

The One Subject Plan



Innovation

When you think about innovation in high school education, the image of a traditional Virginia military school is not likely to pop into your head. Military schools are old-fashioned, traditional, and narrow-minded. Aren't they?

In fact, one of the most innovative and effective ideas in secondary education can be found today in the unique curriculum schedule used at Fork Union Military Academy in Fork Union, Virginia. It's called the One Subject Plan, and it has proven effective in increasing the academic achievement of young men for many years at this historic boys' military school.

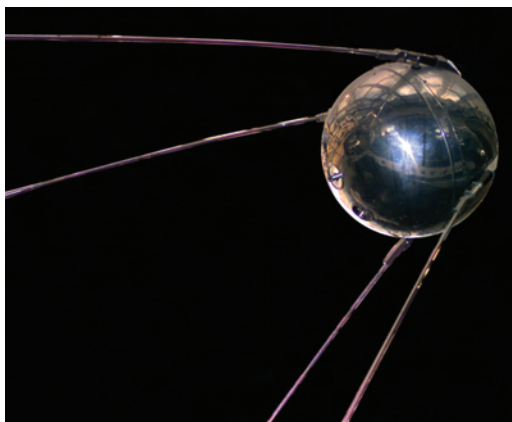
Punch Line or Problem?

A joke making the rounds in recent years suggests, "You know our education system has problems when Hallmark comes out with a new line of 'Easy-To-Read' graduation cards."

Poking fun at the American school system is a national pastime nearly as popular as football but even older. Nineteenth-century humorist Mark Twain once wrote, "Many public-school children seem to know only two dates – 1492 and 4th of July; and as a rule they don't know what happened on either occasion."

It wasn't a laughing matter in 1957, however, when the Soviet Union launched the Sputnik satellite into orbit. Suddenly, America found itself in a "Space Race" with the communists. Federal money began pouring into math and science education. Programs were set up to identify gifted students and put them into upper-level classes. Language labs and educational toys proliferated, as America tried to win this global competition through education.

The Soviet Union's launch of the first satellite, Sputnik, in 1957 inspired new funding and innovation in the public education system of the United States...seven years after Fork Union had already implemented its own education innovation -- the One Subject Plan.



Reform...and more reform

In the half-century since Sputnik, America has seen its educational system reformed, reinvented, and reborn dozens of times. We've put our faith in various new acronyms, from the NDEA (National Defense Act of 1958), to the NAEP (National Assessment of Educational Progress, born in 1969), to NCLB (the No Child Left Behind initiative begun in 2002). We've tried merging small schools into larger schools to provide greater learning resources; now we're breaking large schools into smaller schools. We've gone from holding back pupils who fail their grade, to social promotion, and then back again to retaining struggling students. We've tried phonics, then "whole language," and then back once more to phonics. We've gone from traditional schedules to open scheduling to block scheduling. We've seen any number of new programs: magnet schools, open schools, charter schools, standards of learning, and national testing and assessment schemes.

A Nation at Risk

America was deemed "a nation at risk" in a 1983 report by that name, written by the National Commission on Excellence in Education. This blue-ribbon panel of experts was commissioned by the Secretary of Education to address what he called "the widespread public perception that something is seriously remiss in our educational system. The experts made their investigation and found what they called "a rising tide of mediocrity."

In its landmark report, the Commission said, "If an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might well have viewed it as an act of war. As it stands, we have allowed this to happen to ourselves. We have even squandered the gains in student achievement made in the wake of the Sputnik challenge. Moreover, we have dismantled essential support systems which helped make those gains possible. We have, in effect, been committing an act of unthinking, unilateral educational disarmament."

Findings on Course Content, Expectations, and Use of Time

The Commission warned that school curricula were not preparing students for college. "Secondary school curricula have been homogenized, diluted, and diffused to the point that they

no longer have a central purpose," the Commission reported. "In effect, we have a cafeteria style curriculum in which the appetizers and desserts can easily be mistaken for the main courses." The report found that twenty-five percent of the credits earned by high school students were in areas such as "physical and health education, work experience outside the

school, remedial English and mathematics, and personal service and development courses, such as training for adulthood and marriage."

