

GEOGRAPHY, BEST QUOTES ON

In every outthrust headland, in every curving beach, in every grain of sand there is the story of the earth.

—Rachel Carson

The study of geography is about more than just memorizing places on a map. It's about understanding the complexity of our world, appreciating the diversity of cultures that exists across continents. And in the end, it's about using all that knowledge to help bridge divides and bring people together.

—Barack Obama

The world belongs to me because I understand it.

--Honoré de Balzac

Viewed from the distance of the moon, the astonishing thing about the Earth, catching the breath, is that it is alive. The photographs show the dry, pounded surface of the moon in the foreground, dead as an old bone. Aloft, floating free beneath the moist, gleaming membrane of bright blue sky, is the rising Earth, the only exuberant thing in this part of the cosmos. If you could look long enough, you would see the swirling of the great rifts of white cloud, covering and uncovering the half-hidden masses of land. If you had been looking a long, geologic time, you could have seen the continents themselves in motion, drifting apart on their crustal plates, held aloft by the fire beneath. It has the organized, self-contented look of a live creature, full of information, marvelously skilled in handling the sun.

--Lewis Thomas

Why do Americans have such a tough time understanding the rest of the world, and, from the rest of the world's perspective, why are Americans so damn hard to understand? Aaron David Miller...writes, 'The United States is the only great power in the history of the world that has had the luxury of having nonpredatory neighbors to its north and south....the luxury of America's circumstances' has made its people, by and large, optimistic and idealistic, and has inclined them to self-delusion when dealing with societies where ethnic, religious, and social hatreds are embedded deep in the DNA. Geography has indulged what Miller calls the Americans' 'schizophrenic' blend of isolationist ambivalence and missionary arrogance. But they have to remember, he says, that 'not everyone is lucky enough to have Canadians, Mexicans, and fish for neighbors.'

--Christopher Dickey

Geography affects history. Trace any civilization back to its origin, and geography takes center stage. Be it a strategic military position, an abundant water supply, or a convenient traveling location, geography determines, by and large, where historical events occur.

—Wayne Stiles

Geography is essential to a good education because all of the human drama has been played out in an environmental setting, on an environmental stage. Climate, resources, the presence of some peoples, the absence of others are all elements of geography that give character to the events we're studying.

--Christopher L. Salter

Geography is history. From the geographic factors that determined the course of evolution, to the fact that people built their cities near rivers, to all the wars that men have fought to get what was on the other side of the hill, geographic factors have shaped the events that have shaped our world.

--Kenneth C. Davis

Why is St. Louis where it is? Ah, of course! It's where the Missouri and Mississippi Rivers come together. Why were mill towns built along the fall line of the Appalachians? Because of the long north-to-south series of waterfalls.

—James Fallows

Geography is the science of space and place on Earth's surface. Its subject matter is the physical and human phenomena that make up the world's environments and places. Geographers describe the changing patterns of places in words, maps, and geo-graphics, explain how these patterns come to be, and unravel their meaning. Geography's continuing quest is to understand the physical and cultural features of places and their natural settings on the surface of Earth.

--*American Geographical Society*

For a billion years the patient earth amassed documents and inscribed them with signs and pictures which lay unnoticed and unused. Today, at last, they are waking up, because man has come to rouse them. Stones have begun to speak, because an ear is there to hear them. Layers become history and, released from the enchanted sleep of eternity, life's motley, never-ending dance rises out of the black depths of the past into the light of the present.

—Hans Cloos

Alaska is northernmost, westernmost, and easternmost state in the U.S. It sounds impossible, geographically, but Alaska's uninhabited Semisopochnoi Island lies just west of the International Dateline, technically making it the easternmost point of the United States.

—Terri Pous

Africa could comfortably fit most of the U.S., India, and China within its borders. The Mercator Projection distorts land masses in the southern hemisphere, making them look smaller than they actually are. In reality, Africa, the second-largest continent in the world, is huge.

—Terri Pous

The hardest part of being a Canadian kid is having to color in Nunavut with a crayon in school—hell on earth.

—Rebecca McNutt

Next to ignorance of the grammar of one's native language, nothing betrays want of information so soon as ignorance in matters of geography, without which it is almost impossible to carry on conversation long on any general subject.

—William Playfair

In our changing world nothing changes more than geography.

—Pearl S. Buck

I'm a great believer in geography being destiny.

—Abraham Verghese

Once an important part of the elementary curriculum, geography has suffered great neglect. A...study of 12-year-olds in eight industrialized countries found American students especially lacking in basic geographic knowledge. (In one test group, 20 percent of the students could not even locate the United States on a world map.) A...survey of North Carolina college students' geographic knowledge found 95 percent 'flunking'—that is, scoring less than 70 percent. Only 27 percent of the students knew that the Amazon River was in Brazil, and a mere 20 percent associated the Ganges with India. Of those responding, 71 percent 'never had reference to geography in their elementary schooling.'...children need to develop certain cognitive skills before they can handle abstract geographic concepts like 'north' and 'south.' But they can begin at an early age to learn illustrations of the five basic themes of geography education: location, place, relationships within places, movement, and regions.

—William J. Bennett

Every square inch of land on Earth has been altered by our presence.

—Nathaniel Rich

There are two worlds: the world we can measure with line and rule, and the world that we feel with our hearts and imagination.

—Leigh Hunt

Our woeful ignorance and lack of curiosity about the world beyond our borders amount almost to a national character flaw. Part of the reason is the short shrift given by our schools to geography.

--Alex Shoumatoff

The difference between history and geography is that geography tells me where I am and history tells me how I got here.

--Unknown

The importance of geology to geography is that, without geology, geography would have no place to put itself.

--Art Linkletter

We are the children of our landscape; it dictates behavior and even thought in the measure to which we are responsive to it.

--Lawrence George

Africa is called the Dark Continent not only because most of its inhabitants are dark (black) but chiefly because it is unknown and the light of the world is not on it.

--Cecil Rhodes

The only fence against the world is a thorough knowledge of it.

—John Locke

Whoever commands the sea, commands the trade, whoever commands the trade of the world, commands the riches of the world, and consequently the world itself.

--Sir Walter Raleigh

History is philosophy teaching by example, and also by warning; its two eyes are geography and chronology.

--James A. Garfield

Canada is not so much a country as a clothesline nearly 4,000 miles long. St. John's in Newfoundland is closer to Milan, Italy than to Vancouver.

--Simon Hoggart

The first time I ever felt the necessity or inevitableness of verse, was in the desire to reproduce the peculiar quality of feeling which is induced by the flat spaces and wide horizons of the virgin prairie of western Canada.

--T. E. Hulme

Living next to the United States is in some ways like sleeping with an elephant. No matter how friendly and even-tempered is the beast, one is affected by every twitch and grunt.

--Pierre Elliott Trudeau

The most serious charge which can be brought against New England is not Puritanism but February.

--Joseph Wood Krutch

In the United States there is more space where nobody is than where anybody is. This is what makes America what it is.

--Gertrude Stein

In geography, we create an initial framework—the patterns of the human use of the earth—then we try to figure out how to study these patterns, and make sense of the landscape.

--Christopher L. Salter

Throughout history, our greatest resource has been our land—forests and plains, mountains and marshlands, rivers and lakes. Our land has sustained us. It has given us a love of freedom, a sense of security, and courage to test the unknown.

--Richard Nixon

The land is like poetry: It is inextricably coherent, it is transcendent in its meaning, and it has the power to elevate a consideration of human life.

--Barry Lopez

It is not necessarily those lands which are the most fertile or most favored climate that seem to me the happiest, but those in which a long stroke of adaptation between man and his environment has brought out the best qualities of both.

--T. S. Eliot

The wealth of a nation consists not in its mass of material things, but in its system. The natural resources of South America are not inferior to those of the United States, but the wealth of the two regions is vastly different. The land of India is far richer than that of Japan, but the comparative wealth of the two nations is reversed.

--George Brockway

Geography is the stage upon which the human drama is played.

--C. Frederick Risinger

Think of our world as it looks from that rocket that's heading toward Mars. It is like a child's globe, hanging in space, the continents stuck to its side like colored maps. We are all fellow passengers on a dot of earth.

--Lyndon B. Johnson

New England has a harsh climate, a barren soil, a rough and stormy coast, and yet we love it, even with a love passing that of dwellers in more favored regions.

--Henry Cabot Lodge

There is a sumptuous variety about the New England weather that compels the stranger's admiration—and regret...In the spring I have counted one hundred and thirty-six different kinds of weather inside four-and-twenty hours.

--Mark Twain

Ohio is the farthest west of the East and the farthest north of the South.

--Louis Bromfield

These are the gardens of the Desert; these
The unshorn fields, boundless and beautiful,
For which the speech of England has no name—
The Prairies.

--William Cullen Bryant

The Midwest isn't one region; it's several that you can't really tell apart.

--Unknown

The Midwest is what you have to cross to get to there from here.

--Unknown

Geography is where they make history.

--Unknown

Mountains interposed
Make enemies of nations, who had else
Like kindred drops been mingled into one.

--William Cowper

In the world today, with air the means of communication, with time and space almost annihilated, geography still remains a fact.

--John Foster Dulles

The difference between landscape and landscape is small, but there is a great difference in the beholders.

--Ralph Waldo Emerson

Nature is magnificent, which is why geography starts by saying, 'Gee!'

--Unknown

Geography is the most important study of man, because it ends up telling him where he can go.

--Unknown

He said that he should prefer not to know the sources of the Nile, and that there should be some unknown regions preserved as hunting-grounds for the poetic imagination.

--George Eliot

Geography has no place in the medieval catalogue of the 'seven liberal arts.' Somehow it fit neither into the quadrivium of mathematical disciplines (arithmetic, music, geometry, and astronomy) nor into the trivium of logical and linguistic disciplines (grammar, dialectic, and rhetoric). For a thousand years of the Middle Ages no common synonym for 'geography' was in ordinary usage, and the word did not enter the English language until the mid-sixteenth century. Lacking the dignity of a proper discipline, geography was an orphan in the world of learning. The subject became a ragbag filled with odds and ends of knowledge and pseudo-knowledge, of Biblical dogma, travelers' tales, philosophers' speculations, and mythical imaginings.

