STILL AT RISK: What Students Don't Know, Even Now A report from Common Core by Frederick M. Hess



# STILL AT RISK: What Students Don't Know, Even Now

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# LETTER FROM THE EXECUTIVE DIRECTOR

Senator Joseph McCarthy investigated people who protested the war in Vietnam, better known as the Second World War. Fortunately, that war was over before Christopher Columbus sailed to America; otherwise, we might have never experienced the Renaissance.

A new survey of 17-year-olds reveals that, to many, the paragraph above sounds only slightly strange. Almost 20 percent of 1,200 respondents to a national telephone survey do not know who our enemy was in World War II, and more than a quarter think Columbus sailed after 1750. Half do not know whom Sen. McCarthy investigated or what the Renaissance was.



A deep lack of knowledge is neither humorous nor trivial.

It is easy to make light of such ignorance. In reality, however, a deep lack of knowledge is neither humorous nor trivial. What we know helps to determine how successful we are likely to be in life, and how many career paths we can choose from. It also affects our contribution as democratic citizens.

Unfortunately, too many young Americans do not possess the kind of basic knowledge they need. When asked fundamental questions about U.S. history and culture, they score a D and exhibit stunning knowledge gaps:

- Nearly a quarter of those surveyed could not identify Adolf Hitler; 10 percent think he was a munitions manufacturer
- Fewer than half can place the Civil War in the correct half-century
- Only 45 percent can identify Oedipus



- A third do not know that the Bill of Rights guarantees the freedom of speech and religion
- 44 percent think that *The Scarlet Letter* was either about a witch trial or a piece of correspondence



Students are graduating without knowing what Brown v. Board of Education decided.

There are parents all over America for whom this is no surprise. They know that the focus of their child's school day is increasingly on preparing for basic skills tests, not on learning history or geography, reading literature, or participating in the arts. And their child's teacher often shares in their frustration.

Another concern the survey identifies is a consistent gap—the size of a lettergrade—between respondents who have at least one college-educated parent and those who do not. This is devastating for students who come from homes where the discussion of literature and history is rare because if the school doesn't impart this knowledge, these students are not likely ever to learn it. The burden on schools serving less-privileged students is great because they must somehow teach more just to get their students to the starting line. This survey shows that that challenge is not being adequately met.

When students graduate without knowing what *Brown v. Board of* 

*Education* decided or who told them to "ask not what your country can do for you," they are being left behind in the worst way. Everyone's children deserve to receive a comprehensive, content-rich education in the liberal arts and sciences. Of course they must be able to read and compute. But they must also possess real knowledge about important things, knowledge of civics, biology, geography, art history, languages—the full range of subjects that comprise a complete education. Any reform idea that diminishes the ability of schools and teachers to provide students with such an education is narrowing children's futures, not expanding them.

Lynne Munson Executive Director Common Core WHAT WE NEED IS AN EDUCATION SYSTEM that teaches deep knowledge, that values creativity and originality, and that values thinking skills.

# PREFACE

This report documents continuing weaknesses in our students' knowledge of history and literature. We think it likely that similar surveys would show large gaps in our students' knowledge of many of the liberal arts and sciences, including civics, science, languages, and arts. This is unacceptable. We believe, as do most concerned citizens, that our schools must teach our students the great ideas, controversies, and events that have shaped our nation as well as the skills needed for life in our democratic society. We believe that such knowledge is essential in preparing for postsecondary education, for the modern workplace, for informed understanding, and for civic participation.



The nation is in thrall with testing and basic skills.

Today, the nation is in thrall with testing and basic skills. We think this is a mistake. Common Core's goal in sponsoring this report and in launching a new organization devoted to promoting the liberal arts and sciences is to set forth a richer vision of what education must be for all of our children.

Twenty-five years ago, the landmark report *A Nation at Risk* was published by the federal government. The report called for "excellence in education" and recommended a renewed emphasis on a strong curriculum for all students. It specifically proposed that all high school students seeking a diploma should study at least four years of English, three years of mathematics, three years of science, three years of social studies, and one-half year of computer science; in addition, those who were college-bound were urged to study at least two years of a foreign language. In 1983, the report set off a national discussion and launched what was then called "the excellence movement." This movement was devoted to strengthening the curriculum by ensuring that the content of what was studied was coherent, substantive, and meaningful. For a time, there was extended discussion about how to deepen the study of history, what literature to teach, how to relate the curriculum to the nation's changing demography, and how to engage more students in the study of mathematics and science. In response to this challenge, a few states developed solid, content-rich curriculum frameworks in history and literature (notably California in history and Massachusetts in both history and literature). The history frameworks in these states identified a sequence of topics and ideas for teachers to follow, knowing that their work would build on the previous year of study; the literature framework in Massachusetts identified specific classic and contemporary authors whose work was worthy of study.

However, a decade later, the excellence movement was overshadowed by Congressional demands for accountability in Title I legislation, beginning in 1994. Congress required all states to create standards and testing, but only in reading and mathematics. Almost overnight the emphasis in school reform changed from "excellence" to "basic skills." Without a funeral, and with no public notice, the excellence movement quietly faded away, and in its place rose the test-based accountability movement tied only to basic skills. When No Child Left Behind was enacted in the fall of 2001 and signed into law by President George W. Bush in January 2002, the excellence movement was finally interred and forgotten.

Now we are certainly not in opposition to testing nor to basic skills. No one can learn history or literature or science without literacy and numeracy. Certainly these skills are necessary for success in education and in the workplace in modern society. And far better achievement in these basic skills was clearly needed. One's ability to participate in the arts is obviously enhanced by mastery of the fundamental skills of communication. But the nation's education system, we believe, has become obsessed with testing and basic skills because of the requirements of federal law and that is not healthy. Such obsessions are unhealthy for children, unhealthy for education, and toxic for those who want all children to share in the benefits of a balanced, rich, and coherent liberal education.

Testing is important, of that we have no doubt. But tests are not the be-all and end-all of education. They are an important indicator, but they are only one indicator of educational progress. Some districts are now spending many weeks of the school year preparing their students to take high-stakes tests. This, we believe, is time that could be better spent reading and discussing exciting historical controversies, scientific discoveries, and literary works. Indeed, reading in content areas, especially if guided by a knowledge-rich, coherent curriculum, would, we expect, produce higher test scores than endless testpreparation activities.



Test preparation has excluded such subjects as the arts.

We have no doubt that the current mania for testing and test-preparation has narrowed the curriculum and caused the limiting or exclusion of such subjects as history, literature, civics, geography, science, and the arts. Some studies have demonstrated that the curriculum has narrowed, although supporters of the No Child Left Behind law contest these findings. But we agree with those who see a narrowing of the curriculum, because the time available for teaching and learning is not elastic. There are only so many hours in the school day and only so many days in the school year. If more time is given over to testing and test



preparation, then obviously less time is available to write essays, read novels, discuss history, conduct science experiments, and debate civic issues.

Some say that the only way to restore the full range of subjects into the curriculum is to test every one of them. Others say that students will be overwhelmed by yet another plethora of tests. We are not arguing here for any specific path. Our preference is to open a national discussion about what our students should be learning. In particular, we hope to encourage those who know that something is currently terribly amiss in our nation's cramped vision of school reform to speak up. We don't believe that schools should be evaluated and graded solely on the basis of reading and math scores. We don't believe that the current test-based accountability regimen will ultimately produce either equity or excellence.

We believe in the importance of preparing students to live and succeed in a global economy. We don't think that the mastery of basic skills is sufficient for this goal. What we need is an education system that teaches deep knowledge, that values creativity and originality, and that values thinking skills. This, unfortunately, is not the path on which we are now embarked. We believe that good schools not only teach the basic skills but provide a rich curriculum in the arts and sciences, one that offers not only the basic skills but the full range of subjects to all students. We know that we are far from this goal. We don't have all the answers about how to get there. We invite the participation and contributions of others who share our hopes and dreams for the future. Together, we hope, we can move our nation's education system closer to these aspirations.