The Commission found that expectations for student performance were declining, noting that "The amount of homework for high school seniors has decreased (two-thirds report less than 1 hour a night) and grades have risen as average student achievement has been declining."

The use of time was another area the Commission examined, and the results were equally alarming: "(1) compared to other nations, American students spend much less time on school work; (2) time spent in the classroom and on homework is often used ineffectively; and (3) schools are not doing enough to help students develop either the study skills required to use time well or the willingness to spend more time on school work."

Prisoners of Time

A decade later, in 1994, another panel of experts known as the National Education Commission on Time and Learning took a look at what's wrong with American education and concluded that "Learning in America is a prisoner of time."

"For the past 150 years," their report notes, "American public schools have held time con-

stant and let learning vary. The rule, only rarely voiced, is simple: learn what you can in the time we make available. It should surprise no one that some bright, hard-working students do reasonably well. Everyone else -- from the typical student to the dropout -- runs into trouble."

Carnegie Unit

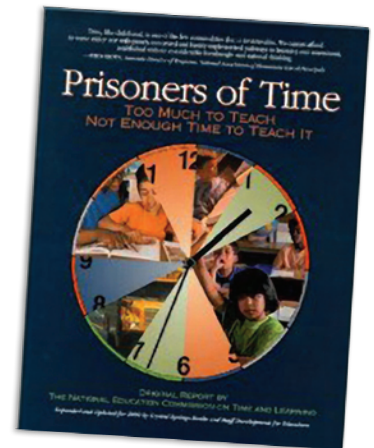
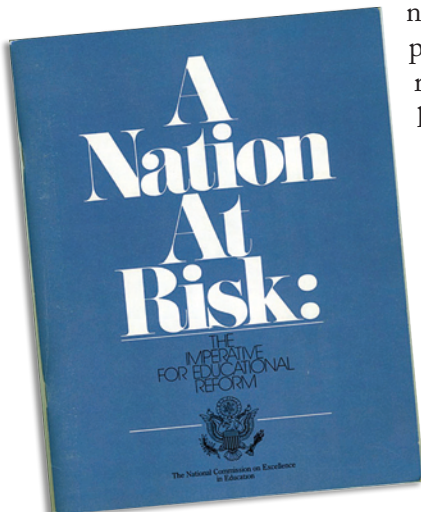
The Commission found that schools, on average, offered a six-period day with 5.6 hours of "instructional time." They noted that, "No matter how complex or simple the school subject -- literature, shop, physics, gym, or algebra -- the schedule assigns each an impartial national average of 51 minutes per class period, no matter how well or poorly students comprehend the material."

This adherence to a 51-minute period on average was based in part on the concept of the Carnegie Unit. The Carnegie Unit was developed in 1906 as a measurement of the time a high school student has spent studying a subject. According to the original definition, completing 120 hours (4 or 5 classes per week, 40 to 60 minutes per class, for 36 to 40 weeks per year) would earn the student one "unit" of high school credit; fourteen units of credit were deemed the minimum requirement for a four-year high school education.

The Carnegie Unit measures only "seat time" and not "knowledge learned," but the Commission noted that secondary school graduation requirements were universally based on Carnegie Units.

"Instructional Time" vs. "Academic Time"

The Commission found that the American concept of instructional time was far different than that of other developed countries. In countries like Germany, Japan, and France, many more hours are spent on core academic subjects. The Commission discovered that the typical American school day, while originally intended for core academic learning, "must now fit in a



whole set of requirements for what has been called ‘the new work of the schools’ -- education about personal safety, consumer affairs, AIDS, conservation and energy, family life, driver’s training -- as well as traditional nonacademic activities, such as counseling, gym, study halls, homeroom, lunch and pep rallies.”

Not a New Concern

The Commission’s concern about the use of time was not new, however. A previous report from the past U. S. Commissioner of Education, William Torrey Harris, made clear his concerns about “the constant tendency toward a reduction of time.”



U. S. Commissioner of Education, William Torrey Harris raised concerns about the use of time in schools as early as 1894.

“First, the Saturday morning session was discontinued; then the summer vacations were lengthened; the morning sessions were shortened; the afternoon sessions were curtailed; new holidays were introduced; provisions were made for a single session on stormy days, and for closing the schools.