--Daniel J. Boorstin

All things are born of earth; all things earth takes again.

--Euripides

The sea is not a bargain basement....The greatest resource of the ocean is not material but the boundless spring of inspiration and well-being we gain from her. Yet we risk poisoning the sea forever just when we are learning her science, art, and philosophy and how to live in her embrace.

--Jacques Cousteau

We have probed the earth, excavated it, burned it, ripped things from it, buried things in it....That does not fit my definition of a good tenant. If we were here on a month-to-month basis, we would have been evicted long ago.

--Rose Elizabeth Bird

As one went to Europe to see the living past, so one must visit Southern California to observe the future.

--Alison Lurie

The darkest thing about Africa is America's ignorance of it.

--Reverend James J.
Robinson

Where we live is environment; where everybody else lives is geography.

--Unknown

We are living beyond our means. We have developed a lifestyle that is draining the earth of its priceless and irreplaceable resources.

--Margaret Mead

All Gaul is divided into three parts: igneous, metamorphic, and sedimentary.

--Wilson Hinckley

The world is a book, and those who do not travel, read only a page.

--Saint Augustine

As soils are depleted, human health, vitality and intelligence go with them.

--Louis Bromfield

Territory is but the body of a nation. The people who inhabit its hills and valleys are its soul, its spirit, its life.

--James A. Garfield

High mountains are a feeling, but the hum of human cities torture.

--Lord Byron

Geography is a representation of the whole known world together with the phenomena which are contained therein.

In Geography one must contemplate the extent of the entire Earth, as well as its shape, and its position under the heavens...the length of its days and nights, the stars which are fixed overhead, the stars which move above the horizon, and the stars which never rise above the horizon at all....

It is the great and exquisite accomplishment of mathematics to show all these things to human intelligence.

--Ptolemy

Furthermore, the sphericity of the Earth is proved by the evidence of our senses, for otherwise lunar eclipses would not take such forms; for whereas in the monthly phases of the moon the segments are of all sorts—straight, gibbous, and crescent—in eclipses, the dividing line is always rounded. Consequently, if the eclipse is due to the interposition of the Earth, the rounded line results from its spherical shape.

--Aristotle

And then, as never on land, he knows the truth that his world is a water world, a planet dominated by its covering mantle of ocean, in which the continents are but transient intrusions of land above the surface of the all-encircling sea.

--Rachel Carson

Although we are mere sojourners on the surface of the planet, chained to a mere point in space, enduring but for a moment of time, the human mind is not only enabled to number worlds beyond the unassisted ken of mortal eye, but to trace the events of indefinite ages before the creation of our race, and is not even withheld from penetrating into the dark secrets of the ocean, or the solid globe.

--Sir Charles Lyell

The following list of ports of call between Panama and Valparaiso contains the name of every important point on the coast, and gives the relative positions of many places which, if the war continues, will become familiar, for whatever evil war brings in its train, it has value in teaching us geography.

—*Rose-Belford's*
Canadian Monthly
(1879)

Our bombs are smarter than the average high school student. At least they can find Kuwait.

--A. Whitney Brown

Many detailed scientific studies have shown that the entire planet's population can be adequately housed and fed and provided with a livelihood which allows them to live beyond the fear of poverty. There are even sufficient resources for the six or more billion people who will be here by the end of the century. The issue is how existing resources are managed. The key to the future is the concept of sustainable development.

By sustainable development I mean the rational use of resources to meet all basic human needs. To be sustainable, development cannot ignore long-term costs for short-term gains. Concern for the environment is not a luxury that only richer nations can afford. If some development project is damaging forests or soil or water or clean air, then it is not true development.

--William Clark

War is God's way of teaching us geography.

--Ambrose Bierce

We're living beyond our means. We have developed a lifestyle that is draining the earth of its priceless and irreplaceable resources.

--Margaret Mead

Geographically, Ireland is a medium-sized rural island that is slowly but steadily being consumed by sheep.

--Dave Barry

Geography has much more to do with asking questions and solving problems than it does with rote memorization of isolated facts....It is an integrative discipline that brings together the physical and human dimensions of the world in the study of people, places, and environments.

--*Geography for Life:
National
Geography
Standards*

The great fact was the land itself, which seemed to overwhelm the little beginnings of human society that struggled in its sombre wastes.

--Willa Cather

There are many places which nobody can look upon without being consciously influenced by a sense of their history...In some places history has wrought like an earthquake, in others like an ant or mole; everywhere, permanently; so that if we but knew or cared, every swelling of the grass, every wavering line of hedge or path or road were an inscription...When we muse deeply upon the old road worn deep into the chalk, among burial mound and encampment; we feel rather than see.

--Edward Thomas

Today, no less than in the past, the tetrahedral form of the earth and the relation of the tetrahedron to the poles and to the equator preserve the conditions that favor rapid evolution.

—Ellsworth Huntington

Australia is properly speaking an island, but it is so much larger than every other island on the face of the globe, that it is classed as a continent in order to convey to the mind a just idea of its magnitude.

—Charles Sturt

The knowledge of the world is only to be acquired in the world, and not in a closet.

—Lord Chesterfield

Once you have traveled, the voyage never ends, but is played out over and over again in the quietest chambers, that the mind can never break off from the journey.

—Pat Conroy

From ground level, America is mainly road—after all, that's where cars can take you. From the sky, America is mainly forest in the eastern third, farmland in the middle, then mountain and desert in the west, before the strip of intense development along the California coast.

—James Fallows

America is egalitarian, and snobbish. The city looks down on the countryside, the north on the south, the coastal meccas on the flyover interior—and of course each object of disdain looks back with its own reverse snobbery. A version of today's hierarchical awareness is the concept of the 'big sort.' This is the idea that if you have first-rate abilities and more than middling ambitions, you'll need to end up in one of a handful of talent destinations. New York for finance; the San Francisco Bay Area or Seattle for tech; Washington, D.C., for politics and foreign policy. If you can make it there...

—James Fallows

The jet stream is the controlling influence over the world's weather systems.
—Michael Fish

Morocco as it is is a very fine place spoiled by civilization.
—Richard H. Davis

Easterners commonly complain that there is no 'weather' at all in Southern California, that the days and the seasons slip by relentlessly, numbingly bland. That is quite misleading. In fact the climate is characterized by infrequent but violent extremes: two periods of torrential subtropical rains which continue for week and wash out the hills and send subdivisions sliding toward the sea; and twenty scattered days a year of the Santa Ana, which, with its incendiary dryness, invariably means fire.

—Joan Didion

Los Angeles weather is the weather of catastrophe, of apocalypse, and just as the reliably long and bitter winters of New England determine the way life is lived there, so the violence and the unpredictability of the Santa Ana affect the entire quality of life in Los Angeles, accentuate its impermanence, its unreliability. The wind shows us how close to the edge we are.

—Joan Didion

The West begins where the average annual rainfall drops below twenty inches.
—Bernard DeVoto

Ten geographers who think the world is flat will tend to reinforce each others errors. Only a sailor can set them straight.

—John R. Saul

I've lived in good climate, and it bores the hell out of me. I like weather rather than climate.

—John Steinbeck

The Earth is our canvas. The question is, what kind of artists will we decide to be?...Our recent history isn't promising. We continue to place lawns and swimming pools in deserts, skyscrapers in swamps, and mansions on beaches. In search of fuel, we decapitate mountains, turn forests into lumberyards, and break our promises to defend the sanctity of public land. We reserve our most beautiful landscapes for the wealthiest, restricting the poor to overcrowded slums or depleted agricultural zones...we tend to favor temporary effects at the expense of the future.

—Nathaniel Rich

For millennia beyond computation, the sea's waves have battered the coastlines of the world with erosive effect, here cutting back a cliff, there stripping away tons of sand from a beach, and yet again, in a reversal of their destructiveness, building up a bar or a small island.

—Rachel Carson

By the end of eighth grade, we should certainly expect that our children will know the basic saga of American history and the stories of its great men and women; the sources of our form of government in the Greek, Judeo-Christian, Roman, and Enlightenment traditions; the contours and locations of the physical world, and the major features of international landscapes; essential facts of the world's major nations; and their rights and obligations as American citizens.

—William J. Bennett

The weather in England can really darken your spirits.

—Claire Forlani

Water covers two-thirds of the surface of the Earth, but Fresh water is 0.002% of Earth.

—Slogan

Teach people to surf the Internet and they can tour the world. Teach people to serve on the Internet and they can touch the world.

--Harry M. Kriz

151 Countries, One Technology.

—*ThinkSlogans.com*

About fifteen miles above New Orleans the river goes very slowly. It has broadened out there until it is almost a sea and the water is yellow with the mud of half a continent. Where the sun strikes it, it is golden.

—Frank Yerby

The history of almost every civilization furnishes examples of geographical expansion coinciding with deterioration in quality.

--Arnold Toynbee

History is all explained by geography.

--Robert Penn Warren

When Columbus, in 1492, first discovered what came to be called the New World, he thought it to be the eastern coast of Asia and maintained that belief to the day of his death. The first person to maintain something else—that the lands reached by Columbus were not parts of Asia but were newly found continents, separated from Asia by a second ocean at least as large as the Atlantic—was the Italian navigator Americus Vesputius in 1502. It was for this reason that the new continents were justly named for him rather than for Columbus.

—Isaac Asimov

It was in 1519 that the Portuguese navigator, Ferdinand Magellan (in Spanish employ) first sailed across the South Sea and proved it to be an ocean larger than the Atlantic. Because he entered it in calm weather, after a very stormy trip through what is now called the Strait of Magellan, he named it the Pacific Ocean.

—Isaac Asimov

I believe very strongly, and have fought since many years ago - at least over 30 years ago - to get architecture not just within schools, but architecture talked about under history, geography, science, technology, art.

—Richard Rogers

Switzerland is a small, steep country, much more up and down than sideways, and is all stuck over with large brown hotels built on the cuckoo clock style of architecture.

