining high schools in Stafford is premised on the idea that the teachers will teach the same number of students as they did on the seven class hour day schedule. The PowerPoint presentations to the school board on February 24th and the parents on February 18th indicated that the teachers would teach approximately 75 students every other day for a total of 150 students total during each week during the school year. The idea is that the teachers would be teaching the same number of students (150) in six classes out of the eight classes, with three classes (75 students) meeting every other day, under the A/B block schedule as they now teach when teaching five out of seven classes (150 students) every day under the traditional schedule.

However, that has not been the experience at other schools that have adopted the A/B block schedule. The Washington Post reported that the Anne Arundel County (Maryland) School District discovered that the teachers workload increased from 150 students per day to 180 students. The teachers found the workload to be excessive and was the leading complaint among the teachers who quit. The teachers in Anne Arundel went from teaching five out of seven classes to teaching six out of eight classes when the school district went to the A/B Block Schedule. That change in the schedule in Anne Arundel is exactly the same change that is being proposed for the Colonial Forge and Stafford high schools. The Washington Post reported:

After just one meeting last week, a school system task force already seems to have reached consensus that the current high school [block] schedule should be scrapped. . . . Students now take classes in a given subject on alternating days: four 86-minute classes on one day, four different classes of the same duration the next, for a total of eight classes in the academic year, a schedule known in education as the A/B block. . . . **But teachers have found their student loads vastly increased under block scheduling. Teachers typically went from teaching five classes a**

day to six classes across two days, and from serving about 150 students to 180 or more. The schedule emerged as the leading complaint among teachers leaving the system, cited by 71 percent of departing teachers in exit surveys. It is perhaps the most controversial of all the policies enacted during Smith's three-year tenure in Anne Arundel.

Daniel de Vise, Schools May Drop Block Schedule, Workload Is Excessive, Teachers Say, *The Washington Post*, December 22, 2005, http://www.washingtonpost.com/wp-dyn/content/article/2005/12/21/AR2005122100706_pf.html (last visited March 14, 2009) (emphasis added).

It is unlikely that the teachers in Stafford County will have a different experience teaching under the A/B Block Schedule than that suffered by the teachers in Anne Arrundel County Maryland.

Loss of Instructional Time Under Block

The 2009 block scheduling report states on page 32 that “transporting students during the school day to other high schools within the school division to attend classes offered at a student’s base school results in a loss of instructional time.” The report lists that statement under the heading of “Other Significant Findings.”

That is a significant finding indeed. When a student travels to another school to take a class he must miss one class period out of the day in order to allow for the travel time between schools. Under both the A/B or the 4X4 block schedule the traveling students miss a full 87 minute class. That is 1/4 of their instructional day. Whereas, a student who has a 7 class period day only misses a single 45 minute period which is only 1/7 of their instructional day.

What is done in practice many times is that rather than lose an entire 87 minute class period the student arrives late for the class at the target school and loses instructional time for that class. The report explains that “time has to be cut from other classes on the students schedules” in order to facilitate the travel from one school to the next. That lost instructional time does not appear anywhere on the school transcript. The lost instructional time, however, does appear later when the student scores lower on the SOL and SAT exams.

The report states that “by discontinuing this practice, the school division would alleviate concerns about lost instructional time, while potentially reducing the transportation budget in the areas of bus fuel and maintenance.”

The only way to discontinue the practice, as suggested by the report, would be to not allow the students to travel to take courses at other schools. Under block scheduling that would not be plausible because there are not enough courses taught at any one school to satisfy the needs of the student population (who need 8 courses per year) without adding courses at the students home school. Adding more classes to the curriculum at each school could not be done without hiring

more teachers.

Adding block scheduling at the other two high schools exacerbates the issue. If that were done there would then be a need for even more classes, because there would be two more high schools full of students that would need to take an extra eighth class. The school district claims that it can expand block scheduling without added staff. However, the report itself alludes to the fact that block scheduling as it stands now creates staffing and class offering issues. The report states: "Schedule conflicts and/or staffing challenges can limit the opportunities available to students by offering 8 courses each school year."

Extra Classes Without Any Extra Learning

The Stafford County School District plans on instituting block scheduling without incurring the extra costs of hiring extra teachers. It is possible to do that. However, if more teachers are not hired it comes at a cost to the students.

Before going to block scheduling, the 2004-2005 Stafford County Public Schools Catalogue contained a total of 239 classes. (at the time there was no IB and no JROTC). Three high schools went to block scheduling during the 2005-2006 school year. By the 2008-2009 school year the Stafford County Public Schools Catalog had grown to a total of 269 courses (not including the 23 IB courses and 8 JROTC classes). That is an increase of 30 courses. Those 30 courses represent a 13% increase in number of courses offered. That corresponds very closely with the expected 14% increase in classes needed when going from 7 traditional schedule classes to 8 block schedule classes.