“The boy of today must attend school 11.1 years in order to receive as much instruction, quantitatively, as the boy of fifty years ago received in 8 years... It is scarcely necessary to look further than this for the explanation for the greater amount of work accomplished...in the German and French than in the American schools.”

Commissioner Harris’ remarks were made in a report published in 1894. He was criticizing the reduction of the school year from 193.5 days to 191 days. A century later, the 1994 Commission noted that the school year ranged, on average, from 175 to 180 days.

The National Education Commission on Time and Learning recommended that “new uses of time should ensure that schools rely much less on the 51-minute period, after which teachers and students drop everything to rush off to the next class.” Further, they noted that “greater flexibility in the schedule will also make it easier for schools to take advantage of instructional

resources in the community-workplaces, libraries, churches, and community youth groups-and to work effectively with emerging technologies.”

Block Scheduling

In the past decade, the vast majority of public high schools have moved to a system known as block scheduling. In a typical block schedule, students attend 90-minute class periods, instead of 50-minute classes. In the 4x4 block system, students take four courses per semester for a total of eight courses in the year. In the A/B block system, students rotate eight courses throughout the year, four classes each on alternating days.

The advantages offered by this block schedule include less time spent each day roaming the halls for class changes, less time lost to class administration (it takes less time to call the roll and collect homework for four classes per day than for six), and more time for instructional flexibility. Teachers can use a wider variety of instructional methods, hold longer discussions, encourage interactive learning, and engage in extended lab times in the 90-minute period.

The benefits of the block schedule are lost, however, if the time is not used effectively.

Block scheduling does not permit the same number of instructional hours as the traditional schedule (180 days x 50 minutes = 9,000 minutes; 90 days x 90 minutes = 8,100 minutes). Much of that difference is made up in fewer minutes lost to class administration, but the teacher must still make a careful use of time each day.

Lecture continues to be the most widely used instructional method in high schools today, even under the block schedule. With added pressures to improve test scores and meet mandated curriculum standards, many teachers resort to lecturing for the entire available time in order

	Day 1-F	Day 2-F	Day 3-F	Day 4-F	Day 5-F	Day 6-F	Day 7-F
Period 1	Computer Apps 8010 Miller, Will	Chemistry H908 Behr, A.	English 12-01 8302 Conrad, J.	Religion IV-12 A101 Jones, E.	Am History-11 A345 Lincoln, Abe.	Calculus BC M222 Newton, I.	Latin V AP H390 Smith, G.
Period 2	English 12-01 8302 Conrad, J.	Religion IV-12 A101 Jones, E.	Am History-11 A345 Lincoln, Abe.	Calculus BC M222 Newton, I.	Latin V AP H390 Smith, G.	Computer Apps 8010 Miller, Will	Chemistry H908 Behr, A.
Period 3	Am History-11 A345 Lincoln, Abe.	Calculus BC M222 Newton, I.	Latin V AP H390 Smith, G.	Computer Apps 8010 Miller, Will	Chemistry H908 Behr, A.	English 12-01 8302 Conrad, J.	Religion IV-12 A101 Jones, E.
Period 4	Latin V AP H390 Smith, G.	Computer Apps 8010 Miller, Will	Chemistry H908 Behr, A.	English 12-01 8302 Conrad, J.	Religion IV-12 A101 Jones, E.	Am History-11 A345 Lincoln, Abe.	Calculus BC M222 Newton, I.

	Day 1-S	Day 2-S	Day 3-S	Day 4-S	Day 5-S	Day 6-S	Day 7-S
Period 1	Sociology II A102 Byrne, A.	Chemistry H908 Behr, A.	English 12-01 8302 Conrad, J.	Religion IV-12 A101 Jones, E.	Sr. Project Autism Staff	Calculus BC M222 Newton, I.	Latin V AP H390 Smith, G.
Period 2	English 12-01 8302 Conrad, J.	Religion IV-12 A101 Jones, E.	Sr. Project Autism Staff	Calculus BC M222 Newton, I.	Latin V AP H390 Smith, G.	Sociology II A102 Byrne, A.	Chemistry H908 Behr, A.
Period 3	Sr. Project Autism Staff	Calculus BC M222 Newton, I.	Latin V AP H390 Smith, G.	Sociology II A102 Byrne, A.	Chemistry H908 Behr, A.	English 12-01 8302 Conrad, J.	Religion IV-12 A101 Jones, E.
Period 4	Latin V AP H390 Smith, G.	Sociology II A102 Byrne, A.	Chemistry H908 Behr, A.	English 12-01 8302 Conrad, J.	Religion IV-12 A101 Jones, E.	Sr. Project Autism Staff	Calculus BC M222 Newton, I.