Antonia Cortese and Diane Ravitch Trustees Common Core INTRODUCTION: The first mission of public schooling in a democratic nation is to equip every young person for the responsibilities and privileges of citizenship.

This requires that students have the knowledge they need to be prepared for civic responsibilities, further education, or the workforce, in addition to mastering basic skills such as reading and mathematics. To do this well, it is vital that schools familiarize students with the history and culture that form the shared bonds of their national community.

In acquainting students with the historical narrative and cultural touchstones that mark our national experience, schools provide the vocabulary for a common conversation that can render *e pluribus unum* more than a pretty turn of phrase. Absent shared reference points, it may be more difficult for young Americans and new immigrants alike to find their common identity as citizens. This is of particular import at a time when 12 percent of the American population is foreign-born<sup>1</sup> and 20 percent of the nation's students speak a language other than English at home.<sup>2</sup>



Freedom and education are interconnected.

Recognizing the import of a comprehensive education is hardly a new or novel insight. Indeed, instilling this type of education is what our nation's founders regarded as the purpose of schooling. As Thomas Jefferson famously opined, "Enlighten the people generally, and tyranny and oppressions of body and mind will vanish like evil spirits at the dawn of day."<sup>3</sup> Jefferson was in good company, with founders like Benjamin Franklin, George Washington, and Benjamin Rush repeatedly uttering similar sentiments.

Iefferson's admonition that freedom and education are interconnected is especially timely in a world where religious questions are interwoven with international relations, where observers on the right and left worry about a coarse and fraying culture in which individuals use the web to form virtual communities of the like-minded, and where debates about assimilation and cultural conflict routinely lead the evening news. These developments make nurturing the informal ties that bond Americans into one nation particularly pressing. This is doubly true against a backdrop of civic frustration, in which confidence in political institutions is at generational lows.4,5

The task of educating children in American history and culture is particularly pressing for those whose homes are not steeped in these subjects. Some children grow up in homes where books are part of the fabric of everyday life, where newspapers are read and discussed, and where families watch documentaries and visit historic sites. Other children do not enjoy those advantages, growing up in families where parents are not conversant in questions of history and culture or where the pressures of life render these an unaffordable luxury. It is for those students, in particular, that schools are especially crucial.



These students are less than a year away from reaching legal adulthood.

The question of how much our 17-yearolds know is particularly pressing given broader social trends. After all, these students are less than a year away from reaching legal adulthood, making them eligible to vote and serve in the nation's armed forces.

When students reach the end of high school, are they literate in the currency of our common civilization? Are schools successfully preparing students whose families are less able to provide this kind of education on their own?

There is reason for concern on this count. As Emory Professor Mark Bauerlein reports in his forthcoming book *The Dumbest Generation*, American youth have more schooling, money, leisure time, and information than any previous generation, yet they devote enormous quantities of time to social networking websites, television, and video games. Young people, on average, spend two to four hours daily watching television or playing video games; most cannot name their mayor, governor, or senator, and 45 percent are unable to comprehend a sample ballot.<sup>6</sup>

Americans in almost every demographic group are reading less than they were 10 or 20 years ago. The percentage of 17vear-olds who report reading for fun daily declined from one in three in 1984 to one in five in 2004. In 2006, 15- to 24-yearolds on the whole reported reading an average of seven minutes a day on weekdays and 10 minutes a day on weekends.<sup>7</sup> Meanwhile, in the past decade, the amount of time that teens and preteens devote to television, video games, and computers has increased steadily.<sup>8</sup> In a culture suffused by instant messaging and YouTube, leisure reading has increasingly become an anachronisma bit like polka or bowling leagues.

As state accountability systems have increasingly emphasized reading and math skills, the amount of classroom time devoted to history and literature has decreased. Author David Ferrero of the Gates Foundation has noted, "The traditional liberal arts have been losing their voice over the last 20 years among the reform elites who shape public discourse and policymaking about education."9 U.S. Department of Education data show that the amount of weekly instructional time devoted to history and social studies in grades one to six fell by 22 percent between 1988 and 2004. The amount of time devoted to "English and reading arts" increased substantially during these same years, but there is reason to believe that most or all of this additional time was spent on basic reading skills, not literature.<sup>10</sup>



"The traditional liberal arts have been losing their voice over the last 20 years."

Two decades ago, in the aftermath of the furor provoked by *A Nation at Risk*, the National Assessment of Educational Progress (NAEP) conducted a

pathbreaking study to determine what America's 17-year-olds knew about history and literature.<sup>11</sup> Administered in 1986, the results yielded the disheartening answer: not enough. As Diane Ravitch and Chester E. Finn, Jr., gravely concluded in their 1987 book, *What Do Our 17-Year-Olds Know?* "It is



"It is impossible to avoid the conclusion that something is gravely awry."

impossible to avoid the conclusion that something is gravely awry... Our eleventh-graders as a whole are ignorant of much that they should know. We cannot be certain that they were taught it; but the evidence is unmistakable that they do not know enough of it."<sup>12</sup>

Unfortunately, today there is no good measure of how much our children know about American history and literature. While the NAEP evaluates twelfth-grade students' knowledge of history approximately every five years, it excludes youths who are not enrolled in school and only one-third of the questions test historical "knowledge and perspective"—with the Department of Education reporting that the other twothirds test historical "analysis and interpretation."<sup>13</sup> There is no ongoing effort to assess knowledge of literature. This study seeks to determine just how much today's 17-year-olds know about history and literature.

While the findings here cannot be readily compared to those collected in 1986 given substantial differences in how the tests were administered and how the data were collected—they can offer valuable insights into where we stand now. Moreover, because the data were collected using a subset of the same questions that were developed, vetted, tested, refined, and administered as part of the NAEP, they represent a carefully designed measuring stick.<sup>14</sup>

TABLE ONE: Complete Weighted Correct Results for History	
The Civil War was between 1850 and 1900.	43%
The purpose of The Federalist Papers was to gain ratification of the Constitution.	50%
The controversy surrounding Senator Joseph McCarthy focused on Communism.	51%
The First World War was between 1900 and 1950.	60%
The Renaissance was the period in European history noted for cultural and technological advances.	61%
The guarantee of freedom of speech and religion is found in the Bill of Rights.	67%
President John F. Kennedy said, "And so my fellow Americans, ask not what your country can do for you; ask what you can do for your country."	70%
In its Brown v. Board of Education decision, the Supreme Court ruled segregation unconstitutional.	71%
The Declaration of Independence says, "We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty, and the Pursuit of Happiness."	73%
Japanese-Americans were forced into relocation camps during the Second World War.	73%
Christopher Columbus sailed for the New World before 1750.	74%
The Watergate investigations resulted in the resignation of President Richard Nixon.	74%
Adolf Hitler was the Chancellor of Germany during the Second World War.	77%
Jamestown was the first permanent English colony in North America.	77%
George Washington was the commander of the American army in the Revolutionary War.	77%
The idea that each branch of the federal government should keep the other branches from becoming too strong is called checks and balances.	80%
The major enemies of the United States during the Second World War were Germany and Japan.	82%
President Abraham Lincoln wrote the Emancipation Proclamation.	82%
Plato and Aristotle were Greek philosophers.	86%
Thomas Jefferson was the primary author of the Declaration of Independence.	87%
The bombing of Pearl Harbor led to the entry of the United States into the Second World War.	88%
"I have a dream" speech was given by Martin Luther King, Jr.	97%
Average	73%

# SECTION ONE: WHAT DO 17-YEAR-OLDS KNOW?

In their analysis of the 1986 assessment, Diane Ravitch and Chester E. Finn, Jr., proposed a grading system modeled on the one that is widely used by America's classroom teachers, in which 100 percent is a perfect grade, below 60 percent is a failing mark, and letter grades are marked off in ten-point increments. Consequently, 90 percent and up constitutes an A, 80–89 percent a B, 70–79 percent a C, and 60–69 percent a D.<sup>15</sup>



Overall, students earned a D.