When the school district initially went to block scheduling in the 2005-06 school year they did not add any new courses that year to the catalogue; it was a disaster. They were putting students in classes for which they never signed up. It was quite controversial, and the school district immediately improvised new courses that were never listed in the catalogue. The school district learned its lesson, and it revised the catalogue the next year with added classes. The revisions continued until the 2008-09 catalogue, which has 13% more classes than the 2004-05 catalogue.

The school division claims that there are no extra teachers need to be hired to teach block scheduling. How are the high schools able to offer 13% more courses without adding 13% more teachers? There seems to be a patchwork of methods used that dilutes academic instruction and reduces academic achievement. The school district has an extensive bussing program that buses children from school to school in order to meet the needs of the students taking an eighth class.

Howard County, Marlyland, adopted and then abandoned block scheduling. In Maryland, Students are required to have 21 credits for graduation. Howard County found that filling the gap of the 32 credits in an eight period block schedule was done with classes that were of limited value to the students. Howard County officials stated that the 90 minute classes were too long and

that teachers watered down their classes with games and puzzles. Hartford County Maryland School Board, Comments of PTA member and officer, April 11, 2005, https://www.hcps.org/boe/docs/meetinghighlights/archive/2004_05/20050411BoardHighlights.aspx (last visited on March 8, 2009).

The same thing that happened under block scheduling in Howard County has also happened in the Stafford County Schools. Not only are the classes watered down, but new courses have been added, many of which have little academic benefit, just to fill the gap of having to teach the extra eighth course required by block scheduling.

In addition, the school district has expanded the availability of courses to other grades, thus allowing more students to take those classes. For example, in the 2007-08 catalogue Video Production Technology was expanded to be offered to grades 9, 10, 11, and 12. Formerly, it had not been offered to 9th grade students. Advanced Geometry (course number 3143C) was only offered to 9th grade students in the 2006-07 catalogue. However, in the 2007-08 catalogue that same course and course number was offered to 9th and 10th grades.

Furthermore, there has also been an expansion of the student aid program in the block scheduling schools because there are no classes available for the students to take. The student aid program gives the students somewhere to go. In addition, there have been many instances where students are put into classes for which they did not sign up and for which they have no interest in taking. However, they have a slot in their schedule for an eighth class and so they are placed into a class where there is an open seat.

There are instances where classes with two or three course numbers are taught at the same time by the same teacher (e.g., small engine repair and art). The teacher would take attendance using a different roster for each course and each different roster is associated with a different course number. That is one way in which the school district expands the course offerings without hiring more teachers.

There are also instances where there are different course numbering rules followed for block schools than for traditional schools. The 2007-08 course catalogue has two courses (Advanced Video Production Technology, Video Production Technology III), that listed at CFHS and SHS under the same course number (8497T). In addition, that same course number (8497T) was listed for yet a third course (Video Production Technology IV) that was taught at CFHS. Advanced Video Production Technology (8689) and Video Production Technology III (8690), have a second set of different course numbers for each course associated with them listed for BPHS, MVHS, and NSHS. Video Production Technology IV (8690T) also has a second distinct course number designating that it is only taught at BPHS. It is not clear why those three courses are given the same course number when listing them to be taught at the traditional schedule schools and yet those same three courses are given three different course numbers when listing them to be taught at block schedule schools.

The burden of accommodating the needs of the block scheduling schools may explain the

confusing and arbitrary changing of course names and titles in the Stafford County class catalogue. For example, Television Production I (course number 8688) was a course taught only at NSHS in 2004-05. In the 2005-06 catalogue the course title was changed to Video Production Technology. In addition, the course was then listed under two course numbers (8465 and 8688). The course was then taught to three other high schools. Course 8465 designated that the course was taught at BPHS and SHS. Course number 8688 designated that the course was taught at NSHS and CFHS. The course was only offered to grades 10, 11, and 12.

In the 2006-07 catalogue Video Production Technology course numbers were changed and another high school (MVHS) was added to the class offering. The course was given the course numbers 8497 and 8688 (8465 course number was dropped). 8497 designated that it was to be taught at NSHS and SHS, whereas 8688 designated that it was taught at BPHS, MVHS, and CFHS. The schools listed under 8688 were changed. While 8688 was still taught at CFHS, it was now also taught at BPHS instead of NSHS. NSHS was switched from the former 8465 course number to the new 8497 course number. It was still offered to grades 10, 11, and 12.

It gets stranger still. The electronic version of the 2006-07 catalogue does not show the course number changes that appear in the published hard copy of the catalogue. In the electronic version, Video Production Technology remains listed under numbers 8688 and 8465. The electronic version of the catalogue does not make the change to 8497 until the 2007-08 electronic catalogue. Furthermore the electronic catalogue does not contain the course switches between schools that took place in the hard copy published catalogue.