The block schedule provides for somewhat longer class periods, but adds complexity to a student’s daily and weekly schedule.

to “cover the curriculum” for state-mandated tests. While it is possible to lecture for most of a 90-minute period, zipping through the required content, it is not very effective for students to sit through four classes of 80-minute lectures. The promise of instructional flexibility offered by block scheduling is not becoming the reality in most American schools.

Fifty Years after Sputnik

It is now more than fifty years after Sputnik, and twenty-five years after the publication of “A Nation at Risk.”

So where do we stand today?

- » In 1970, a greater percentage of American students finished high school than did their peers in any other country. By a decade ago, America had fallen behind Japan, Germany, Korea, France, Ireland, and others.
- » On the recent Third International Mathematics and Science Tests, American 17-year-olds ranked fourth from the bottom of the 38 countries participating, just above South Africa, Cyprus, and Lithuania.
- » Students do no more homework today than they did in 1982 – less than an hour a day on average.
- » Corrected for inflation, we are spending three times more per student than we did in 1960, but we are seeing less return on our public education investment.

As a report issued by the Koret Foundation concludes, “The tide of mediocrity remains high.” Schools in America simply have not found the right solution.

Perhaps they haven’t been looking in the right place for their answers! Maybe they should check out what’s been going on for almost sixty years in the small village of Fork Union, Virginia.



Colonel J. Caldwell Wicker (left), FUMA’s president from 1945-1968, and Harry M. Waldon, FUMA’s headmaster from 1948-1967, could be considered the fathers of FUMA’s famed One Subject Plan.

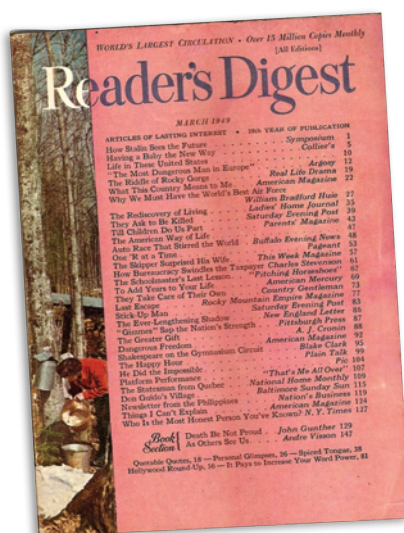
One ‘R at a Time

Long before Sputnik broke the grip of earth’s gravity, a new education innovation was brewing at Fork Union Military Academy. In the days after World War II, the campus was bustling with students and returning soldiers back to finish their education at the Academy. The school’s president, Colonel J. Caldwell Wicker, was always on the lookout for a good idea and spotted one that interested him in an article published in the March, 1949 issue of *Reader’s Digest*.

Titled “One ‘R at a Time,” the article by J. D.

Ratcliff (condensed and re-published from *Pageant* in December, 1948) described a curriculum plan that was tried briefly at two different schools: Hiram College in Hiram, Ohio and the Kiskiminetas Springs School for Boys in Saltsburg, Pennsylvania. Each school was independently experimenting with a program where one subject was taught at a time. Instead of students going from class to class, taking courses like English, algebra, biology, and French all at the same time, students would

spend up to eight weeks in a single course before moving on to the next.



Fork Union Military Academy was in quite good shape in 1949. Enrollment was good, students were doing well, and the school was financially sound. But Colonel Wicker was not one to let the status quo stand in the way of something that might make his school even better. He asked the school's headmaster, Harry M. Waldron, to look into implementing this new One Subject Plan in the 1950-51 academic year.