Overall, how did today's 17-year-olds fare? On the whole, students answered 67 percent of the 33 questions correctly, earning a cumulative grade of D. On the history section, they earned a *C*, answering 73 percent of questions correctly. When it came to literature, they earned an F, correctly answering just 57 percent of the questions.

More disturbing than these aggregate results may be some of the items that many 17-year-olds did not know. Nearly a third could not identify "ask not what your country can do for you" as the words of President John F. Kennedy. A third did not know that the Bill of Rights is the source of our rights to freedom of religion and speech. Just two in five could place the Civil War in the correct 50-year period, and just half knew that The Federalist Papers were written to encourage ratification of the U.S. Constitution. Nearly a quarter could not correctly identify Adolf Hitler. Less than half could identify the literary figures of Job or Oedipus, while barely one in two could identify the plot of George Orwell's immortal 1984.

# SECTION ONE: What Do 17-Year-Olds Know? ndents answered that | broad 50-year windows. Only 43 percent |

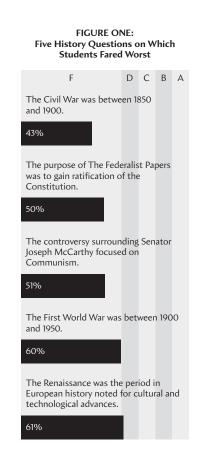
**HISTORY.** TABLE ONE presents the weighted results for the history questions. The questions assessed students' knowledge of U.S. and world history, with five questions involving U.S. presidents, four asking about other historic individuals, three asking about the dates of major historic events, two asking about the design of the U.S. government, and the other eight including queries on topics such as the European Renaissance and the U.S. Supreme Court's 1954 Brown v. Topeka Board of Education ruling. It's important to note that the questions asked are, by almost any measure, basic. They are far more similar, for instance, to the kinds of questions asked in a citizenship test than to those posed by an Advanced Placement history exam.

How well did 17-year-olds collectively fare on the 22 history questions? There was just one question on which they earned an A (with at least 90 percent correct) and just five more on which students as a whole earned a B. There were 10 questions on which respondents earned a C, with 70 percent to 79 percent answering correctly, and two on which they earned a D (with 60 percent to 69 percent answering correctly). Finally, there were four questions that fewer than 60 percent of students answered correctly.

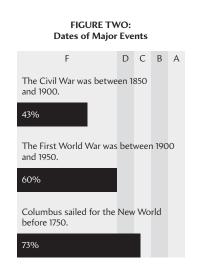


More than 25 percent think Columbus sailed after 1750.

FIGURE ONE identifies the five history questions on which students fared worst. One asked respondents to identify the European Renaissance and another inquired about the intentions of the authors of The Federalist Papers. Sixtyone percent of 17-year-olds correctly identified the Renaissance as a period of "technological and cultural advances." In reference to The Federalist Papers, just half of the respondents answered that they were intended to gain ratification of the United States Constitution, whereas 26 percent said that they were intended to "establish a strong, free press in the colonies," 12 percent that they sought "to win foreign approval for the Revolutionary War," and 11 percent that they aimed to "confirm George Washington's election as the first president."



Two of the questions on which students performed most poorly asked respondents to identify the approximate period in which historic events took place, aiming to discover if young people have any remote grasp of when important events occurred. As it turns out, not many do (see FIGURE TWO). Fewer than 60 percent could identify the correct period in which World War I occurred, and less than half could do so for the Civil War. These questions did not ask for an exact year; they offered broad 50-year windows. Only 43 percent of respondents knew the Civil War was fought between 1850 and 1900. Thirty percent thought it had taken place between 1800 and 1850, 21 percent that it happened before 1800, and six percent that it happened after 1900. Respondents were slightly less creative when it came to World War I, with 60 percent indicating that the war took place between 1900 and 1950, 13 percent placing it between 1850 and 1900, nine percent between 1800 and 1850, 16 percent before 1800, and two percent after 1950—placing it after the conclusion of the Second World War.



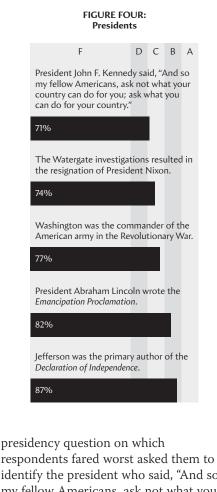
When asked when Columbus "sail[ed] for the New World," 74 percent of respondents answered that it was before 1750, while 13 percent thought it was between 1750 and 1800, and another 13 percent indicated it was since 1800. In other words, more than one-fourth of 17year-olds believe that Columbus sailed after 1750—more than 250 years after his actual crossing in 1492. (In an interesting bit of alternate history, two percent of respondents reported that Columbus set sail after 1950!)

Two questions asked about particular design features of the U.S. government. When asked to put a name to the notion "that each branch of the federal government should keep the other FREEDOM OF SPEECH AND RELIGION ARE FOUNDATIONAL principles in American culture, but a third of respondents haven't a clue where these freedoms originate. branches from becoming too strong," 80 percent correctly identified "checks and balances." The source of "the guarantee of freedom of speech and religion" in American life was correctly identified as the Bill of Rights by 67 percent. Freedom of speech and religion are foundational principles in American culture, but a third of respondents haven't a clue where these freedoms originate.

FIGURE THREE: Other Historic Individuals				
F	D	С	В	Д
The controversy surrour Joseph McCarthy focuse Communism.			ator	
51%				
Adolf Hitler was Chance during World War II.	ellor	of G	erma	ny
77%				
Plato and Aristotle were philosophers.	Gree	ek		
86%				
"I have a dream" speech Martin Luther King, Jr.	was	give	n by	
97%				

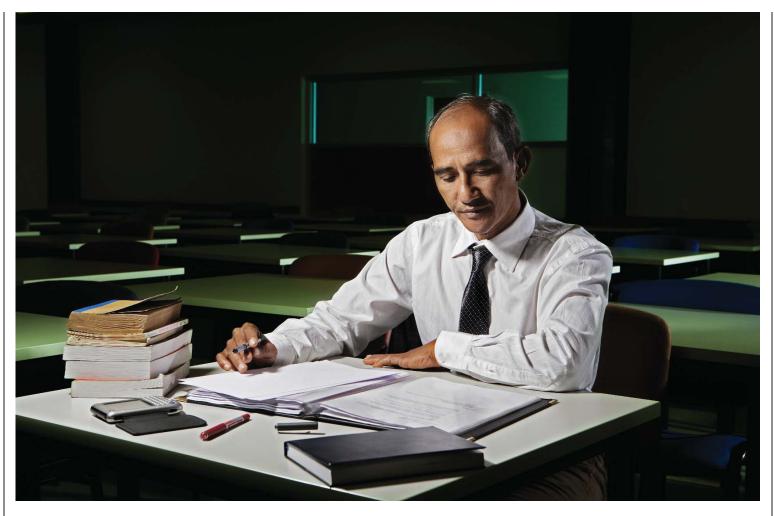
FIGURE THREE breaks out four questions that asked respondents to identify historically significant individuals. Seventeen-year-olds did relatively well at identifying Plato and Aristotle and Martin Luther King, Jr. They did significantly worse when asked to identify German dictator Adolf Hitler. Seventy-seven percent correctly answered "the Chancellor of Germany during the Second World War," while nearly a guarter answered either "the German munitions manufacturer between the two World Wars," "The Kaiser during the First World War," or "the Premier of Austria who advocated union with Germany." And barely half could name the subject of the controversy that involved former Senator Joseph McCarthy. Just 50 percent responded with "investigations of individuals suspected of Communist activities."

