《21世纪大学英语》教学与学习辅导丛书（核心版）

21世纪大学英语

阅读精选（第四册）

张增健　吴建蘅　编著

复旦大学出版社

21st CENTURY COLLEGE ENGLISH

Selected Readings for College Students (Ⅳ)

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编 者 的 话

《〈21 世纪大学英语〉阅读精选》是配合大学英语教学编选的一套英语读物，计划在两年内共编四册，现在与读者见面的是其第四册。

《〈21 世纪大学英语〉阅读精选》（第四册），按题材（subject matter）分成 10 个单元，共收选文 30 篇。选文大多取自近年来出版的英美报刊书籍，语言清新，体裁多样，有故事、随笔、杂感、短评及新闻报道等。在编选过程中，为确保原作的“真实性”（authenticity），不随意改动原文，即使对少数篇幅过长的文章，也只是略加删节，而不作任何文字上的“加工”。

《〈21 世纪大学英语〉阅读精选》的每篇选文，都配有适量的阅读和翻译练习。“理解检测”（Comprehension Check），旨在提高读者语篇水平上的阅读理解能力，确保读者对整篇文章——从主题思想到主要细节以至语言难点——的全面理解。

至于“佳句试译”（Sentences Selected for Translation Practice）这一练习的设置，不仅仅着眼于为读者提供翻译实践的机会。由于所选的语句，大多是文章的精髓、也是难点所在，读者反复琢磨、玩味之余，自然会对文章有更深入的理解。

阅读应该是一种享受，而不该视为一种负担。享受阅读，寻求书中的逸趣，乃是学习求知的最高境界。编者深信，在高等学府的莘莘学子中，勤于开卷、深得阅读意趣的，大有人在。编者之所以致力编选这样一套贴近现实窗口、力求融“趣味、知识、哲理”于一体的英语读物，也正是基于这一信念。但愿《〈21 世纪大学英语〉阅读精选》一书，能为这一读者群所喜欢，并最终成为当今大学生们的生活之友。

张增健

2003 年 10 月

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Unit One Achievements and Expectations

You don't have to be great to start, but have to start to be great.

—— *Joe Sabah*

The world is endless, the universe inexhaustible, and the human brain will never be threatened with unemployment.

——*Genrich Altshuller*

That's one small step for man, one giant leap for mankind.

—— *Neil Armstrong*

Greatness is built upon tremendous amounts of study, practice and devotion.

—— *Dean Keith Simonton*

Reading 1

The Wonder of Flight

By **Sen. John Glenn**

This year (2003) *marks the* ***centennial***① *anniversary of powered human flight, and Senator John Glenn, an* ***aviation***② *pioneer and former astronaut, shares his* ***perspective***③ *about the importance and* ***legacy***④ *of the Wright Brothers' historic achievements.*

From the dawn of time, there had been men of a curious nature who *aspired*⑤ to fly. *Leonardo da Vinci*⑥ had studied the way birds go up and down, ahead and over. And more than 2000 years ago, the Chinese had used kites to learn about lift and drag. Despite many *valiant*⑦ attempts, no one had succeeded at powered human flight.

But on the morning of Dec. 17, 1903, two bicycle makers from Dayton, Ohio, Orville and Wilbur Wright, achieved the impossible: With Orville at the *helm*⑧, their homemade flying machine (with a 12-horsepower engine) rose magnificently from the ground at Kitty Hawk, North Carolina, and landed 120 feet away. By today's standards, that might not seem impressive: The distance the *Wright Flyer* traveled was just a little over one-half the length of Boeing 747. But that relatively short trip changed the world and gave birth to the age of modern aviation.

As a young boy growing up in Ohio, I learned about the Wright Brothers almost from my first day of school. They were remarkably *tenacious*⑨, methodical men. And I admired how they learned everything they could from previous researchers and experimenters, then set out to correct or fill knowledge gaps.

Even after their historic flight at Kitty Hawk, the Wright Brothers continued to refine their designs to solve problems such as lateral control — the ability to *bank*⑩ and

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① 百年的 ② 航空 ③ 观点 ④ (精神)遗产 ⑤ 渴望
⑥ 列奥纳多·达·芬奇(意大利文艺复兴时期的画家和雕塑家) ⑦ 英勇的 ⑧ 舵轮(装置)
⑨ 顽强的 ⑩ 倾斜着前进

change direction. They made more than a hundred flights to test their hypotheses. Finally, in 1904 and 1905, the brothers developed truly *maneuverable*① flights (turns, circles and figure eights) at Huffman Prairie, the site today of Wright-Patterson Air Force Base near Dayton, Ohio.