Although this curriculum plan, like many other educational reforms, was tried and soon abandoned by at least ten schools, the idea took root at Fork Union. The first couple of years were difficult as faculty, students, and administration adjusted to the new plan, but, under the leadership of Colonel Wicker and Headmaster Waldron, the concept was patiently developed. The plan has undergone some minor tinkering since those first days, but the overall outline of the program has remained largely unchanged from that first concept.

From September of 1950 until the present day, the One Subject Plan has been the cornerstone of Fork Union Military Academy's Upper School academic program.

The One Subject Plan

The academic year for students in grades 9 through 12 is divided into five grading periods of about seven weeks each. A student is assigned one course each grading period, for a total of five courses in the regular academic year.

The normal school day is divided into eight periods of 45 minutes each. Five of those periods are class periods, one is a mid-morning break period for all students, one period is for lunch, and one period during the day is a planning period. During planning period, students can receive additional help from their classroom teacher, or have free time to take care of other assignments. Classes meet every day, Monday through Friday, and some class periods are scheduled for Saturday mornings each grading period to provide additional academic instruction time.

The academic school day lasts from 8am to 2pm and is devoted to core academic studies. Extracurricular activities such as band, choir, athletics, drama, and art classes meet before or after this academic school day.

The student attends the same class, with the same group of fellow students and the same instructor, for a total of 3 hours and 45 minutes every school day, for the entire seven-week grading period. Class size is usually in the 12 to 15 student range, but never more than 20 in the largest class. The teacher is responsible for teaching only one class of students for that seven-week grading period.

Benefits of the One Subject Plan

Fork Union Military Academy has found a number of specific benefits resulting from this unique program.

Focus

Students are able to focus on a single subject, without the distractions inherent when shifting from class to class. They never have to mentally shift gears like they would when moving from English to physics. It becomes almost like a total immersion program in that one subject. This focus helps student and teacher both stay engaged with each other and in the learning.

Students are freed from the obligation to meet the demands of several different teachers at the same time. They never have to prioritize homework assignments, deciding whether to spend more time studying math or do their history homework instead. They are able to focus their energy and attention in one direction, yielding more rapid progress and deeper understanding.

Accountability

A typical high school teacher must track at least 80 to 120 students at a time, even with block scheduling. Under the One Subject Plan, the teacher is responsible for only 12 to 20 students at a maximum. Teachers can check homework every day if they wish. They can check student notebooks and journals on a regular basis. It's nearly impossible for a student to "slip through the cracks" within the One Subject Plan.

In the same way, the One Subject Plan requires the teacher to be accountable to the students. Under a normal high school schedule, if an underprepared teacher has only 50 to 90 minutes to spend with four or five different classes, they might slip by with just a test and a video for that day. In the One Subject Plan, however, the

teacher is responsible for nearly four hours of class time each day and this schedule, by its very nature, requires that teachers be fully prepared to teach each day when they enter the classroom.

Individualized Instruction

With markedly fewer students to track, a teacher can really get to know each student as an individual. The teacher can determine what styles of learning work best for each student, and use different instructional methods to reach the various visual, auditory, tactile and kinesthetic learners in the class. For example, a traditional lecture method might work for auditory learners, while hands on group activities might be needed to effectively teach the kinesthetic learners in the class.

In fact, the nature of the One Subject Plan forces a teacher to use a variety of instructional methods throughout the class day. While a teacher might be able to simply lecture for 90 minutes every day under a block schedule, that kind of educational filibuster is nearly impossible to maintain for almost four hours a day. The teacher must use different techniques to keep students engaged throughout the course of the day. This naturally provides the kind of individualized instructional variety that proves effective for learning.

Mentoring

The teacher spends hours each day with a small group of students. Student and teacher get to know each other very well, warts and all. This means they must work through any conflicts, learn how to deal with each other effectively and positively, and look beyond surface impressions to find points of connection and shared interests. A strong bond can develop between student and teacher in this environment.

This is how effective learning has developed for centuries, between mentor and protégé. Plato was a disciple of Socrates. Aristotle was a disciple of Plato. Learning from a respected teacher among a small group of students has a long, productive tradition. A teacher can be more than a mere functionary delivering 50-minute lectures; a teacher can become a role model, trusted and respected, helping develop a young person's character in addition to his knowledge of algebra.