FIGURE FOUR breaks out the results for the five questions that addressed U.S. presidents. Students did slightly better on these questions than they did overall. More than 80 percent of students knew that Thomas Jefferson was the primary author of the Declaration of Independence, and 82 percent knew that Abraham Lincoln wrote the Emancipation Proclamation. Students did less well naming the commander of the American army in the Revolutionary War (77 percent answered George Washington) and naming the president who resigned as a result of the Watergate investigations (with 74 percent naming Richard Nixon but more than 11 percent naming Dwight Eisenhower and another 11 percent naming Harry Truman). The



identify the president who said, "And so my fellow Americans, ask not what your country can do for you; ask what you can do for your country." Slightly over twothirds, 70 percent,

# SECTION ONE: What Do 17-Year-Olds Know?



knew it was John Kennedy, but 21 percent thought it was Theodore Roosevelt, and another six percent answered with Richard Nixon.

In the midst of a national election cycle in which Senator Barack Obama's rhetoric has frequently been compared to Kennedy's call to "ask not," those familiar with Kennedy's statement were far better positioned to make sense of this coverage and to interpret the public debates. The 30 percent of 17-year-olds unfamiliar with Kennedy's famous speech lacked that reference point.

The only question that more than 90 percent of students answered correctly asked them to identify Martin Luther King, Jr., as the speaker who declared, "I have a dream." Other questions which more than 85 percent of respondents answered correctly were those asking what event directly led the United States into World War II (88 percent knew that it was the Japanese bombing Pearl Harbor); who primarily authored the Declaration of Independence (87 percent knew it was Thomas Jefferson); and that respondents identify Plato and Aristotle (86 percent knew they were Greek philosophers). All four of these events (or personages), of course, are historical icons that also make frequent appearances in popular culture—with the Declaration of Independence garnering substantial screen time, for instance, in the blockbuster movie National Treasure and the 1941 attack on Pearl Harbor providing the stage for a popular flick of the same name—possibly accounting for the impressive performance on these questions.

On the whole, the history results suggest that about 73 percent of 17-year-olds can correctly answer relatively basic questions about major historical figures, dates, and developments in America's common background. Except for Martin Luther King, Jr.'s, iconic "I have a dream" speech, there is not a single historical figure or event—including Pearl Harbor and George Washington's service as head of the Continental Army during the Revolutionary War—that 90 percent of 17-year-olds could accurately identify.



Students had trouble identifying major historical figures.

**LITERATURE.** Thinkers who may disagree on much else have historically agreed that educated individuals should be acquainted with humanity's cultural

TABLE TWO: Complete Weighted Correct Results for Literature	
Geoffrey Chaucer wrote the <i>Canterbury Tales</i> , a poem written in Middle English and containing stories told by people on a pilgrimage.	38%
<i>Invisible Man</i> by Ralph Ellison is about a young man's growing up in the South and then moving to Harlem.	41%
Oedipus is the character in an ancient Greek play who unknowingly kills his father and marries his mother.	45%
In the Bible, Job is known for his patience in suffering.	50%
The novel <i>1984</i> is about a dictatorship in which every citizen is watched in order to stamp out all individuality.	52%
The Scarlet Letter is the story of a woman who was unfaithful.	56%
Dickens' novel A Tale of Two Cities took place during the French Revolution.	57%
Odysseus demonstrates his bravery and cunning during his long journey homeward after fighting in the Trojan War.	60%
Walt Whitman wrote the volume of poetry <i>Leaves of Grass</i> , which includes the line "I celebrate myself, and sing myself."	72%
Uncle Tom's Cabin helped the anti-slavery movement by depicting the evils of slavery.	77%
<i>To Kill a Mockingbird</i> by Harper Lee is about two children who were affected by the conflict in their community when their father defended a black man.	79%
Average	57%

and artistic achievements. These works span many forms including visual art, music, architecture, and literature. One might survey 17-year-olds in a range of areas, but this study inquired about students' knowledge of literature, as it is more commonly taught in schools than is the history of art, music, or architecture. It is left to readers to judge how good a proxy literary knowledge may be for these other realms of human accomplishment. If it is a good proxy, however, the results are more disturbing than is immediately apparent.



Students failed 7 of the 11 literature questions.

TABLE TWO presents the weighted results for the literature questions. On the whole, the performance of respondents on these questions was poor. There were just four questions that even 60 percent of respondents were able to answer correctly. Students failed seven of the eleven questions. As a whole, 17year-olds collectively earned three Cs, one D, and seven Fs on the literature portion of the assessment. Certainly, skeptics might suggest that literature knowledge would be better measured by standards drawn from contemporary works. But the purpose of this survey was to measure 17-year-olds' knowledge of their literary heritage, not their exposure to popular culture.

FIGURE FIVE depicts the five literature questions on which survey respondents fared worst. When it came to George Orwell's classic *1984*, just 52 percent of respondents recognized it as a novel about "a dictatorship in which every citizen was watched in order to stamp out all individuality." Twenty-one percent thought it was a novel about the destruction of the human race through nuclear war, and 18 percent thought that it was about time travel. It is indeed ironic that 17-year-olds know so little about 1984 that many think it a backward-looking tale about time travel rather than a future-oriented work of dystopian fiction. Students unfamiliar with Orwell's oeuvre or the history that produced it will be hard-put to understand public debates that reference "big brother," much less the evocation of twentieth-century experiences with communism and totalitarianism.



Two questions were asked about poetry. One asked about the author of the *Canterbury Tales,* described as a poem written in Middle English and containing stories told by people on a pilgrimage. This was the question on which respondents fared the worst, with just 38 percent naming Geoffrey Chaucer. The other poetry query required identifying the "American poet who wrote the volume of poetry *Leaves of Grass,* which includes the line 'I celebrate myself, and sing myself." Faring much better with American than with medieval poetry, 72 percent of respondents correctly identified the author as Walt Whitman.

Just 45 percent knew that Oedipus is the character in an ancient Greek play who "unknowingly killed his father and married his mother," with more than half of the respondents naming either Agamemnon, Orestes, or Prometheus. That misinformation alone may well render incomprehensible many contemporary references to Freudian thought. Finally, one question addressed the Bible. Just 50 percent of respondents correctly identified Job as known for his patience in the face of suffering. Apparently, and somewhat incomprehensibly, 20 percent think that "prophetic ability" is the point being made when they hear references to the trials of Job.

Six of the eleven literature questions dealt with novels. More than 70 percent of respondents correctly answered two of these questions, while fewer than 60 percent correctly answered the other four. Just 41 percent knew that Ralph Ellison's novel about a young man growing up in the South and then moving to Harlem was Invisible Man. Only 57 percent knew that Charles Dickens' A Tale of Two Cities took place during the French Revolution, with nearly half of respondents incorrectly stating that it took place during the Crimean War, War of the Roses, or English Civil War.



Students fared better when asked to identify To Kill a Mockingbird.

Respondents fared best when asked to identify the plot of Harper Lee's novel, *To Kill a Mockingbird*, for which 79 percent correctly identified the theme as "two children who were affected by the conflict in their community when their father defended a black man." The literature question on which respondents fared second best asked them to identify the novel that "helped the anti-slavery movement by depicting the evils of slavery." Seventy-seven percent correctly identified *Uncle Tom's Cabin*, by Harriet Beecher Stowe. Worth noting is the intriguing result that in the cases of both history and literature, respondents posted their best scores on questions deeply intertwined with the history of American race relations.

# A HALF-EMPTY GLASS. The

problems that the above results pose for civic discourse are neither murky nor obscure. One need not search far to find attacks on anti-terrorism measures that draw upon imagery from 1984 or that use the term "Orwellian." Pundits, novelists, and journalists routinely wield references to Job or Oedipus in making points about the trials of a public figure or the complexities of familial relationships. High school graduates unacquainted with these terms are handicapped when it comes to engaging in such public debates, perhaps recognizing the terms and phrases but lacking comprehension of the assumptions and associations that lend them meaning. Magazine and newspaper articles are not infrequently strewn with allusions to a fallen figure being branded with a "scarlet letter" or to it being "the best of times and the worst of times"—rhetorical nods that presume familiarity and help readers navigate the narrative. Those unfamiliar with terms and references that authors and editors presume to be common knowledge may find themselves struggling to make sense of seemingly prosaic accounts. What's worse is that these students lack the knowledge and wisdom that historical information provides and that artistic works contain.