It took several years for aviation to take off. While the Wright Brothers' historic achievement inspired experiments in other parts of the world, manned flight was largely a curiosity in America. Relatively few had actually witnessed it. At first, the brothers could not find customers for their aircraft. Then, in 1907 — four years after the first flight at Kitty Hawk — the Army Signal Corps requested proposals for "a heavier-than-air flying machine." They wanted a machine that could travel at least 40 miles per hour, carry two passengers and be easy to operate. It was probably no accident that the *specifications*② reflected exactly what the Wright Brothers already had been doing at Huffman Prairie. A few years later, the brothers formed the Wright Company and entered the airplane production business.

Since that first flight a century ago, advances in aviation technology have been remarkably swift. Orville's air speed at Kitty Hawk was 31 miles per hour. Just 44 years later, Chuck Yeager flew faster than the speed of sound in the rocket-powered Bell X-1 at Mŭroc Army Air Base in California. It was 58 years to Alan Shepard's *sub-orbital*③ start of our manned space program. Today, space shuttle astronauts orbit the Earth at 4.86 miles per second (17 500 miles per hour).

I have been honored in my career to be part of the rich aviation history launched by the Wright Brothers. I served as a young Marine pilot during World War Ⅱ and was one of America's first astronauts as part of the *Mercury*④ program in 1959.

Five years ago, I had the opportunity to join the crew of the *STS*-95 *Discovery* space shuttle. Before the launch, Wick Wright, the Wright Brothers' nephew, presented me with a piece of wing fabric that had flown at Kitty Hawk nine decades earlier. With NASA approval, I carried it proudly with me on the space flight. Later this year, the fabric will be presented to the National Air and Space Museum, where it will be displayed with the original *Wright Flyer*.

That *stained*⑤ bit of cloth symbolizes the curiosity that is at the heart of all pro-

① 操纵灵活的 ② 规格 ③ 亚轨道(不满轨道一圈)的
④ (美国由 Atlas 运载火箭发射的)墨丘利单人宇宙飞船 ⑤ 沾(有)污(迹)的

gress. Someone has to think about how to do things differently, or believe there just may be "a better way." But progress comes when one not only thinks about it but also acts on that wonder. And that's exactly what these ambitious bicycle makers did, changing the world for all time.

The spirit of exploration and innovation — so central to the Wright Brothers and to our nation's greatness from our founding days — continues to inspire today's aviation pioneers to build flying machines that can travel higher, faster and more safely. Already there have been significant advances in designing a reusable rocket ship capable of carrying three passengers on a sub-orbital flight. Some experts predict that such a voyage could be accomplished within the next decade.

And what about the next 100 years? How far will we go? Will rocket ships be as common as cars today? Nothing is certain, but I believe we'll go as far as our energy, curiosity and imagination can take us.

(838 words)

Important Powered Human Flights Over the Past 100 Years

Dec. 17, 1903	Orville and Wilbur Wright had been printers and bicycle makers before turning to flying machines. On this day the *Wright Flyer* — made of *muslin*①, wood and steel — travels 120 feet over North Carolina sand dunes in the first powered manned flight.
May 20-21, 1927	Charles A. Lindbergh achieves the first nonstop solo flight across the Atlantic in the *Spirit of St. Louis*.
May 20-21, 1932	Amelia Earhart becomes the first woman to fly solo across the Atlantic. Five years later, she is lost over the Pacific Ocean in an attempt to fly around the globe.
Oct. 14, 1947	Gen. Chuck Yeager — flying the rocket powered Bell X-1 — breaks the sound barrier for the first time.

① 粗帆布

Feb. 20, 1962	John Glenn becomes the first American to orbit the Earth in *Friendship* 7.
June 18-24, 1983	Sally K. Ride becomes the first female astronaut as a crew member of the *Challenger* space shuttle.
1981-Present	Despite the recent *Columbia* tragedy and the 1986 loss of *Challenger*, the shuttle — with 111 successful missions in 22 years — has made space travel almost commonplace.

Comprehension Check

Answer the following questions by making the best choice.