—Ernest Hemingway

Landscape architecture is basically geodesign; it's designing geography. And yet geodesign is not only done by landscape architects, it's done by some of the world's largest corporations.

—Jack Dangermond

I think it's important to approach a house in a way that's reflective of the original environment. Maybe I'm a sentimentalist, but I think that certain geographies call out for certain architecture. I like residences that reflect their place.

—Kelsey Grammer

One half the world knows not how the other half lives.

--George Herbert

Maine is the closest U.S. state to Africa. A peninsula of Maine called Quoddy Head is 3,154 miles away from El Beddouza, Morocco, making it way closer than other states you might've thought, like Florida or North Carolina.

—Terri Pous

Reno, Nevada is actually further west than Los Angeles.

—Terri Pous

Rome is further north than New York City. Rome's latitude is at 41°54'N, and New York City's is at 40°40'N. Think about that the next time you consider Italy for a warm wintertime vacation.

—Terri Pous

Chicago is on the same latitude as Madrid, Rome, and Istanbul. Chicago usually brings to mind snow, ice, and more snow, but those other cities? Not so much.

—Terri Pous

If you drive south from certain parts of Detroit, you'll end up in Canada. It's hard to think of Canada as being south of... well, anything, but Windsor, Ontario, actually lies south and east of Detroit.

—Terri Pous

About 90% of the world's population lives in the northern hemisphere. Massive northern hemisphere cities like Tokyo and New York City account for the disparity.

—Terri Pous

The world's largest desert isn't the Sahara. It's the entire continent of Antarctica. Deserts aren't measured by grains of sand or amount of camels; it's all about precipitation, and Antarctica takes the cake. The roughly 5.5 million square mile continent only gets about eight inches of rain a year.

—Terri Pous

No offense to Mount Everest, but it technically isn't the world's tallest mountain. If you measure height from below sea level, Mauna Kea in Hawaii is the winner. At 29,035 feet, Everest is by far the tallest mountain above sea level. Because much of Mauna Kea's height is underneath the ocean, only 13,796 of it rises above sea level. In total, though, Mauna Kea rises to 33,500 feet from base to peak, making it nearly a mile taller than Everest.

—Terri Pous

Mount Everest isn't the closest mountain to space. Mount Chimborazo in Ecuador is. Thanks to a bulge in the earth's shape around the equator, the peak of Chimborazo — which rises to 20,500 feet above sea level — is further from the earth's center than that of Everest.

—Terri Pous

Minnesota has more shoreline — 90,000 miles, to be exact — than California, Florida, and Hawaii, combined. It is the land of 10,000 lakes, after all.

—Terri Pous

The country with the longest coastline in the world is none other than Canada. With more than 125,000 miles of coastline, Canada far outpaces more obvious choices like Australia or the Philippines.

—Terri Pous

Russia spans a whopping 11 time zones. Thanks to Russia's expansive size, the exclave of Kaliningrad, and parliament's 2014 decision to reinstate the impressive number of time zones, the world's largest country has a lot of time on its hands.

—Terri Pous

The longest place name in the world is a hill in New Zealand called Tau-matawhakatangi - hangakoauauotamatea turipukakapikimaunga - horonukupokaiwhen uakitanatahu. That's 85 letters long. It means 'The summit where Tamatea, the man with the big knees, the climber of mountains, the land-swallower who travelled about, played his nose flute to his loved one' in Māori.

—Terri Pous

The largest city by area in the world, Hulunbuir, Mongolia, is almost half as big as France. Hulunbuir is a prefecture-level city that lies over 101,913 square miles. France, by comparison, is 248,573 square miles.

—Terri Pous

Istanbul is only city in the world that is on two different continents. The Bosphorus River separates the European and the Asian sides.

—Terri Pous

Finland and North Korea are separated by just one country. Russia shares a small land border with North Korea.

—Terri Pous

The world is so empty if one thinks only of mountains, rivers and cities; but to know someone here and there who thinks and feels with us, and though distant, is close to us in spirit - this makes the earth for us an inhabited garden.

—Johann von Goethe

The Earth is beautiful, and bright, and kindly, but that is not all. The Earth is also terrible, and dark, and cruel.

—Ursula K. LeGuin

Our primeval Mother Earth is an organism that no science in the world can rationalize. Everything on her that crawls and flies is dependent upon Her and all must hopelessly perish if that Earth dies that feeds us.

—Viktor Schaubерger

Wherever we look the dreadful disintegration of the bridges of life, the capillaries and the bodies they have created, is evident, which has been caused by the mechanical and mindless work of man, who has torn away the soul from the Earth's blood—water. The more the engineer endeavors to channel water, of whose spirit and nature he is today still ignorant, by the shortest and straightest route to the sea, the more the flow of water weighs into the bends, the longer its path and the worse the water will become. The spreading of the most terrible disease of all, of cancer, is the necessary consequence of such unnatural regulatory works. These mistaken activities—our work—must legitimately lead to increasingly widespread unemployment, because our present methods of working, which have a purely mechanical basis, are already destroying not only all of wise Nature's formative processes, but first and foremost the growth of the vegetation itself, which is being destroyed even as it grows. The drying up of mountain springs, the change in the whole pattern of motion of the groundwater, and the disturbance in the blood circulation of the organism—Earth—is the direct result of modern forestry practices. The pulse-beat of the Earth was factually arrested by the modern timber production industry. Every economic death of a people is always preceded by the death of its forests. The forest is the habitat of water and as such the habitat of life processes too, whose quality declines as the organic development of the forest is disturbed. Ultimately, due to a law which functions with awesome constancy, it will slowly but surely come around to our turn. Our accustomed way of thinking in many ways, and perhaps even without exception, is opposed to the true workings of Nature. Our work is the embodiment of our will. The spiritual manifestation of this work is its effect.

—Viktor Schaubерger

I thought how utterly we have forsaken the Earth, in the sense of excluding it from our thoughts. There are but few who consider its physical hugeness, its rough enormity. It is still a disparate monstrosity, full of solitudes, barrens, wilds. It still dwarfs, terrifies, crushes. The rivers still roar, the mountains still crash, the winds still shatter. Man is an affair of cities. His gardens, orchards and fields are mere scrapings. Somehow, however, he has managed to shut out the face of the giant from his windows. But the giant is there, nevertheless.

—Wallace Stevens

We do not inherit the land from our ancestors, we borrow it from our children.
—American Indian
Proverb

The sun, the moon and the stars would have disappeared long ago had they happened to be within the reach of predatory human hands.
—Havelock Ellis

We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect.
—Aldo Leopold

The past history of our globe must be explained by what can be seen to be happening now. No powers are to be employed that are not natural to the globe, no action to be admitted except those of which we know the principle.
—James Hutton

Strabo,... enters largely, in the Second Book of his Geography, into the opinions of Eratosthenes and other Greeks on one of the most difficult problems in geology, viz., by what causes marine shells came to be plentifully buried in the earth at such great elevations and distances from the sea. He notices, amongst others, the explanation of Xanthus the Lycian, who said that the seas had once been more extensive, and that they had afterwards been partially dried up, as in his own time many lakes, rivers, and wells in Asia had failed during a season of drought. Treating this conjecture with merited disregard, Strabo passes on to the hypothesis of Strato, the natural philosopher, who had observed that the quantity of mud brought down by rivers into the Euxine was so great, that its bed must be gradually raised, while the rivers still continued to pour in an undiminished quantity of water. He therefore conceived that, originally, when the Euxine was an inland sea, its level had by this means become so much elevated that it burst its barrier near Byzantium, and formed a communication with the Propontis, and this partial drainage had already, he supposed, converted the left side into marshy ground, and that, at last, the whole would be choked up with soil. So, it was argued, the Mediterranean had once opened a passage for itself by the Columns of Hercules into the Atlantic, and perhaps the abundance of sea-shells in Africa, near the Temple of Jupiter Ammon, might also be the deposit of some former inland sea, which had at length forced a passage and escaped.

—Charles Lyell

What have we achieved in mowing down mountain ranges, harnessing the energy of mighty rivers, or moving whole populations about like chess pieces, if we ourselves remain the same restless, miserable, frustrated creatures we were before? To call such activity progress is utter delusion. We may succeed in altering the face of the earth until it is unrecognizable even to the Creator, but if we are unaffected where-in lies the meaning?

—Henry Miller

Union of geology with geography, without which the latter science is deprived of its firmest foundation

—Sir Roderick I

War is God's way of teaching Americans geography.

—Ambrose Bierce

Our world is evolving without consideration, and the result is a loss of biodiversity, energy issues, congestion in cities. But geography, if used correctly, can be used to redesign sustainable and more livable cities.

—Jack Dangermond

East and Gulf Coast states are at risk of hurricanes; prairie and other central and southern states are constantly threatened by tornados; and western states commonly face damaging droughts. Extreme weather does not discriminate by American geography.

—Matt Cartwright

The biggest difference between England and America is that England has history, while America has geography.

—Neil Gaiman

For sheer majestic geography and sublime scale, nothing beats Alaska and the Yukon. For culture, Japan. And for all-around affection, Australia.

—Sam Abell

To me, it seems a dreadful indignity to have a soul controlled by geography.

—George Santayana

I'm somewhat horrified because I don't think the young people today even know what history is. Some of them don't even study History at school anymore or Geography and they don't know where one place is from another.

—Joan Sutherland

Cultural values are, in themselves, neutral as well as universal, and so much depends on how individuals or ethnic groups use them. Values are influenced by so many factors such as geography, climate, religion, the economy and technology.

—F. Sionil Jose

In particular, Australia, because of its ancient geography, soil profile and distinctive weather patterns, is more adversely affected by climate variability than some other continents.

—Peter Garrett

Nature, I have constantly argued in my work, is the real superpower of this godless universe. It is the ultimate disposer of human fate, randomly recarving geography over 10,000-year epochs.

—Camille Paglia

The accidents of birth and geography determine to a very large extent to what faith we belong.