In summarizing the results of the 1986 study, Ravitch and Finn concluded that "the glass is almost half empty... We cannot tell from a 'snapshot' assessment of this kind whether today's students know more or less about history and literature than their predecessors of ten, twenty, or fifty years ago. We do

#### TABLE THREE:

#### History Correct Results by Parental Educational Attainment

Figures in pink show a difference of ten percentage points or more between the two scores.

	College- educated parent	No college- educated parent
The Civil War took place between 1850 and 1900.	46%	41%
The purpose of the authors of The Federalist Papers was to gain ratification of the Constitution.	56%	47%
The controversy surrounding Senator Joseph McCarthy focused on Communism.	59%	47%
The guarantee of freedom of speech and religion is found in the Bill of Rights.	72%	64%
The First World War was between 1900 and 1950.	73%	54%
President John F. Kennedy said, "And so my fellow Americans, ask not what your country can do for you; ask what you can do for your country."	73%	69%
The Renaissance was the period in European history noted for cultural and technological advances.	74%	55%
The Declaration of Independence says "We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty, and the Pursuit of Happiness."	77%	72%
In its Brown v. Board of Education decision, the Supreme Court ruled segregation unconstitutional.	79%	67%
The Watergate investigations resulted in the resignation of President Richard Nixon.	79%	71%
Jamestown was the first permanent English colony in North America.	82%	74%
Christopher Columbus sailed for the New World before 1750.	83%	69%
Adolf Hitler was Chancellor of Germany during the Second World War.	84%	74%
Japanese-Americans were forced into relocation camps during the Second World War.	84%	68%
George Washington was the commander of the American army in the Revolutionary War.	85%	73%
The major enemies of the United States during the Second World War were Germany and Japan.	86%	79%
President Abraham Lincoln wrote the Emancipation Proclamation.	88%	79%
The idea that each branch of the federal government should keep the other branches from becoming too strong is called checks and balances.	89%	76%
The bombing led to the entry of the United States into the Second World War.	90%	87%
Thomas Jefferson was the primary author of the Declaration of Independence.	92%	84%
Plato and Aristotle were Greek philosophers.	92%	83 %
"I have a dream" speech was given by Martin Luther King, Jr.	100%	95%
Average	79%	70%

conclude, however, that they do not know enough."<sup>16</sup> More than twenty years later, it is safe to say that the story remains disheartening.

## SECTION TWO: THE IMPACT OF PARENTAL EDUCATION

History and literature can be absorbed in the home as well as at school. Students born into educated or affluent homes where books and cultural experiences abound may have the opportunity to become culturally literate regardless of what happens in their K–12 schooling. But for those without those advantages at home, school offers their only chance of acquiring this necessary knowledge.

The next section compares results for respondents who reported that they had at least one college-educated parent (students were asked to base their answers on the parent with the highest educational attainment). For purposes of this analysis, a parent reported as having a college degree by their 17-year-old was understood as "college-educated," possessing either a bachelor's degree or an academic associates degree. A 17year-old with "non-college-educated" parents is one who reported that he or she did not have a parent who had a college degree (although some did have parents that had attended, but not graduated, college).17

**HISTORY.** Seventeen-year-olds with a college-educated parent scored at least one full letter grade, and sometimes almost two, above those without a college-educated parent on over 40 percent of the history questions. They earned a D or an F on just three questions, whereas those without college-educated parents earned three times as many. Those less-advantaged respondents earned an A or B on only four questions, while respondents with college-educated parents earned twelve.

The biggest difference between the two groups emerged on the questions that

asked about the First World War, the Renaissance, and which ethnic population the U.S. interned during World War II (see TABLE THREE). In each case, the difference between the two groups was between 15 and 20 percentage points—nearly two letter grades. The smallest differences emerged when respondents were asked about the time period of the Civil War and the bombing of Pearl Harbor.

#### FIGURE SIX: Five history questions on which students fared worst by parental educational attainment

Dark bars represent students with a collegeeducated parent; light bars represent students without a college-educated parent. Bars highlighted in red/pink show a difference of 10 percentage points or more between these two scores

D C B A

When was the Civil War?

F



The purpose of The Federalist Papers was to gain ratification of the Constitution.

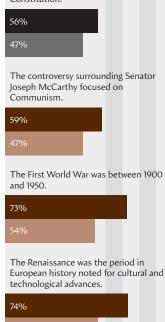


FIGURE SIX depicts the difference in performance between respondents who had a college-educated parent and those who did not on the five history questions on which all students fared worst.



Respondents raised by college graduates earned Cs on the questions about the Renaissance and the First World War and scored substantially better than their peers on the question about Senator McCarthy (although it was still the case that fewer than 60 percent answered the question correctly). Meanwhile, respondents who did not have a collegeeducated parent earned failing grades on each of the five questions.



For some, school offers their only chance of acquiring this necessary knowledge.

Approaching the end of their high school education, students with a collegeeducated parent consistently fared better in historical knowledge than those without a college-educated parent. **LITERATURE.** Even those students with a parent who had graduated college managed a passing grade on just four of the 11 literature questions, while earning an F on seven. They posted an overall average of 63 percent across the literature questions. On the four questions where they earned a passing grade, they earned two Bs (on the questions about *Uncle Tom's Cabin* and *To Kill a Mockingbird*), a C, and a D.

Meanwhile, students who did not have a parent who graduated college compiled an overall average of 54 percent. This group could only manage three Cs, failing the rest of the questions. This population was wrong more than half of the time on five questions, and fewer than 40 percent could identify Oedipus or the author of the *Canterbury Tales*.

The biggest differences between the two groups emerged on the questions that asked respondents to identify *Uncle Tom's Cabin*, Oedipus, and Geoffrey Chaucer (see TABLE FOUR). About poor

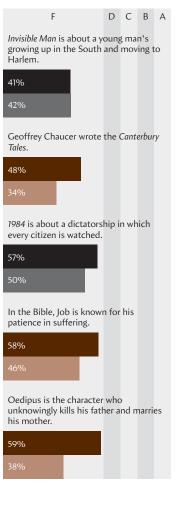
# TABLE FOUR: Literature Correct Results by Parental Educational Attainment Figures in pink show a difference of ten percentage points or more between the two scores

	College- educated parent	No college- educated parent
<i>Invisible Man</i> by Ralph Ellison is about a young man's growing up in the South and then moving to Harlem.	41%	42%
Geoffrey Chaucer wrote the <i>Canterbury Tales</i> , a poem written in Middle English and containing stories told by people on a pilgrimage.	48%	34%
The novel 1984 is about a dictatorship in which every citizen is watched in order to stamp out all individuality.	57%	50%
Dickens' novel A Tale of Two Cities took place during the French Revolution.	58%	56%
In the Bible, Job is known for his patience in suffering.	58%	46%
Oedipus is the character in an ancient Greek play who unknowingly kills his father and marries his mother.	59%	38%
The Scarlet Letter is the story of a woman who was unfaithful.	59%	54%
Odysseus demonstrates his bravery and cunning during his long journey homeward after fighting in the Trojan War.	67%	57%
Walt Whitman wrote the volume of poetry <i>Leaves of Grass</i> , which includes the line "I celebrate myself, and sing myself."	75%	71%
<i>To Kill a Mockingbird</i> by Harper Lee is about two children who were affected by the conflict in their community when their father defended a black man.	84%	77%
Uncle Tom's Cabin helped the anti-slavery movement by depicting the evils of slavery.	86%	73%
Average	63%	54%

Oedipus, respondents with moreeducated parents fared 21 percentage points better—although they still identified this character correctly less than 60 percent of the time. In fact, respondents from less educated families were more likely to name Prometheus as the character in question than Oedipus.