Special Learning Activities

Teachers don't need to worry about coordinating their schedules with other classes. They have the whole school day to use as they need. This means that government classes can schedule field trips to the state capitol to witness the legislature in action. A chemistry teacher can use more time for a lab experiment if needed. A history teacher can take the entire class to the library to work on research for a term paper, supervising the process from start to finish.

This flexibility in scheduling special activities means that the needs of the student can drive the learning process, not the need to be finished with class within 50 or 90 minutes. Learning is no longer held prisoner by time.

Class Scheduling

The One Subject Plan offers benefits in class scheduling as well. Students can take sequential courses like Algebra I and Algebra II consecutively within the same year. This is recommended as well for students taking a foreign language, so they might take Spanish I and Spanish II in back-to-back grading periods and gain the benefit of concentrated study in the language. Students can also repeat a course within the same year if needed to improve a low grade.

Success Stories Begin Here

"It felt good when I started getting good grades," said Andy Hodak, a recent graduate of Fork Union Military Academy. "I made Honor Roll twice and Dean's List once this past year. I made Honor Roll twice last year. FUMA kind of brings out an inner strength that normal high school teachers don't demand from you. FUMA teachers expect that to come out. They expect you to do your homework. They expect that extra 10% effort."

More than fifty years ago, educational innovation was nurtured in the small village of Fork Union, Virginia. Generations of students since 1950 have found this unique program to have a transformative effect on their academic lives. At Fork Union Military Academy, the One Subject Plan is one educational reform that's here to stay.

Frequently Asked Questions About the

One Subject Plan

Because the One Subject Plan, while simple, is so different from what most school systems follow, people express a lot of interest in the program. They frequently ask questions like these:

Don't the students get bored?

The short answer is no, not any more than normal. "Interest comes with mastery," said the late E. H. "Gus" Lacy, a former teacher and administrator at Fork Union Military Academy, writing about the One Subject Plan in 1955. "This new plan has given us a method of doing a better job of teaching. The boys learn more, and, consequently, they devote their energies toward the subject because they understand more about the subject being taught." This observation continues to be true more than fifty years later. Students get a lot of genuine satisfaction from really learning a subject instead of just coasting their way through a 50- or 90-minute class period.

Those who doubt the concentration ability and attention span of a teenager have never seen a young man working to master something like Madden on his video game console. When it is something that engages and interests them, young people can stay amazingly focused. The One Subject Plan helps channel that kind of dedicated effort into the academic realm, helping a young man post his name on the Honor Roll instead of just climbing the leader board for Halo 3.

On a related note, most students have favorite subjects, and subjects they don't enjoy. In those cases where a student finds a particular subject to be dull and tedious, the One Subject Plan offers the promise that with just seven weeks of effort, the course can be successfully completed.

What about college, where students have to take multiple classes?

Academically, students who have followed the One Subject Plan are as prepared, or better

prepared than their peers to handle college level work. The college acceptance rate of Fork Union Military Academy graduates is 100%. Although not all graduates proceed directly on to college, the One Subject Plan successfully offers them the opportunity to make that choice – a fact that can't be said for all high school programs.

Moving from high school to college is a major adjustment for any student. Students spend about half the time in class at college compared to the time spent in high school. More of the burden of learning is placed on the student rather than on the instructor. They are in class an average of 16 or 17 hours each week, instead of 30 to 35 hours a week in high school.

The One Subject Plan helps the student develop the individual study skills to learn in a concentrated fashion and explore a subject in depth. This ability to focus and concentrate on a course of study will help the student accomplish the kind of independent study required by the college schedule. Students must learn to handle newfound freedoms in a responsible manner and manage their own time effectively for independent study, but this is a challenge that faces all college freshmen.

Do students get better grades?

Within the first five years of implementing the One Subject Plan, Fork Union Military Academy saw its Honor Roll double in size. This kind of academic success continues today. The vast majority of students who transfer to Fork Union Military Academy from another school see their GPA improve, even though FUMA uses a grading scale (A = 95 and above, F = 75 and below) that may be tougher than their previous school. These increased grades are matched by improvements in scores on tests such as the PSAT and SAT.