—Desmond Tutu

Travel stories teach geography; insect stories lead the child into natural science; and so on. The teacher, in short, can use reading to introduce her pupils to the most varied subjects; and the moment they have been thus started, they can go on to any limit guided by the single passion for reading.

—Maria Montessori

GIS, in its digital manifestation of geography, goes beyond just the science. It provides us a framework and a process for applying geography. It brings together observational science and measurement and integrates it with modeling and prediction, analysis, and interpretation so that we can understand things.

—Jack Dangermond

I like geography best, he said, because your mountains & rivers know the secret. Pay no attention to boundaries.

—Brian Andreas

Everywhere's been where it is ever since it was first put there. It's called geography.

—Terry Pratchett

The decline of geography in academia is easy to understand: we live in an age of ever-increasing specialization, and geography is a generalist's discipline. Imagine the poor geographer trying to explain to someone at a campus cocktail party (or even to an unsympathetic administrator) exactly what it is he or she studies.

'Geography is Greek for 'writing about the earth.' We study the Earth.'

'Right, like geologists.'

'Well, yes, but we're interested in the whole world, not just the rocky bits. Geographers also study oceans, lakes, the water cycle...'

'So, it's like oceanography or hydrology.'

'And the atmosphere.'

'Meteorology, climatology...'

'It's broader than just physical geography. We're also interested in how humans relate to their planet.'

'How is that different from ecology or environmental science?'

'Well, it encompasses them. Aspects of them. But we also study the social and economic and cultural and geopolitical sides of—'

'Sociology, economics, cultural studies, poli sci.'

'Some geographers specialize in different world regions.'

'Ah, right, we have Asian and African and Latin American studies programs here.'

'But I didn't know they were part of the geography department.'

'They're not)'

(Long pause.)

'So, uh, what is it that do study then?'

—Ken Jennings

Bhutan does seem a bit unreal at times. Hardly anybody in the U.S. knows where it is. I have friends who still think the entire country is a figment of my imagination. When I was getting ready to move there, and I told people I was going to work in Bhutan, they'd inevitably ask, 'Where's Butane?'

'It is near Africa,' I'd answer, to throw them off the trail. 'It's where all the disposable lighters come from.'

They'd nod in understanding.

—Linda Leaming

Geography is the key, the crucial accident of birth. A piece of protein could be a snail, a sea lion, or a systems analyst, but it had to start somewhere. This is not science; it is merely metaphor. And the landscape in which the protein 'starts' shapes its end as surely as bowls shape water.

—Annie Dillard

Eratosthenes, the mapmaker who was the first man to accurately measure the size of the Earth, was a librarian.

—Ken Jennings

Take geography. Physical geography, which is a science, is considered difficult; human geography, which strives to be a science, is considered less difficult; humanistic geography, full of poetry and good feeling, is widely viewed as the softie of the three, taken up by the intellectually lazy or unprepared.

Human geography studies human relationships. Under the influence of Marxism, it often shows them to be one of exploitation, using physical force when necessary and the subtler devices deception when not. Human geography's optimism lies in its belief that asymmetrical relationships and exploitation can be removed, or reversed. What human geography does not consider, and what humanistic geography does, is the role they play in nearly all human contacts and exchanges. If we examine them conscientiously, no one will feel comfortable throwing the first stone. As for deception, significantly, only Zoroastrianism among the great religions has the command, 'Thou shalt not lie.' After all, deception and lying are necessary to smoothing the ways of social life.

From this, I conclude that humanistic geography is neglected because it is too hard. Nevertheless, it should attract the tough-minded and idealistic, for it rests ultimately on the belief that we humans can face the most unpleasant facts, and even do something about them, without despair.

—Yi-Fu Tuan

It is no coincidence that, on all four sides, in all four corners, the borders of the Roman Empire stopped where wine could no longer be made.

—Neel Burton

Krakatoa, spelled 'Krakatau' in Indonesian, is a volcano in the Sunda Strait between Java and Sumatra. It is also the name of an island group made up of what is left of a larger island, consisting of three volcanic peaks that were destroyed by the catastrophic 1883 eruption. This explosive force was equivalent to 100,000 Hiroshima sized atomic bombs. It was the loudest sound ever heard in modern history and could be heard up to 3,000 miles away. At that time, the explosion caused huge tsunamis which killed more than 36,000 people and sent out shock waves that were recorded worldwide for almost a week. Years later in 1927, 'Anak Krakatau' a new island mountain formed in its place and is again the location of volcanic activity. It is considered a part of the Pacific 'Ring of Fire.'

—Captain Hank Bracker

That thing we call a place is the intersection of many changing forces passing through, whirling around, mixing, dissolving, and exploding in a fixed location. To write about a place is to acknowledge that phenomena often treated separately—ecology, democracy, culture, storytelling, urban design, individual life histories and collective endeavors—coexist. They coexist geographically, spatially, in place, and to understand a place is to engage with braided narratives and sue generous explorations.

—Rebecca Solnit

[A]s Geography without History seemeth a carkasse without motion; so History without Geography, wandreth as a Vagrant without a certaine habitation.

—John Smith

Geography is an earthly subject, but a heavenly science.

—Edmund Burke

There is only one sensible way to think of the Pacific Ocean today. It is the highway between Asia and America, and whether we wish it or not, from now on there will be immense traffic along that highway.

—James A. Michener

‘Do you know what geography really is?’ Ted asked. ‘It’s not the shapes of countries or a list of trade routes. Geography is a snapshot of war, plain and simple. It’s a record of the state of hostile powers at a moment of suspended animation.’

—Christopher Bollen

If one is seeking for Heaven on earth, he has slept in geography class.

—Stanisław Jerzy Lec

Science rocks: The pursuit of science lead us to the beautiful places of the world.

—Lailah Gifty Akita

As any distance we take from things give us an outside perspective, so does taking a geographical distance—offering us a new vantage point over our lives.

—Lauren Klarfeld

It is the relationship between the physical environment and the envired organism, between physiography and ontography (to coin a term), that constitutes the essential principles of geography today.

—William Morris Davis

Let us start by picturing the Japan archipelago lying in the sea by the Chinese mainland. If its proximity allowed it to become part of the Sinosphere and acquire a written culture, its distance benefited the development of indigenous writing. The Dover Strait, separating England and France, is only 34 kilometers (21 miles) wide. A fine swimmer can swim across it. In contrast, the shortest distance between Japan and the Korean Peninsula is five or six times greater, and between Japan and the Chinese mainland, twenty-five times greater. The current, moreover, is deadly. . . . Japan's distance from China gave it political and cultural freedom and made possible the flowering of its own writing.

—Minae Mizumura

Arthur Jay Klinghoffer, a professor of political science at Rutgers University, has argued that geography seems less relevant than ever in a world where nonstate actors -- malleable entities like ethnicities, for example—are as powerful and important as the ones with governments and borders. Where on a map can you point to al-Qaeda? Or Google, or Wal-Mart? Everywhere and nowhere.

—Ken Jennings

Anatomy is to physiology as geography is to history; it describes the theatre of events.

—Jean Fernel

Much of the geographical work of the past hundred years... has either explicitly or implicitly taken its inspiration from biology, and in particular Darwin. Many of the original Darwinians, such as Hooker, Wallace, Huxley, Bates, and Darwin himself, were actively concerned with geographical exploration, and it was largely facts of geographical distribution in a spatial setting which provided Darwin with the germ of his theory.

—David R. Stoddart

The enemy must fight his battles far from home for a long time... We must weaken him by drawing him into protracted campaigns. Once his initial dash is broken, it will be easier to destroy him... When the enemy is away from home for a long time and produces no victories and families learn of their dead, then the enemy population at home becomes dissatisfied and considers it a Mandate from Heaven that the armies be recalled. Time is always in our favor. Our climate, mountains, and jungles discourage the enemy; but for us they offer sanctuary and a place from which to attack.

—Tran Hung Dao

Do you understand the sadness of geography?

—Michael Ondaatje

If some peoples pretend that history or geography gives them the right to subjugate other races, nations, or peoples, there can be no peace.

—Ludwig von Mises

To me, it seems a dreadful indignity to have a soul controlled by geography.

—George Santayana

John Hall, my geography teacher at school inspired me to a lifelong interest in geography and a curiosity about our world which has stayed with me through my life. Geography is a living, breathing subject, constantly adapting itself to change. It is dynamic and relevant. For me geography is a great adventure with a purpose.

—Michael Palin

The peculiar value of geography lies in its fitness to nourish the mind with ideas and furnish the imagination with pictures.

—Charlotte Mason

Charleston has a landscape that encourages intimacy and partisanship. I have heard it said that an inoculation to the sights and smells of the Carolina low country is an almost irreversible antidote to the charms of other landscapes, other alien geographies. You can be moved profoundly by other vistas, by other oceans, by soaring mountain ranges, but you can never be seduced. You can even forsake the low country, renounce it for other climates, but you can never completely escape the sensuous, semitropical pull of Charleston and her marshes.

—Pat Conroy

Columbus's real achievement was managing to cross the ocean successfully in both directions. Though an accomplished enough mariner, he was not terribly good at a great deal else, especially geography, the skill that would seem most vital in an explorer. It would be hard to name any figure in history who has achieved more lasting fame with less competence. He spent large parts of eight years bouncing around Caribbean islands and coastal South America convinced that he was in the heart of the Orient and that Japan and China were at the edge of every sunset. He never worked out that Cuba is an island and never once set foot on, or even suspected the existence of, the landmass to the north that everyone thinks he discovered: the United States.

--Bill Bryson

I wanna hang a map of the world in my house. Then I'm gonna put pins into all the locations that I've traveled to. But first, I'm gonna have to travel to the top two corners of the map so it won't fall down.

—Mitch Hedberg

Without geography you're nowhere.

—Jimmy Buffett

Many adults, whether consciously or unconsciously, find it beneath their adult dignity to do anything as childish as read a book, think a thought, or get an idea. Adults are rarely embarrassed at having forgotten what little algebra or geography they once learned

—Isaac Asimov

What makes a nation in the beginning is a good piece of geography.