#### FIGURE SEVEN: Five literature questions on which students fared worst by parental educational attainment.

Dark bars represent students with a collegeeducated parent; light bars represent students without a college-educated parent. Bars highlighted in red/pink show a difference of 10 percentage points or more between these two scores.



On the other two questions, the differences between the two groups were between 10 and 15 percentage points. The two groups' performance on the five



literature questions on which the respondents fared worst is illustrated in FIGURE SEVEN. Respondents raised by college graduates fared substantially better, although both groups earned Fs on all five questions. The difference between the two groups was more than 10 points on three of the five questions and about eight points on a fourth.

While both groups fared poorly on the literature questions overall, it is clear that 17-year-olds born into more educated environments are approaching high school graduation with significantly more literary knowledge than their counterparts. While aggregate performance is mediocre, those 17-yearolds with a parent who graduated college did substantially better than their peers. In a nation concerned about social divisions and civic apathy, this is a worrisome state of affairs and one deserving careful attention. Now, let us turn to a final piece of data that may help us understand a bit more clearly why this might be.



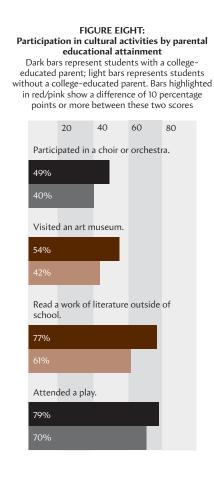
Respondents raised by college graduates fared substantially better.

**CULTURAL EXPOSURE.** One way to interpret these results is to consider what respondents had to say about the extent of their participation in various cultural opportunities. Activities such as attending plays, visiting museums,

singing in choirs, and reading at school and at home are important not only in their own right, but also because they offer students access to the literature and history of our common culture.

FIGURE EIGHT shows that about twothirds of all 17-year-olds have attended a play or read a work of literature outside of school and about half have visited an art museum or participated in a choir or orchestra. About three-quarters of those with a college-educated parent have attended a play and have read at least one work of literature outside of school, while about half have visited an art museum or participated in a choir or orchestra. Of those young people without a collegeeducated parent, the figures are markedly lower. These teenagers were 16 percentage points less likely to have read at least one work of literature outside of

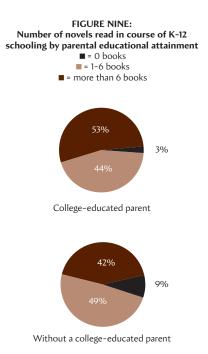
IF STUDENTS ARE NOT READING these texts in school, it is about 95 percent certain that they will not have read them by age 17. school and 12 percentage points less likely to have visited an art museum. They were also eight to nine percentage points less likely to have attended a play or participated in a choir or orchestra. In



short, 17-year-olds with a collegeeducated parent appear substantially more likely to be exposed to literary and cultural opportunities.

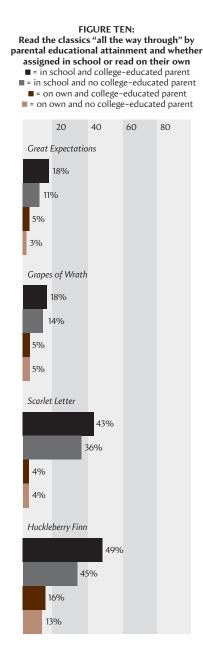
FIGURE NINE shows that 90 percent of 17-year-olds have read at least one novel in the course of their schooling, while almost half have read more than six. Those young people who have a collegeeducated parent are about 10 percentage points more likely to have read more than six novels in school, and they are six percentage points less likely to have never read a novel in school.

The disappointing overall performance on literature, and particularly the substantial gap in literary knowledge between 17-year-olds with and without college-educated parents, raises the question of whether elementary and secondary schools are including classic literature in the curriculum. FIGURE TEN shows the percentage of respondents who reported reading four class novels "all the way through," either for school or on their own. About threefifths of students report having read *Huckleberry Finn* in its entirety. Slightly less than half report having done the same with *The Scarlet Letter*, and only about one in five claim to have read *Great Expectations* or *The Grapes of Wrath*.



There is only one of these four novels that a majority of students report having read by age 17. Perhaps even more telling is the data which show that respondents were highly unlikely to have read any of these texts on their own. In short, if students are not reading these texts in school, it is about 95 percent certain that they will not have read them by age 17.

It is certainly possible that of the minority of students who read these novels in school, some would have read them on their own had they not been assigned. However, given the data showing steadily declining youth interest in reading and literature, skepticism on this count is justified. There is also cause to wonder whether the self-reported percentage of students claiming to have read these volumes is an overestimation. It is of course likely that young readers are more inclined to read J.K. Rowling than John Steinbeck, and thus are reading some novels even if not the literature



asked about here; but the fact remains that the youths in question are not receiving much exposure to the pillars of our shared literary tradition.

One important wrinkle here is the question of how effectively schools can



promote reading. Perhaps schools are assigning classics like The Grapes of Wrath or Great Expectations, and students are simply not reading them. Unfortunately, the information needed to answer such questions is not collected today in any systematic fashion. There are scraps of evidence that give us some insight into the question, however. In 2004, about three-fourths of 17-year-olds and four-fifths of 13-year-olds reported being assigned homework, with more than 80 percent of high schoolers and more than 90 percent of middle schoolers saying that they do at least some of the work that is assigned. About one-third of both middle schoolers and high schoolers reported that they spend an hour or more per day on homework.<sup>18</sup> There is then some cause for confidence that assigned texts are not simply ignored, which suggests that the simple act of expecting students to read more literature is a sensible place to start.

There is reason to believe that the substantial gap in knowledge is due to the

prevalence of books and literary material in the home, parental interests and activities, and the assignments given at



Seventeen-year-olds with a collegeeducated parent appear substantially more likely to be exposed to literary and cultural opportunities.

the schools that they attend. Any effort to untangle these various threads, however, and to determine their impact or relative importance, is beyond the confines of this analysis. What is clear is that all students need improved instruction in literature and history—and that less advantaged students would benefit most of all. CONCLUSION: The findings here should serve as a wake-up call to remind us that it is vital to address more than one educational challenge at a time.

When it comes to familiarity with major historical events and significant literary accomplishments, America's 17-year-olds fare rather poorly. When asked relatively simple multiple-choice questions and graded on a generous scale, teens on the cusp of adulthood earned a D overall. Moreover, there is an unsurprising but unfortunate gap between those children born into homes headed by collegeeducated parents and their peers. When it comes to familiarity with the base of knowledge that enables us to engage in conversations about policy and values and so much else, our 17-year-olds are only barely literate.

Nearly a quarter of 17-year-olds did not know that George Washington commanded the American army in the Revolutionary War. Forty percent could not identify the proper half-century in which the First World War took place. One-fourth thought Christopher Columbus had landed in the New World after 1750. More than a quarter did not know that it is the Declaration of Independence that declares that all men "are endowed by their Creator with certain unalienable Rights." Barely half



Is No Child Left Behind stifling instruction in the liberal arts and sciences?

know the setting of Dickens' *A Tale of Two Cities* or the plot of *The Scarlet Letter*. Just two in five could identify the author of the *Canterbury Tales* or the plot of Ralph Ellison's seminal *Invisible Man*. Perhaps these results should not come as a great surprise. For all the attention paid to school improvement in recent years, particularly at the high school level, there has been a focus on the essentialist questions of reading, math, and graduation. It appears likely that this focus has not served the broader aim of ensuring that our children are educated in the liberal arts and sciences.

The responses to novels like *The Adventures of Huckleberry Finn* and *The Grapes of Wrath* strongly suggest that few high school graduates will have read these volumes unless they are assigned. For young people who are not pursuing a postsecondary education, their K–12 education is the window of opportunity to acquaint them with these works. And in too many cases, that opportunity is being squandered. What should we take from these findings? For starters, it is essential that parents, policymakers, and educators examine what we are doing when it comes to the teaching of history and culture. We must ask whether popular reform currents are delivering the results (and incentives) we wish, and what that means for school reform going forward. Five specific recommendations deserve attention.