The 2007-08 catalogue once again changed the schools listed under each Video Production Technology course number. 8497 designated that it was taught at CFHS and SHS (the year previously that course number was taught at NSHS but not at CFHS), whereas 8688 designated that it was taught at BPHS, MVHS, and NSHS (the year previously that course was taught at CFHS but not at NSHS). Another interesting fact is that the course was now offered to grades 9, 10, 11, and 12. Formerly it was not offered to 9th grade students. By the time the 2007-08 catalogue was published NSHS has had the same course listed under three different course numbers, all within three school years (course number 8465 in 2005-06, course number 8497 in 2006-07, and finally course number 8688 in 2007-08). Why?

In the 2008-09 catalogue the course name was again changed, this time from Video Production Technology to Video and Media Technology I. However, it maintained the same course numbers (8497 and 8688). The schools designated for each course number remained the same. The course remained open to all grades.

This constant changing of names and course numbers and scrambling the schools associated with the course numbers is a recipe for disaster. A student at North Stafford High School could have taken Video Production Technology under course number 8497 during the 2006-07 school year; he could have taken the very same course during the 2008-09 school year under a different name (Video and Media Technology I) and a different course number (8688) and no one would be the wiser.

School District Report Contravenes the School Board Committee

On February 28, 2006, the school board created the block scheduling evaluation committee by unanimously voting to approve the following: “the school board form a committee to evaluate the hybrid block scheduling used in three of the divisions high schools. The committee, as appointed by school advisory councils and school board selected at-large members, will report directly to the school board.”

The way the school district conducted the meetings had the effect of undermining the school board committee. For example, when the committee initially began to convene it violated the rules of conduct for a school board committee by restricting discussion. This restriction violated Roberts Rules. Robert’s Rules can be found at <http://www.rulesonline.com/start.html#rror--00.htm> .

Art. IX, section 52 of Robert’s Rules (Committees, Special and Standing) states: "motions to close or limit debate are not allowed, and there is no limit to the number of times a member may speak, . . . unless agreed to by general consent, all questions must be put to vote."

In addition, none of the block scheduling reports from 2006 through 2009 were approved by the block scheduling committee.

Art. IX, Section 52 of Robert’s Rules further states:

The committee's report can contain only that which has been agreed to by a majority vote at a meeting of which every member has been notified, or at an adjourned meeting thereof (a quorum, a majority of the members, being present), except where it is impracticable to have a meeting of the committee, when it may contain what is agreed to by every member. (emphasis added)

Id.

The final report for 2007 was not even seen by the committee members before it was falsely presented to the school board as a report of the committee. Several members of the committee were so angry at this that they appeared before the school board to demand that their names be removed from the report. The committee members had only seen an initial rough draft of the report and were not allowed to vote on the submission of the final report, which they were never given. In addition, they objected to the failure of the report to give important details about block scheduling and the fact that there were misleading and inaccurate statements in the report.

The school district apparently decided after 2007 to no longer deal with the citizen members of the committee and instead created a block scheduling report without giving any notice to the committee members or to the public at all. By doing this it essentially excluded members of the school board committee from meetings and did not give public notice of the meetings as required

by the Virginia Freedom of Information Act, Virginia Code § 2.2-3707.

Opinion Surveys Were Based Upon Biased Statements Favoring Block Scheduling

The objection of the committee members to the 2007 report was just the tip of the iceberg regarding the discontent on the committee with how the school district was conducting matters. Some of the committee members concluded that the opinion surveys being conducted by the school district were slanted to create what is known as a “halo effect” in favor of block scheduling. The parents on the initial committee immediately perceived the bias in the form of the survey. One of the committee members tabulated the bias.

That committee member focused on 30 questions out of a total of 34 questions on the student survey. The other 4 questions were deemed neutral. The survey provided a series of responses for each survey statement from “strongly agree” (SA), “agree” (A), “no change” (N), “disagree” (D), “strongly disagree” (SD) or “no opinion” (0). The responses were then transformed to a numeric scale.

This is an example of a statement on the survey that was biased toward block scheduling: “Teachers use more activities on block scheduling.”

This is an example of a statement on the questionnaire that is biased against block scheduling: “Having substitute teachers is more difficult on block scheduling.”

The committee member found that 26 out of the 30 statements in the block scheduling survey were biased toward block scheduling. The statements emphasized the strengths of block scheduling. Only four of the questions were geared towards revealing negative aspects of block scheduling. The slanting of the survey with 26 out of 30 questions making positive statements about block scheduling had the effect of creating an 87% bias in favor of block scheduling.

The parent found the same thing when looking at the teacher survey. Out of 32 ranked numbered questions, only 8 statements were geared towards revealing negative aspects of block scheduling. 24 statements were slanted towards revealing positive aspects of block scheduling. That is a 75% positive bias in the teacher survey in favor of block scheduling.

A survey that is biased in favor of a particular program tends to have results that correlate closely to the bias in the survey. This creates an unrealistic halo effect that does not accurately report the true opinions in the population.

Conclusion

Block scheduling is expensive and ineffective. The Stafford County School Board should reject the school district’s request to adopt block scheduling at Colonial Forge and Stafford High

Schools. Furthermore, the school board should task the school district to begin the process of ending block scheduling at the three other Stafford high schools.