—Robert Frost

Yes, gentlemen, give me the map of any country, its configuration, its climate, its waters, its winds, and the whole of its physical geography; give me its natural productions, its flora, its zoology, etc., and I pledge myself to tell you, a priori, what will be the quality of man in history, not accidentally, but necessarily; not at any particular epoch, but in all; in short, -what idea he is called to represent.

—Victor Cousin

Canada emerged as a political entity with boundaries largely determined by the fur trade. These boundaries included a vast north temperate land area extending from the Atlantic to the Pacific and dominated by the Canadian Shield. The present Dominion emerged not in spite of geography but because of it.

—Harold Innis

Geography is the art of the mappable.

—Peter Haggett

People look down on stuff like geography and meteorology, and not only because they're standing on one and being soaked by the other. They don't look quite like real science. But geography is only physics slowed down and with a few trees stuck on it, and meteorology is full of excitingly fashionable chaos and complexity. And summer isn't a time. It's a place as well. Summer is a moving creature and likes to go south for the winter.

—Terry Pratchett

It is impossible to understand history, international politics, the world economy, religions, philosophy, or 'patterns of culture' without taking geography into account.

—Kenneth C. Davis

I hope to make pictures like I walk in the desert—under a spell, an instinct of motion, a kind of knowing that is essentially indirect and sideways. Of all the things I wondered about on this land, I wondered the hardest about the seduction of certain geographies that feel like home—not by story or blood but merely by their forms and colors. How our perceptions are our only internal map of the world, how there are places that claim you and places that warn you away. How you can fall in love with the light.

—Ellen Meloy

The course of the line we indicated as forming our grandest terrestrial fold [along the shores of Japan] returns upon itself. It is an endless fold, an endless band, the common possession of two sciences. It is geological in origin, geographical in effect. It is the wedding ring of geology and geography, uniting them at once and for ever in indissoluble union.

—Charles Lapworth

All that comes above the surface [of the globe] lies within the province of Geography; all that comes below that surface lies inside the realm of Geology. The surface of the earth is that which, so to speak, divides them and at the same time 'binds them together in indissoluble union.' We may, perhaps, put the case metaphorically. The relationships of the two are rather like that of man and wife. Geography, like a prudent woman, has followed the sage advice of Shakespeare and taken unto her 'an elder than herself; but she does not trespass on the domain of her consort, nor could she possibly maintain the respect of her children were she to flaunt before the world the assertion that she is 'a woman with a past.'

—Charles Lapworth

In the long winter evenings he talked to Ma about the Western country. In the West the land was level, and there were no trees. The grass grew thick and high.

—Laura I. Wilder

There are no other Everglades in the world. They are, they have always been, one of the unique regions of the earth; remote, never wholly known. Nothing anywhere else is like them.

—Marjory S. Douglas

I stress the uniqueness of the Australian landscape and its metaphysical and mythic content.

—Arthur Boyd

The greatest obstacle to discovering the shape of the earth, the continents, and the ocean was not ignorance but the illusion of knowledge.

--Daniel J. Boorstin

That long (Canadian) frontier from the Atlantic to the Pacific Oceans, guarded only by neighborly respect and honorable obligations, is an example to every country and a pattern for the future of the world.

--Sir Winston Churchill

Morality is largely a matter of geography.

--Elbert Hubbard

Customs form us all, our thoughts, our morals, our most fixed beliefs; are consequences of our place of birth.

—Aaron Hill

If geography is prose, maps are iconography.

—Lennart Meri

Not understanding the human terrain has the same effect on your operations that not understanding the physical terrain has on conventional military operations. If you don't really appreciate the physical terrain and its impact on your operations, you don't succeed. If you don't understand the human terrain in the conduct of population-centric counterinsurgency operations, you don't succeed.

--General David
Petraeus

The noblest monument to peace and to neighborly economic and social friendship in all the world is not a monument in bronze or stone, but the boundary which unites the United States and Canada—3,000 miles of friendship with no barbed wire, no gun or soldier and no passport on the whole frontier.

--Franklin D. Roosevelt

You can't see Canada across lake Erie, but you know it's there....You have to have faith, especially in Cleveland.

—Paul Fleischman

The day I arrived in Yakutsk...it was 46 below. When our plane landed, the door was frozen solidly shut, and it took about half an hour for a powerful hot-air blower—standard equipment at Siberian airports—to break the icy seal. Stepping outside was like stepping onto another planet, for at those low temperatures nothing seems quite normal. The air burns. Sounds are brittle. Every breath hovers in a strangle slow-motion cloud, adding to the mist of ice that pervades the city and blurs the sun. When the breath freezes into ice dust and falls almost silently to the ground, Siberians call it the whisper of stars.

--David K. Shipler

THE CHRISTMAS ISLANDS

Around the world there are four separate islands that have been dubbed ‘Christmas Island.’ Canada has one in Nova Scotia which is a community on Cape Breton Island. Another one is off the New Year Island Group north-west of Tasmania, and then there is Little Christmas Island a part of the Schouten Island Group off eastern Tasmania. Another Australian Christmas Island is an island territory in the Indian Ocean.

Finally there is Kiritimati, formally called ‘Christmas Island.’ Kiritimati is a direct translation from English to the Kiribati language. It is a small island of the Central Pacific Ocean Nation of Kiribati lying 144 miles north of the Equator. The entire population of the Republic of Kiribati is just over 100,000 people half of which live on Tarawa Atoll. With the Earth’s climate changing the entire nation is in danger of disappearing into the Pacific Ocean. The 33 atolls and islands comprising the country have a total of 310 square miles and are spread out over 1,351,000 square miles. Kiribati is a member of the Commonwealth of Nations, the IMF and the World Bank, and is a full member of the United Nations.

‘Christmas Island’ or Kiritimati has the greatest land area of any coral atoll in the world and comprises about 70% of Kiribati’s land mass with about 150 square miles. The atoll is about 150 km (93 mi) in perimeter, while the lagoon shoreline extends for over 30 miles. The entire island is a Wildlife Sanctuary. It lies 144 miles north of the Equator and is one of the first place on Earth to experience the New Year.

--Hank Bracker

Our ancestors began the long experiment in figuring out how they fit into the world, by inventing a bold new tool: the map.

One of the oldest surviving maps is, ironically, about the size and shape of an early iPhone: the Babylonian Map of the World. A clay tablet created around 700 to 500 B.C. in Mesopotamia, it depicts a circular Babylon at the center, bisected by the Euphrates River and surrounded by the ocean. It doesn't have much detail—a few regions are named, including Assyria—but it wasn't really for navigation. It was more primordial: to help the map holder grasp the idea of the whole world, with themselves at the center.

—Clive Thompson

The first great attempt to make mapping realistic came in the second century A.D. with Claudius Ptolemy. He was an astronomer and astrologer obsessed with making accurate horoscopes, which required precisely placing someone's birth town on a world map. 'He invented geography, but it was just because he wanted to do better horoscopes,' notes Matthew Edney, a professor of cartography at the University of Southern Maine.

Ptolemy gathered documents detailing the locations of towns, and he augmented that information with the tales of travelers. By the time he was done, he had devised a system of lines of latitude and longitude, and plotted some 10,000 locations—from Britain to Europe, Asia and North Africa. Ptolemy even invented ways to flatten the planet (like most Greeks and Romans, he knew the earth was round) onto a two-dimensional map. What did he call his new technique? 'Geography.'

—Clive Thompson

Christopher Columbus' discovery of America was partly due to Ptolemy—and errors in his cartography. Columbus carried a map influenced by the ancient Roman's work. But Ptolemy thought the world was 30 percent smaller than it actually is; worse, the mapmaker was using Arabian miles, which were longer than Italian ones. Together these mistakes led Columbus to believe the voyage to Asia would be much shorter.

—Clive Thompson

By the late 19th century, this surge in mathematical reasoning and measurement technology made map making explode. In France, the Cassini family crisscrossed the country to calculate its dimensions with precision never before seen. Their trick? Using 'triangulation'—a bit of trigonometry—to let them stitch together thousands of measurements taken by peering through the new, high tech 'theodolite.' Breakthroughs in binocular lenses allowed surveyors to measure scores of miles at a glance. World maps became increasingly accurate.

—Clive Thompson

No map entirely tells the truth. There's always some distortion, some point of view.
—Mark Monmonier

What road led Hannibal to Rome? The vexed question is one of those problems on the border line of history and geography that are fascinating and perhaps insoluble. Much ink has been spilled in pinpointing the route of Hannibal's improbable five-month, thousand-mile trek from Catalonia across the Pyrenees, through the Languedoc to the banks of the Rhone, and then over the Alps to the plains of Italy. Many boots have been worn out in determining the Alpine pass through which tens of thousands of foot soldiers and cavalymen, thousands of horses and mules, and, famously, 37 African battle elephants tramped.

—Franz Lidz

Few historical problems have produced more unprofitable discussion than that of Hannibal's pass over the Alps.

—F. W. Walbank

The researches of many commentators have already thrown much darkness on this subject [Hannibal's route through the Alps], and it is probable that, if they continue, we shall soon know nothing at all about it.

—Mark Twain

The general wildness, the eternal labyrinths of waters and marshes, interlocked and apparently never ending; the whole surrounded by interminable swamps....Here I am then in the Floridas.

—John James Audubon

He [Christopher Columbus] stands in history as the completer of the globe.

—John Sterling

The Lord hath blessed me abundantly with a knowledge of marine affairs. Of the science of the stars He has given me that which would suffice; so, also, of geometry and arithmetic. Besides this He has granted me the mind and skill to draw globes and maps, and indicate upon them in their proper places the various cities and rivers and mountains. I have studied all sorts of writings, history, the Chronicles, and some of the other arts, for which our Lord has quickened my intelligence and understanding.

--Christopher Columbus

And I purpose to make a chart and to set down therein the lands and waters of the Ocean Sea, with all their positions and bearings, and to compose it into a book, and to illustrate the whole with paintings, showing, as we go, the latitude from the Equator, and also the western longitude.