We must do a substantially better job of teaching the liberal arts and sciences.

First, as the old management adage has it, "What you measure is what you get." We have put that notion to the test in education in recent years, determinedly measuring reading and math skill levels, especially in grades three through eight. It should come as no surprise that our time, energy, and attention have consequently been absorbed by mastery of basic skills in reading and math. The findings here should serve as a wake-up call to remind us that it is vital to address more than one educational challenge at a time. The first step in doing so is to more systematically assess student learning beyond math and reading, particularly in the subjects of the traditional liberal arts. This does not mean adding new assessments into the No Child Left Behind framework—in truth, it is probably advisable not to do so—but it does suggest that states, school districts, foundations, and the National Assessment Governing Boards should think hard about how we might more regularly and more profoundly measure learning in liberal arts and science subjects at a variety of grade levels.

Second, as we debate the reauthorization of No Child Left Behind and design state accountability programs, we would be well advised to reassess whether these systems or district practices are promoting or unintentionally stifling instruction in the liberal arts and sciences. This survey makes clear that students' knowledge in these areas falls far short of where it needs to be. In light of extensive efforts to promote educational accountability in recent years, it is worth ensuring that measures such as NCLB are helping to address this challenge and not somehow aggravating it.

Third, we must do a substantially better job of teaching the liberal arts and sciences. In the current policy environment, the vast majority of time and energy are being devoted to research that addresses reading and math instruction. This work is essential and invaluable, but it would behoove parents and policymakers to encourage researchers and educators to ensure that their enthusiasm for basic skills is not marginalizing attention to questions of civic import. To this end, it may be useful to consider the Core Knowledge, Latin, or International Baccalaureate programs, which may offer promising approaches and useful lessons on this count.

Fourth, we need to make sure our teachers have the knowledge they need to teach science and the liberal arts well. Unfortunately, there is little energy or attention devoted to programs that ensure teachers are equipped to provide such instruction. Teachers flock to the few opportunities that do exist to steep themselves in content-rich subject matter, such as the summer institutes offered by the Gilder Lehrman Institute of American History and the National Endowment for the Humanities. So the anecdotal evidence strongly suggests that teachers want to know more and be able to offer that knowledge to their students. There is a need to research the state of teacher mastery and to devise recruitment, training, and support programs that will support robust teaching and learning when it comes to historical and cultural knowledge.

And finally, we note that promoting a rich liberal arts and sciences education for all is an idea around which reform advocates of various stripes can rally. Whatever reforms one believes

advisable in order to promote quality schools and schooling, we can agree that "quality" includes a broad, rich, and challenging liberal arts curriculum. In truth, proponents of charter schools or vouchers, mayoral control or school boards, merit pay or career ladders, or any number of other measures all have reason to insist that these structural strategies be coupled with a rich curriculum that is provided equitably to all students. A successful coalition on behalf of liberal education can and must welcome those who may otherwise disagree on the particular shape of reform.



A coalition on behalf of liberal education must welcome those who may otherwise disagree.

In profound and essential ways, our civic health and national cohesion depend on our ability to familiarize the rising generation with the touchstones of our shared history and culture. Ensuring that all citizens have a shared sense of Martin Luther King, Jr.'s, "I have a dream" speech and the attack on Pearl Harbor is a start—but only a very modest one. Alone, such scattered kernels of awareness constitute no more than a handful of romanticized images flickering in the national conscience. What we need is confidence that all of our children will be familiar with the highs and the lows of the compelling narrative that is our common heritage.

# APPENDIX

**METHODOLOGY.** Twelve hundred questionnaires were completed in the first two weeks of January 2008 using a targeted sample base of 32,000 records purchased from Scientific Telephone Samples (STS), the premiere telephone sampling organization in the United States. The targeted list was part of a nationwide database of over 1.6 million 17-year-olds compiled by STS. Based on the sample size, the sampling margin of error in this effort is plus or minus three percent.<sup>19</sup>



Twelve-hundred 17-year-olds were polled.

RMA Research, a South Dakota-based firm, administered a test consisting of 33 questions drawn from the 1986 NAEP test. The survey included 22 questions on history and 11 on literature, all drawn from the 141 history and 121 literature questions administered in 1986.

All of the questions called for multiplechoice responses. Thirty of the questions provided respondents with four possible answers. The other three questions (all asking respondents to match an historic event with the time period in which it occurred) provided six possible answers. This multiple-choice format means that even a respondent who guessed randomly on every question could expect to answer about 25 percent of the questions correctly.

While it is tempting to try to determine trends over time, given that this study uses questions from the 1986 assessment, the results from this research and those compiled by the 1986 NAEP should not be directly compared. The NAEP was administered to a national sample of 17year-olds enrolled in school and taking the assessment under conventional test conditions as part of a federally supported testing program, while this effort relied upon telephone questioning of a representative sample. The fundamentally different nature of these data collection exercises makes it inadvisable to compare the two sets of results in order to determine trends over time.

First, asking 17-year-olds to answer questions by telephone might serve to make the test harder (because there are more distractions when answering a telephone survey than under school testing conditions) or easier (because individuals perform better when tests are read to them). In particular, researchers have determined that reading tests aloud to students frequently has a sizable, positive impact on performancesuggesting that the results reported here might be higher than they would be if students were tested using a written instrument.<sup>20</sup> However, illustrating the uncertain nature of such considerations. a 2003 study by Brian McKevitt and Stephen Elliot found that reading a test to students had no significant effect on performance.21



Reading tests aloud frequently has a positive impact on performance.

Similarly, administering the test as a telephone survey rather than in school to a national sample of students poses particular challenges of ensuring that the sample is nationally representative. For instance, the introduction of callscreening, multiple phone lines, and widespread use of mobile phones have altered the population sampled randomly by RDD.<sup>22</sup> Moreover, as of 2005, three percent of the population in the United States did not have a working telephone in their household,<sup>23</sup> and at least 12.8 percent of Americans had cell phones only.<sup>24</sup> This calls for caution in comparing results collected using land-line telephones to those obtained in a different fashion.

It is also important to note that the population tested here included a fuller sample of the nation's 17-year-olds, as it potentially included those who had dropped out of school, were suspended, or were home schooled, and therefore assuredly would not have been included in an in-school assessment of the kind administered in 1986. This makes the current effort a better gauge of the overall knowledge of the nation's 17-year-olds. Of course, as with any telephone survey, the answers are being provided by respondents who agree to participate.<sup>25</sup> In the end, there is no clear or reliable way to sort out all of the potential effects. which is why these results should be read as a snapshot of what 17-year-olds know in 2008 rather than as part of a trend.

Finally, note that the aggregate results reported in SECTION ONE of this report are "weighted" to provide a nationally representative picture of what 17-yearolds know. Because sampling techniques used in conducting phone, mail, or e-mail surveys inevitably provide an imperfect representation of the larger population, researchers typically weight the results so that the findings account for the fact that the sample may have included a disproportionate number of individuals of a given gender, ethnicity, or socioeconomic class.<sup>26</sup> The general reader can largely ignore this caution, as the weighting here is no different from the adjustments routinely made in national samples conducted by Gallup or the *New* York Times on all manner of questions.