1. In this article John Glenn mainly _____.
   A) describes his own experiences, first as a pilot and then as an astronaut
   B) lists all important events in US aviation history over the past century
   C) praises the Wright Brothers' spirit of exploration and innovation
   D) predicts future achievements in the field of space exploration
2. The author John Glenn suggests that man's _____ has played an important role in the development of powered human flight.
   A) bravery B) curiosity
   C) talent D) aggressiveness
3. According to the author, the Wright Brothers' flying trip at Kitty Hawk, North Carolina, _____.
   A) was a successful attempt for powered human flight
   B) was unimpressive compared with the achievements of modern aviation
   C) ushered in the age of modern aviation
   D) both A) and C)
4. As a young boy, John Glenn particularly admired the Wright Brothers for their _____.
   A) tenacity B) industriousness
   C) boldness D) perceptiveness
5. After their historic flight the Wright Brothers _____.
   A) made efforts to refine their designs, solving various technical problems
   B) were setting off to seek after potential customers for their refined products
   C) made preparation for setting up a plane production company

D) all of the above

6. All the following facts are true about the author EXCEPT that _____.
   A) he served as a Marine pilot during World War Ⅱ
   B) he was one of the astronauts who participated in Apollo programs and stepped on the moon
   C) he was the first America's astronaut to orbit the Earth in 1962
   D) in the 1990s, he flew in the outer space once more as a crew member of *Discovery* space shuttle
7. In telling us the story about that piece of wing fabric, John Glenn would like to bring home to us his idea that _____.
   A) the Wright Brothers' original airplane was made of very simple material
   B) progress starts with curiosity and miracles are wrought by boldness to act
   C) the Wright Brothers' spirit of exploration and innovation continues to inspire today
   D) both B) and C)
8. By way of conclusion, the author points out that _____.
   A) dreams of flight still fire the imagination of young and old
   B) within the next decade rocket ships will be as common as cars today
   C) significant advances will be made in the next 100 years by those who are energetic, curious and imaginative
   D) curiosity often leads people to think about and work on "better ways"

Sentences Selected for Translation Practice

The following sentences are taken from the text. Re-read them carefully and translate each of them into Chinese.

1. With Orville at the helm, their homemade flying machine (with a 12-horsepower engine) rose magnificently from the ground at Kitty Hawk, North Carolina, and landed 120 feet away. By today's standards, that might not seem impressive: The distance the *Wright Flyer* traveled was just a little over one-half the length of Boeing 747. But that relatively short trip changed the world and gave birth to the age of modern aviation.

2. They were remarkably tenacious, methodical men. And I admired how they learned everything they could from previous researchers and experimenters, then set out to correct or fill knowledge gaps.

3. Since that first flight a century ago, advances in aviation technology have been remarkably swift. Orville's air speed at Kitty Hawk was 31 miles per hour. Just 44 years later, Chuck Yeager flew faster than the speed of sound in the rocket-powered Bell X-1 at Muroc Army Air Base in California. It was 58 years to Alan Shepard's sub-orbital start of our manned space program. Today, space shuttle astronauts orbit the Earth at 4.86 miles per second (17 500 miles per hour).

4. That stained bit of cloth symbolizes the curiosity that is at the heart of all progress. Someone has to think about how to do things differently, or believe there just may be "a better way." But progress comes when one not only thinks about it but also acts on that wonder. And that's exactly what these ambitious bicycle makers did, changing the world for all time.

5. The spirit of exploration and innovation — so central to the Wright Brothers and to

our nation's greatness from our founding days — continues to inspire today's aviation pioneers to build flying machines that can travel higher, faster and more safely. Already there have been significant advances in designing a reusable rocket ship capable of carrying three passengers on a sub-orbital flight. Some experts predict that such a voyage could be accomplished within the next decade.

Reading 2

What Produces Outstanding Science Students

By **Joseph Berger**

The Westinghouse Science Talent Search

*The Westinghouse Science Talent Search*①, the most prestigious high school science contest in the nation, was launched to identify young scientific talent, and it has been doing so with remarkable precision since 1941. Every year, approximately 1 700 students from around the country *polish off*② projects they have been working on for as long as two years, and send in a report to the contest officials. Simply entering the contest is an impressive achievement for a high school junior. It means that the student has spent hundreds of hours probing a scientific question or testing a theory about which he has written a scientific paper of *near-professional quality*③. The top 300 students become semifinals, and from this group, 40 are selected to bring their projects to Washington. Ten projects are then selected as the best in the final round of judging. The 40 finalists get at least $1 000 for their efforts, and the top student receives a $40 000 scholarship. Most of the winners, from semifinals up, are guaranteed admission to the college of their choice.