--Christopher Columbus

He [Christopher Columbus] accomplished more than anyone else towards making us masters of the world on which we tread, and giving us, instead of yawning abysses and realms of vapour, wide waters for our ships, and lands for the city and the plough...He stands in history as the completer of the globe.

--John Sterling

It is because they took the easy way out, That rivers and people, go crooked.

—Jill Peterson

When we were on the farm, we were isolated, not just by geography but by the primitive living conditions: no electricity, no running water and, of course, no computer, no phone.

—Sally Mann

Imagine a world 6 degrees warmer. It's not going to recognize geographical boundaries. It's not going to recognize anything. So agriculture regions today will be wiped out.

—Steven Chu

The lack of roads in Africa greatly hinders agriculture, education, and development.

—Norman Borlaug

There is something in this January Siberian landscape that overpowers, oppresses, stuns. Above all, it is its enormity, its boundlessness, its oceanic limitlessness. The earth has no end here; the world has no end. Man is not created for such measureless. For him a comfortable, palpable, serviceable measure is the measure of his village, his field, street, house. At sea, the size of the ship's deck will be such a measure. Man is created for the kind of space that he can traverse at one try, with a single effort.

--Ryszard Kapuściński

Students have to learn content, including geography, dates, and political contexts. But books can put a human face on historical events. That [ability] is the greatest power of integrating literature with social studies, science, math, and history.

—Joan Ruddiman

Teacher: Maria, go the map and find North America.

Maria: Here it is.

Teacher: Correct. Now, class, who discovered America?

Class: Maria.

—Internet Meme

The continent of Africa is located in all four hemispheres.

—Roger Matile

See where American and Mexico had a joint earthquake. That's the only thing I ever heard that we split 50-50 with Mexico.

—Will Rogers

Geologically, the West Coast of North America is one of the oldest coastlines on earth.

—Kirk Johnson

Visual surprise is natural in the Caribbean; it comes with the landscape, and faced with its beauty, the sigh of History dissolves.

—Derek Walcott

The States which form the northern border of the United States westward from the Great Lakes to the Pacific coast include an area several times larger than France and could contain ten Englands and still have room to spare.

—John Moody

Geographers think there may be as many as 30,000 islands in the Pacific.

—Roger Matile

The most significant breakup was that of Pangaea, roughly 200 million years ago. The resultant continental drift was one of the factors behind the great diversity of flora and fauna we enjoy today.

—Jon Mathias

In the Historys, War always starts ‘for patriotism’s sake,’ but you read on then get down to the Peace Conference and you find that the historian has to write pretty fast and veil things over pretty cleverly, or the reader is apt to discover what changed hands at the finish besides a mere satisfying of honor. You look at all Wars and you will find that there is more new deeds for land signed at these Peace Conferences than there is good will. Did you ever look at a map and see the Colonies that Germany lost at Versailles? All these Nations that are crying Debt Cancellations, you never hear ‘em mention a word about returning Colonies to Germany so she would have a chance to kinder use ‘em to help dig up this Reparations. So, you see, in Wars the Slogan is Honor, but the object is Land. They are always fighting for Independence, but at the finish they always seem to be able to use quite a snatch of the defeated opponent’s land to be independent on.

—Will Rogers

More than 60 places throughout the United States have been named in honor of Christopher Columbus.

—Roger Matile

Brotherly love has never crossed a boundary line yet. If you think it has why don’t somebody protect China? China has never bothered anybody. They have been a friend to the World. They are having their Country taken away from em, but nobody says a word for she is so far away that they hope no Nation can march clear through her and get to them. Yes sir geography has more to do with brotherly love than civilization and Christianity combined.

—Will Rogers (1934)

Aleksandr Kolchak...calculated the whereabouts of the most remote place in all of the vast Arctic—a spot some 400 miles from the geographic North Pole that he said was ‘permanently covered with ice fields of the Arctic Pack and inaccessible to navigation.’ Because nothing is more alluring than a place that supposedly can’t be reached, the ‘pole of inaccessibility’ would become an irresistible challenge for generations of adventurers. And it still is.

—Amy Crawford

The earth’s hundreds of thousands of miles of seacoasts are daily reshaped by waves that are driven by winds, pulled by the gravity of sun and moon, and churned by submarine earth tremors. For each cliff or headland that is eroded by surging seas, somewhere a curved beach is being molded of drifting sands carried by the waves.

—Leonard Engel

When the phone in your pocket pinpoints your location in seconds, it's easy to forget just how new that technology is—the U.S. military launched its first GPS satellite only in 1978—and just how laborious it used to be to gather and synthesize definitive geographic data. Unlike a traditional survey used to determine property lines or mark the route for a new road, a geodetic survey of a region accounts for the curvature of the Earth and even variations in this curvature. That extra precision becomes more critical over long distances....[with geodesy] any point on Earth's surface could be defined by numerical coordinates, and its distance and direction from any other point calculated with precision.

—Greg Miller

Unless you are given to chronic anxiety or suffer from nihilistic despair, you probably haven't spent much time contemplating the bottom of the ocean. Many people imagine the seabed to be a vast expanse of sand, but it's a jagged and dynamic landscape with as much variation as any place on shore. Mountains surge from underwater plains, canyons slice miles deep, hot springs billow through fissures in rock, and streams of heavy brine ooze down hillsides, pooling into undersea lakes.

—Wil S. Hylton

Here are three elements we often see in town names:

If a town ends in '-by', it was originally a farmstead or a small village where some of the Viking invaders settled. The first part of the name sometimes referred to the person who owned the farm—Grimsby was 'Grim's village'. Derby was 'a village where deer were found'. The word 'by' still means 'town' in Danish.

If a town ends in '-ing', it tells us about the people who lived there. Reading means 'The people of Reada', in other words 'Reada's family or tribe'. We don't know who Reada was, but his name means 'red one', so he probably had red hair.

If a town ends in '-caster' or '-chester', it was originally a Roman fort or town. The word comes from a Latin words 'castra', meaning a camp or fortification. The first part of the name is usually the name of the locality where the fort was built. So Lancaster, for example, is 'the Roman fort on the River Lune'.

—David Crystal

'It's clear' said the teacher, 'That you haven't studied your geography. What's your excuse?'

'Well, my dad says the world is changing every day. So I decided to wait until it settles down!'

—<http://jokes.thetimetube.com>

A 1832 expedition led by Henry Schoolcraft identified the Mississippi's source as Lake Itasca in Minnesota.

—Dean Klinkenberg

In the late Cretaceous, around 80 million years ago, a mountain chain spanned the southern portion of the continent, blocking southbound water flows, so most North American rivers flowed to the Western Interior Sea or north to Canada's Hudson Bay. Eventually, a gap in those mountains formed, opening a path for the river we now know as the Mississippi to flow to the Gulf of Mexico. Scientists call that gap the Mississippi Embayment, but the rest of us know it as the Mississippi Delta, the vast flood plain that stretches from southern Missouri to northern Louisiana. As recently as 2014, geological consensus held that the Mississippi began flowing through the embayment around 20 million years ago. But in 2018, [Sally] Potter-McIntyre and her team concluded, based on the age of zircon fragments they excavated from sandstone in southern Illinois, that the river began flowing much earlier—some 70 million years ago. The Mississippi was thus born when dinosaurs still roamed the planet.

—Dean Klinkenberg

Down on the mile-deep floor of the Grand Canyon, the stillness allows the subtlest natural sounds to emerge, from the call of a peregrine falcon overhead to the scamper of a scorpion underfoot. Rock layers tell their own story, revealing nearly two billion years of geology.

—Pete McBride

Let's be real. Denver was founded when a bunch of settlers already worn out from crossing the plains saw the Rocky Mountains and said, 'F... that, I quit.'

—*theChive*

GEOGRAPHY FACTS EVERYONE KEEPS GETTING WRONG

Mistake: Iceland is covered with ice—

Despite its name, the small island nation in the North Atlantic is actually fairly mild. Thanks to the warm North Atlantic Current nearby, the coasts of Iceland remain ice-free all winter. Sure there are glaciers, but there are also geysers and lots of volcanic activity, such as the Eyjafjallajökull eruption of 2010, which threw so much ash into the air that it stopped air travel across Europe for days.

Mistake: The Mississippi River is the longest in the U.S.

The Mississippi may have Tom Sawyer and Huckleberry Finn. But despite that fiction, the Missouri River has this fact: At 2,341 miles, it is 139 miles longer than the Mighty Mississippi.

Mistake: The Nile is the world's longest river

That's what it always said in our geography books, so this myth is pretty pervasive. But if you consider, as many studies do, the tributaries, multiple channels of a river, and cutoffs that eliminate longer river bends, the Amazon River beats out the Nile nowadays by a whisker—4,345 miles to 4,258.

—Bob Cannon

OK, today's geography lesson begins with tracking Mommy's Amazon package.

—Jeff Stahler

We like to think that people have only known the earth was round since Columbus didn't fall off. But the Greeks not only knew it, they even calculated its circumference. Which means flat-earthers could travel to 500 BC and still be considered dumb.

—Internet Meme

All the geography, trigonometry, and arithmetic in the world are useless unless you learn to think for yourself. No school teaches you that. It's not in the curriculum.

—Carlos Ruiz Zafón

Is Brooklyn itself a geographical form of insanity?

—Jonathan Lethem

In A.D. 536, known as the worst year to be alive, one of Iceland's volcanoes exploded, and darkness descended over the Northern Hemisphere, bringing summer snow to China and starvation to Ireland.

—Peter Brannen

We all must learn geography in order to learn history.

—David Gress

Earth provides enough to satisfy every man's needs, but not every man's greed.

—Mahatma Gandhi

The 2002 'National Report Card' on geography found that 16 percent of eighth graders could not locate the Mississippi River on a map, and only one-quarter of high school seniors were able to interpret maps, describe regional features and socioeconomic and political factors....one-third of fourth graders could not identify the state where they lived.

—Walter A. McDougall

We are all geographers from the moment we navigate a playpen or explore our neighborhood on bicycles to our adult careers as teachers, business or sales people, farmers, engineers, truck drivers, or just smart consumers. Geography is the context in which we live and move and have our being.