# Appendix

# ENDNOTES

- <sup>1</sup> Luke J. Larsen, *The Foreign-Born Population in the United States: 2003,* Current Population Reports, August 2004, http://www.census.gov/prod/2004pubs/p20-551.pdf (accessed January 24, 2008), 1.
- <sup>2</sup> National Center for Education Statistics, *The Condition of Education: 2007*, U.S. Department of Education, June 2007, http://nces.ed.gov/pubs2007/2007064.pdf (accessed January 17, 2008), 27.
- <sup>3</sup> Jefferson to Du Pont de Nemours, 24 April 1816 in *The Writings of Thomas Jefferson*, ed. Albert Ellery Bergh (Washington, DC: The Thomas Jefferson Memorial Association, 1905), vii.
- <sup>4</sup> Gallup reported in June 2007 that just 14 percent of Americans had a "great deal" or "quite a lot" of confidence in Congress and that just 25 percent of Americans had a "great deal" or "quite a lot" of confidence in the presidency.
- <sup>5</sup> Frank Newport, Americans' Confidence in Congress at All-Time Low: Confidence in Most Institutions Drops, Gallup News Service, June 21, 2007, http://www.gallup.com/poll/27946/Americans-Confidence-Congress-AllTime-Low.aspx (accessed January 24, 2008).
- <sup>6</sup> Mark Bauerlein, *The Dumbest Generation* (Los Angeles, CA: Tarcher Press, 2008).
- <sup>7</sup> National Endowment for the Arts, *To Read or Not to Read: A Question of National Consequence*, Executive Summary, November 2007, http://www.arts.gov/research/ToRead\_ExecSum.pdf (accessed January 24, 2008), 8.
- <sup>8</sup> While less than one in ten high school seniors watched three or more hours of television per day in 1992, almost one in three did so in 2004. U.S. Department of Education, *Digest of Education Statistics: 2006*, July 2007, http://www.eric.ed.gov/ERICDocs/data/ ericdocs2sql/content\_storage\_01/0000019b/80/2d/78/63. pdf (accessed January 24, 2008), table 142, p. 219.
- <sup>9</sup> David J. Ferrero, "W(h)ither Liberal Education? A Modest Defense of Humanistic Schooling in the Twenty-first Century," in *Beyond the Basics: Achieving a Liberal Education for All Children*, ed. Chester E. Finn, Jr., and Diane Ravitch (Washington, DC: Thomas B. Fordham Institute, 2007), 25.
- <sup>10</sup> Martin West, "Testing, Learning, and Teaching: The Effects of Test-based Accountability on Student Achievement and Instructional Time in Core Academic Subjects," in *Beyond the Basics: Achieving a Liberal Education for All Children*, ed. Chester E. Finn, Jr., and Diane Ravitch (Washington, DC: Thomas B. Fordham Institute, 2007), 45–61.
- <sup>11</sup> For the official report, see Arthur N. Apple, Judith A. Langer, and Ina V.S. Mullis, *Literature & U.S. History: The Instructional Experience and Factual Knowledge of High School Juniors* (Princeton, NJ: Educational Testing Service, 1987).
- <sup>12</sup> Diane Ravitch and Chester E. Finn, Jr., What Do Our 17-Year-Olds Know? A Report on the First National Assessment of History and Literature (New York: Harper & Row, 1987), 200.

- <sup>13</sup> For instance, one question that tests no precise historical context provides a table that lists household expenditures on various appliances in 1900 and in 1928. Appliances purchased in 1900 include bicycles, wringer and washboard, brushes and brooms, and a mechanical sewing machine. Those purchased in 1928 include an automobile, radio, washing machine, and vacuum cleaner. The question asks, "Create a thesis statement about the way the changes shown in the table above affected everyday life between 1900 and 1928" and "use the information in the table to help prove your thesis." A second example of this type of question is one that depicts Lyndon B. Johnson clinging to a side of a gear labeled "Vietnam War" as it rotates toward a gear labeled "1968 election." The question posed is: "What is the main message of this cartoon about Lyndon B. Johnson?"
- <sup>14</sup> Detailed descriptions of the criteria governing the selection of the initial items for literature and history can be found in National Assessment of Educational Progress, *Foundations of Literacy: A Description of the Assessment of Basic Knowledge of United States History and Literature*, NAEP Description Booklet No. 17-HL-11, (Princeton, NJ: Educational Testing Service, 1986).
- <sup>15</sup> Diane Ravitch and Chester E. Finn, Jr., What Do Our 17-Year-Olds Know? A Report on the First National Assessment of History and Literature (New York: Harper & Row, 1987), 45.
- <sup>16</sup> Diane Ravitch and Chester E. Finn, Jr., What Do Our 17-Year-Olds Know? A Report on the First National Assessment of History and Literature (New York: Harper & Row, 1987), 120.
- <sup>17</sup> Phone interveiws: 32.5 percent of respondents reported that their parent had "a college degree," 63.5 percent that their parent did not, and 4 percent reported that they did not know. Twenty-one percent indicated that their parent had "some college," These categories are obviously far less precise than one might prefer. Nonetheless, given the limitations of collecting data about parents through phone interviews with 17-year-olds, these simple proxies for educational attainment were deemed the most reliable indicators feasible.
- <sup>18</sup> National Center for Education Statistics, *Digest of Education Statistics: 2006*, U.S. Department of Education, July 2007, http://nces.ed.gov/pubs2007/ 2007017.pdf (accessed January 17, 2008), 177.
- <sup>19</sup> More information about STS can be found on their website (www.stssamples.com).
- <sup>20</sup> Linda Meloy, Craig Deville and David Frisbie, "The Effects of a Reading Accommodation on Standardized Test Scores of Learning Disabled and Non-Learning Disabled Students," Paper presented at the annual meeting of the National Council on Measurement in Education, New Orleans, LA, 2000, http://www.eric.ed.gov/ERICDocs/ data/ericdocs2sql/content\_storage\_01/0000019b/80/16/ 34/8a.pdf (accessed January 15, 2008). Daniel Koretz and Laura Hamilton, "Assessment of Students with Disabilities in Kentucky: Inclusion, Student Performance, and Validity," *Educational Evaluation and Policy Analysis* 22, no. 3 (2000): 255–272.
- <sup>21</sup> Brian C. McKevitt and Stephen N. Elliot, "Effects and perceived consequences of using read aloud and teacherrecommended testing accommodations on a reading achievement test," *School Psychology Review* 32, no. 4 (2003).
- <sup>22</sup> Sturgis, *Surveys and Sampling*, 19.

- <sup>23</sup> U.S. Census Bureau and U.S. Department of Housing and Urban Development, *American Housing Survey for the United States: 2005*, August 2006, http://www.census.gov/ prod/2006pubs/h150-05.pdf (accessed January 15, 2008).
- <sup>24</sup> Stephen J. Blumberg and Julian V. Luke, Wireless Substitution: Early Release of Estimates Based on Data from the National Health Interview Survey, July – December 2006, National Center for Health Statistics, May 2006, http://www.cdc.gov/nchs/data/nhis/ earlyrelease/wireless200705.pdf (accessed January 15, 2008).
- $^{\rm 25}$  A total of about 12 percent answered the phone but refused to take the quiz.
- <sup>26</sup> Results were weighted according to 2006 population data from the Center for Disease Control, which measured that 11.9 percent of the U.S. population in 2006 was Hispanic; 12.3 percent was Black, non-Hispanic; 71.1 percent white, non-Hispanic; 4.6 percent other, non-Hispanic; 51 percent female and 49 percent male. While the survey's target population prohibited obtaining reliable data on family income, respondents were asked about the extent of their parents' educational attainment. These were weighted according to 2006 data from the U.S. Census Bureau, which measured that 13 percent of adults between the ages of 30 and 74 had less than a high school education, 32 percent had a high school degree, 22 percent had some college, and 34 percent had earned an academic associate's degree or a bachelor's degree. Students were asked whether their parent with the highest level of educational attainment had no high school degree, a high school degree, some college, or a college degree. For purposes of this analysis, answers were weighted according to the understanding that "some college" referred to those who attended but did not complete college as well as those who received occupational associate's degrees and that "college degree" referred to those who had earned an academic associate's degree, bachelor's degree, or higher. Some respondents may have categorized a parent as having a college degree although that parent had completed an occupational, rather than an academic, associate's degree. This inconsistency could skew the weighting of the sample. However, as only 5 percent of the population had completed an occupational associate's degree, the substantive effect would be minimal.