From the start, this contest was different from traditional science fairs. Its goal was not simply to choose the best project but to locate the best potential scientists. The distinction is an important one. The contest has a number of features that test the *mettle*④ of the students as well as the projects. It endeavors to explore the *nimbleness*⑤ and originality of the minds behind the projects, rather than just rewarding the boldness of the experiment. The contest's underlying philosophy is that students discover their scientific talents by working on science, not by listening to lectures in a classroom.

Today there are 23 specialized science schools in the United States, and many of

① 西屋育才科学竞赛 ② 完成 ③ 接近职业水平的质量 ④ 本领 ⑤ 灵活

these are *residential*①. This number does not include the magnet schools around the country that are placing a new emphasis on science.

These schools are selective and the curriculum is difficult. In special science schools and programs, students don't start with earth science as do most high school freshmen. They begin with biology or chemistry. By sophomore year, the top students are taking *honors biology and chemistry*②. By junior year, the students *are well launched*③ on their own research at the school or in teaching hospitals or labs in their cities.

What Makes a Winner: The Method

"Chalk and talk is no good. Go out and do what science is," says Richard Plass, a biology teacher at Stuyvesant High School in New York City. Plass has never done research more sophisticated than raising *guppies*④, but he has produced 202 Westinghouse semifinals, nurturing more successful research projects than perhaps any other teacher in the United States. The biology teacher (not biologist) admits frankly that many of the young people he teaches are beyond him.

At Stuyvesant, Plass *immerses*⑤ his students in research *at a tender age*⑥. Students in freshman biology take four periods of research lab a week in addition to the normal complement of six classes of biology. *In short order*⑦, they are working on lengthy and distinctive experiments. Students start the year studying a number of common creatures. They study the organisms and their life cycles and then pick up a substance or a physical or environmental phenomenon whose effects on the organism they will test. The projects are designed to nurture a love of research in the students. In addition to their work on experiments, students serve on student committees associated with their research projects in order to trade their lab experiences.

In their second terms, students compose a report on their experiments, complete with an abstract, a review of *prior literature*⑧, a hypothesis, results, graphs, photographs, and conclusions. Students are also required to give oral presentations. Sophomore year offers a research in chemistry. In junior year, students can choose a "Junior

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① (学生)寄宿的 ② 为优等生开设的高级生物学和化学课程 ③ 积极投入
④ 虹鳉(一种色彩美丽的淡水热带鱼) ⑤ 使……专心于 ⑥ 在未成年时 ⑦ 立即
⑧ 先有的文献

Research Class", sometimes called the "Westinghouse Class", which pairs them with professional scientists for more research. This class meets formally only once a week. Beyond that and the time spent on other course work, students are on their own. Students are required, as a test of their maturity, to find their own *mentors*① in the host of hospitals and universities in New York City.

What comes through in examining the schools that produce the Westinghouse winners is a commitment to early training in the methods, philosophy, and ethics of research. These methods endure for a lifetime, having instilled a mental discipline that helps students tackle the world.

Nina Tabachnik Schor, a *pediatric*② neurologist at Children's Hospital in Pittsburgh, exemplifies that mental discipline. She won first prize in the 1972 Westinghouse contest and used the prize money for tuition at Yale. After graduating she enrolled in a *grueling*③ seven-year program at Cornell Medical School and Rockefeller University that led to both an M. D. and a Ph. D. in biochemistry. She credits completion of the program to the habits and persistence she developed in her early immersion in a Westinghouse project. "Without the background," she says, "I don't think I could have done it." Roald Hoffmann, a Nobel Prize-winning chemist at Cornell and former Westinghouse winner, credits the program for his own addiction to research.

What Makes a Winner: Students and Their Families

Schools are only part of the secret of winning the Westinghouse. The backgrounds of winning students have a number of common traits. In 1989, the year of my study, 28 percent of the winners were foreign-born immigrants and at least 2 were children of immigrants. Though precise statistics dating from the contest's *inception*④ are not available, it is clear that immigrant families have long won a *disproportionate*⑤ share of prizes. In the 1940s when the contest began, children from immigrant Jewish families captured an unexpectedly large number of prizes. During the 1980s and early 1990s, young people from Korea, China, Japan, and India took a disproportionate share. But since most of these students were educated entirely in American schools, one cannot attribute their success to a superior foreign education.

What differentiates these students from their peers is an immigrant *grit*⑥ that drives

① 导师 ② 儿科的 ③ 累垮人的 ④ 开端 ⑤ 不成比例的 ⑥ 坚毅