—Walter A. McDougall

When faced with glimpses of Everest, the Victoria Falls, the lonely deserts of Arabia, Tibet, and Antarctica, they [students] find food for their sense of wonder and feeling for beauty. What happens next is that a student originally enthralled by the sheer variety of the world begins to ask, not only what? And where? But why? And How? Why are deserts or rain forests here and not there? Why do Asians eat rice and Mexicans tortillas, instead of bread? Why did Europeans discover routes to China instead of the Chinese discovering Europe? How did the colonial powers manage to conquer the world, how did today's countries emerge, and why are some big, rich, or mighty, while others are small, poor, or weak? Asking such questions opens a universe of inquiry, because to answer them students must turn to geology, oceanography, meteorology, anthropology, ecology, economics, sociology, and history.

—Walter A. McDougall

Without geography and chronology, history will be very ill-retained and very little useful.

—John Locke

Man is a product of the earth's surface.

—Ellen Churchill Semple

It should be impressed upon every child that geography is a part of his everyday life, not a mere learning of names, but a living reality. The imagination—that quality of the brain which enters so largely into a child's life, peopling its wonderland with fairies and creations of fancy—is the one element needful in gaining the ideas of real things.

—Spencer Trotter

I would have instructed her in geometry that she may know something of the contagious countries.

—Mrs. Malaprop from
Richard Sheridan's
The Rivals

No studies seem so well calculated to give a proper expansion to the mind as

Geography and History.

—James Madison

Geography does not argue: it simply is.

—Hans Weigert

Just as none of us is outside or beyond geography, none of us is completely free from the struggle over geography. That struggle is complex and interesting because it is not only about soldiers and cannons but also about ideas, about forms, about images and imaginings.

—Edward W. Said

Geography is destiny.

—Abraham Verghese

The decline of geography in academia is easy to understand: we live in an age of ever-increasing specialization, and geography is a generalist's discipline. Imagine the poor geographer trying to explain to someone at a campus cocktail party (or even to an unsympathetic administrator) exactly what it is he or she studies—

Geography is Greek for 'writing about the earth.' We study the Earth.

Right, like geologists.

Well, yes, but we're interested in the whole world, not just the rocky bits.

Geographers also study oceans, lakes, the water cycle... So, it's like oceanography or hydrology.

And the atmosphere.

Meteorology, climatology...

It's broader than just physical geography. We're also interested in how humans relate to their planet.

How is that different from ecology or environmental science?

Well, it encompasses them. Aspects of them. But we also study the social and economic and cultural and geopolitical sides of—

Sociology, economics, cultural studies, poli sci.

Some geographers specialize in different world regions.

Ah, right, we have Asian and African and Latin American studies programs here. But I didn't know they were part of the geography department.

They're not.

(Long pause.)

So, uh, what is it that you do study then?

—Ken Jennings

To know a nation's geography is to know its foreign policy.

—Napoleon

Sigmund Freud argued that in the human enterprise, anatomy is destiny. In the affairs of nations, geography—what it wills, demands, and bestows—is destiny too. It can't explain everything, to be sure. Britain and Japan are both island nations. That might explain their reliance on naval power and even their imperial aspirations. But what accounts for their fundamentally different histories? Other factors are clearly at play, including culture, religion, and what nature bestows or denies in resources. Fortune, along with the random circumstances it brings, pushes them in different directions.

Still, if I had to identify that one thing that—more than any other—helps explain the way Americans see the world, it would be America's physical location. It's kind of like in the real estate business: It's all about location, location, location.

The United States is the only great power in the history of the world that has had the luxury of having nonpredatory neighbors to its north and south, and fish to its east and west. The two oceans to either side of the country are what historian Thomas Bailey brilliantly described as its liquid assets.

Canadians, Mexicans, and fish. That trio of neighbors has given the United States an unprecedented degree of security, a huge margin for error in international affairs, and the luxury of largely unfettered development.

—Aaron David Miller

Think what you would have been now, if instead of being fed with tales and old wives' fables in childhood, you had been crammed with geography and natural history!

—Charles Lamb

There are fifty American states, but they add up to one nation in a way the twenty-eight sovereign states of the European Union never can. Most of the EU states have a national identity far stronger, more defined, than any American state. It is easy to find a French person who is French first, European second, or one who pays little allegiance to the idea of Europe, but an American identifies with their Union in a way few Europeans do theirs. This is explained by the geography, and the history of the unification of the United States.

—Tim Marshall

When a society is economically dominant, it is easy for its members to assume that such dominance reflects a deeper superiority—whether religious, racial, genetic, cultural, or institutional—rather than an accident of timing or geography.

—Jeffrey D. Sachs

Geography blended
with time equals destiny.

—Joseph Brodsky

Until the eighteenth century, people believed that biblical paradise, the Garden of Eden, was a real place. It appeared on maps—located, ironically, at the confluence of the Tigris and Euphrates rivers, in what is now modern-day Iraq.

—Eric Weiner

Geography is not just about the physical terrain, but also about the meaning that we attribute to it.

—Sanjeev Sanyal

I am always reading and thinking of the history and geography of a place. I see its people in terms of these, placed in the social framework of time and space.

—Oliver Sacks

The real cocktail party conversation would probably go something like this:

Actually, I have a degree in geography.

Geography? Wow, I'm terrible with maps. I bet YOU know all your state capitals, though!

(Geographer's smile freezes, left eye starts to twitch uncontrollably.)

—Ken Jennings

A map has no vocabulary, no lexicon of precise meanings. It communicates in lines, hues, tones, coded symbols, and empty spaces, much like music. Nor does a map have its own voice. It is many-tongued, a chorus reciting centuries of accumulated knowledge in echoed chants. A map provides no answers. It only suggests where to look: Discover this, reexamine that, put one thing in relation to another, orient yourself, begin here... Sometimes a map speaks in terms of physical geography, but just as often it muses on the jagged terrain of the heart, the distant vistas of memory, or the fantastic landscapes of dreams.

—Miles Harvey

Nations rich in natural resources, especially oil, tend to stagnate culturally and intellectually, as even a brief visit to Saudi Arabia or Kuwait reveals. The citizens of these nations have everything so they create nothing.

—Eric Weiner

Environmental determinism. According to this theory, even if some early humans eked out an existence in the harshest conditions on the planet, they rarely advanced beyond a few primitive tribes. Society, in other words, is a captive of geography.

—David Grann

In school, we did not study world maps, because international geography, as a subject, had been long ago phased out of state curriculums. America was the world; there was no sense of America being one country on a planet of many countries. Even the Soviet Union seemed something more like the Death Star, flying overhead and ready to laser us to smithereens, than a country with people in it.

—Suzy Hansen

The countries of northern Europe have been richer than those of the south for several centuries. The north industrialised earlier than the south and so has been more economically successful.

—Tim Marshall

The South Pacific is not a paradise, in the sense that Eden wasn't either. There are always apples and snakes. But it is a wonderful place to live. The green vales of Tahiti, the hills of Guadalcanal, the towering peaks about Wau, and the noonday brilliance of Rabaul have enchanted many white travelers who have stayed on for many years and built happy lives. Often on a cool night when the beer was plentiful and the stories alluring, we have envied the men and women of the South Pacific

—James A. Michener

Geography is the history of the world beneath our feet. The mountains and the ice, rivers, oceans, land, all of it recorded in the very rocks themselves for those with the wit to read what's set there.

—Mark Lawrence

In his book *Why Geography Matters*, the geographer Harm de Blij argues that the West's three great challenges of our time—Islamist terrorism, global warming, and the rise of China—are all problems of geography. An informed citizenry has to understand place, not because place is more important than other kinds of knowledge but because it forms the foundation for so much other knowledge.

—Ken Jennings

Rumford said a long time ago that one always finds in nature more than one is looking for. Whether the scholar examines clouds or stones, plants or insects, or whether he goes further and studies the general laws of the world, he continually discovers unexpected wonders everywhere.

—Élisée Reclus

The word 'arctic' comes from the Greek *artikos*, which means 'near the bear', and is a reference to the Ursa Major constellation whose last two stars point towards the North Star. The Arctic Ocean is 5.4 million square miles; this might make it the world's smallest ocean but it is still almost as big as Russia, and one and a half times the size of the USA.

—Tim Marshall

Look again at the standard Mercator map and you see that Greenland appears to be the same size as Africa, and yet Africa is actually fourteen times the size of Greenland! You could fit the USA, Greenland, India, China, Spain, France, Germany and the UK into Africa and still have room for most of Eastern Europe. We know Africa is a massive land mass, but the maps rarely tell us how massive.

—Tim Marshall

Mountains have long been a geography for pilgrimage, place where people have been humbled and strengthened, they are symbols of the sacred center. Many have traveled to them in order to find the concentrated energy of Earth and to realize the strength of unimpeded space. Viewing a mountain at a distance or walking around its body we can see its shape, know its profile, survey its surrounds. The closer you come to the mountain the more it disappears, the mountain begins to lose its shape as you near it, its body begins to spread out over the landscape losing itself to itself. On climbing the mountain the mountain continues to vanish. It vanishes in the detail of each step, its crown is buried in space, its body is buried in the breath. On reaching the mountain summit we can ask, What has been attained? The top of the mountain? Big view? But the mountain has already disappeared. Going down the mountain we can ask, What has been attained? Going down the mountain the closer we are to the mountain the more the mountain disappears, the closer we are to the mountain the more the mountain is realized. Mountain's realization comes through the details of the breath, mountain appears in each step. Mountain then lives inside our bones, inside our heart-drum. It stands like a huge mother in the atmosphere of our minds. Mountain draws ancestors together in the form of clouds. Heaven, Earth and human meet in the raining of the past. Heaven, Earth and human meet in the winds of the future. Mountain mother is a birth gate that joins the above and below, she is a prayer house, she is a mountain. Mountain is a mountain.

—Joan Halifax

Some of us had some geography in school and had studied maps, but a school map is a terribly uncommunicative thing.

—Robertson Davies

Choose your ground well. War is a game of geography.

—James Maxwell

A definition of right and wrong is a definition established not only by time, but also by simple geography. You could allow them to notice that some activities on your planet (prostitution, for instance) are illegal in one place, and, just a few miles down the road, legal in another. And so, whether a person is judged as having done something wrong is not a matter of what that person has actually done, but of where he has done it.

—Neale Donald Walsch

People can only be in love with one landscape in their lifetime. One can appreciate and enjoy many geographies, but there is only one that one feels in one's bones.

—J. M. Coetzee

Geography does not determine individual character, but it does matter.

—Robert D. Kaplan

Even though water chooses the path of least resistance, it ultimately defines its own course. Rivers divide and merge, they braid and weave, they form complex wholes. They move apart only to rejoin at a different point.

—Shona Patel

It was the landscape. it was the geography. The fields, the streams, the lakes, the forests. And the mountains. On exceptionally clear days when the weather was right, if you walked south on Dietlikon's Bahnhofstrasse you could see the crisp outlines of snow-capped Alps against a blazing blue horizon eighty kilometers away. On these certain days it was something in the magic of the atmosphere that made them tangible and moved them close.

—Jill Alexander
Essbaum

The word psychogeography...does not contradict the materialist perspective of the conditioning of life and thought by objective nature. Geography, for example, deals with the determinant action of general natural forces, such as soil composition or climatic conditions, on the economic structures of a society, and thus on the corresponding conception that such a society can have of the world. Psychogeography could set for itself the study of the precise laws and specific effects of the geographical environment, whether consciously organized or not, on the emotions and behavior of individuals. The charmingly vague adjective psychogeographical can be applied to the findings arrived at by this type of investigation, to their influence on human feelings, and more generally to any situation or conduct that seems to reflect the same spirit of discovery.

—Guy Debord

We take for granted the shape of our world and the position of the continents—the familiar geography that seems as eternal as the order of the planets. But this arrangement is temporary: it isn't how the planet has been and it isn't how it will be.

—Peter Brannen

The *Qur'ān* appears to be interested in three types knowledge for man. One is the knowledge of nature which has been made subservient to man, i.e., the physical sciences. The second crucial type is the knowledge of history (and geography): the *Qur'ān* persistently asks man to travel on the earth and see for himself what happened to bygone civilizations and why they rose and fell. The third is the knowledge of man himself.

—Fazlur Rahman

All theology is rooted in geography.

—Eugene H. Peterson

When we change the shape of the Land, we alter the contents and contexts of our collective, familial, and personal memories. Yet, stories can preserve both mythic and familiar elements of geography even when the physical features are forgotten, buried, or obliterated. And more than this: the stories can bring these elements back. If the Land can be preserved long enough for its stories to be told, and retold, perhaps we all—as custodians of both place and memory—stand a chance at real preservation.

—Ari Berk

Over human timescales, however, our disruption of geography will haunt us. Soil lost to erosion, coastal areas claimed by the sea, and mountaintops sacrificed on the altar of capitalism won't be restored in our lifetime. And these alterations will set in motion a cascade of side effects—hydrologic, biological, social, economic, and political—that will define the human agenda for centuries.

—Marcia Bjornerud

Every people gives, so to speak, new clothing to the surrounding nature. By means of its fields and roads, by its dwellings and every manner of construction, by the way it arranges the trees and the landscape in general, the populace expresses the character of its own ideals. If it really has a feeling for beauty, it will make nature more beautiful. If, on the other hand, the great mass of humanity should remain as it is today, crude, egoistic and inauthentic, it will continue to mark the face of the earth with its wretched traces.

—Élisée Reclus

A state's position on the map is the first thing that defines it, more than its governing philosophy even.

—Robert D. Kaplan

America is a poem in our eyes; its ample geography dazzles the imagination.

—Ralph Waldo Emerson

Check the list of the world's most feeble economies and note the high proportion that are landlocked. Note how tropical countries (those located between 23.45 degrees north and south latitudes) are generally poor, even as most high-income countries are in the middle and high latitudes.

—Robert D. Kaplan

Oceans, by separating America by thousands of miles from other continents, have given America a virulent strain of isolationism that has persisted to this day.

—Robert D. Kaplan

A small state in the midst of adversaries, such as Israel, has to be particularly passive, or particularly aggressive, in order to survive. It is primarily a matter of geography.

—Robert D. Kaplan

If you can name five Kardashians but can't name five countries in Africa, it's time to turn off the TV and pick up a book.

—Fuad Alakbarov

What makes the western plains seem most like the ocean to me is not great sweeps of land cut into swells and hollows, or the grass rippling like waves (what the Lakota call greasy grass), or the sheets of rain that one sees moving in the distance like storms at sea. It is the sound. Many mornings, when the wind has come up during the night, the trees around my house thunder like high surf that swells and ebbs without cease. In open country, far from any trees, the wind beats against you, as insistent as an ocean current. You tire from walking against it just as you would from swimming against an undertow. Working outdoors on such a day leaves you dizzy, and your ears will still be ringing at night, long after you have drawn the shelter of four walls around you. The wind can be a welcome companion on a hot day, but even die-hard Dakotans grow tired when the sky howls and roars at forty miles an hour for a day or more. The wind is so loud you have to shout at the person next to you, and you can't hear yourself think at all. You begin to wonder if you have a self.

—Kathleen Norris

Technology may seem to overcome the distances between us in both mental and physical space, but it is easy to forget that the land where we live, work and raise our children is hugely important, and that the choices of those who lead the seven billion inhabitants of this planet will to some degree always be shaped by the rivers, mountains, deserts, lakes and seas that constrain us all—as they always have.

—Tim Marshall

It was just eye-opening: to see how much your geography could determine the opportunities available to you.

—Michael Lewis

Geopolitics is ultimately the study of the balance between options and limitations. A country's geography determines in large part what vulnerabilities it faces and what tools it holds.

Countries with flat tracks of land—think Poland or Russia—find building infrastructure easier and so become rich faster, but also find themselves on the receiving end of invasions. This necessitates substantial standing armies, but the very act of attempting to gain a bit of security automatically triggers angst and paranoia in the neighbors.

Countries with navigable rivers—France and Argentina being premier examples—start the game with some 'infrastructure' already baked in. Such ease of internal transport not only makes these countries socially unified, wealthy, and cosmopolitan, but also more than a touch self-important. They show a distressing habit of becoming over-impressed with themselves—and so tend to overreach.

Island nations enjoy security—think the United Kingdom and Japan— in part because of the physical separation from rivals, but also because they have no choice but to develop navies that help them keep others away from their shores. Armed with such tools, they find themselves actively meddling in the affairs of countries not just within arm's reach, but half a world away.

In contrast, mountain countries—Kyrgyzstan and Bolivia, to pick a pair —are so capital-poor they find even securing the basics difficult, making them largely subject to the whims of their less-mountainous neighbors.

It's the balance of these restrictions and empowerments that determine both possibilities and constraints, which from my point of view makes it straightforward to predict what most countries will do:

—The Philippines’ archipelagic nature gives it the physical stand-off of islands without the navy, so in the face of a threat from a superior country it will prostrate itself before any naval power that might come to its aid.

—Chile’s population center is in a single valley surrounded by mountains. Breaching those mountains is so difficult that the Chileans often find it easier to turn their back on the South American continent and interact economically with nations much further afield.

—The Netherlands benefits from a huge portion of European trade because it controls the mouth of the Rhine, so it will seek to unite the Continent economically to maximize its economic gain while bringing in an external security guarantor to minimize threats to its independence.

—Uzbekistan sits in the middle of a flat, arid pancake and so will try to expand like syrup until it reaches a barrier it cannot pass. The lack of local competition combined with regional water shortages adds a sharp, brutal aspect to its foreign policy.

—New Zealand is a temperate zone country with a huge maritime frontage beyond the edge of the world, making it both wealthy and secure—how could the Kiwis not be in a good mood every day?

But then there is the United States. It has the flat lands of Australia with the climate and land quality of France, the riverine characteristics of Germany with the strategic exposure of New Zealand, and the island features of Japan but with oceanic moats—and all on a scale that is quite literally continental. Such landscapes not only make it rich and secure beyond peer, but also enable its navy to be so powerful that America dominates the global oceans.

—Peter Zeihan

Maps...are crucial to any understanding of world politics.

—Robert D. Kaplan

Geography is the study of places and the relationships between people and their environments. Geographers explore both the physical properties of Earth’s surface and the human societies spread across it. They also examine how human culture interacts with the natural environment, and the way that locations and places can have an impact on people. Geography seeks to understand where things are found, why they are there, and how they develop and change over time.

—*National Geographic*

The term ‘geography’ comes to us from the ancient Greeks, who needed a word to describe the writings and maps that were helping them make sense of the world in which they lived. In Greek, *geo* means ‘earth’ and *-graphy* means ‘to write.’ Using geography, Greeks developed an understanding of where their homeland was located in relation to other places, what their own and other places were like, and how people and environments were distributed. These concerns have been central to geography ever since.

—*National Geographic*

A sentence in Auden’s *Airman’s Journal* has always seemed very profound to me —‘geography is a thousand times more important to modern man than history’.

—Elizabeth Bishop

The hillsides and Alps looked as if they’d been sculpted and freshly seeded. Nothing appeared to be placed at random. The world is out of control, but the Swiss had purpose. They derived life’s meaning from geography.

—Scott Haas

Geography! That’s something they teach in the third grade! I never heard of a grownup studying geography.

—John Updike

The United States was a great power less because of its ideas than because, with direct access to the Atlantic and Pacific oceans, it was ‘the most favored state in the world from the point of view of location.’

—Robert D. Kaplan

The greater Mississippi basin has more miles of navigable river than the rest of the world put together. Nowhere else are there so many rivers whose source is not in highland and whose waters run smoothly all the way to the ocean across vast distances.

—Tim Marshall

I am always reading and thinking of the history and geography of a place. I see its people in terms of these, placed in the social framework of time and space. Take the prairies, for example; you’re wasting your time visiting these unless you know the saga of the homesteaders, the influence of law and religion at different times, the economic problems, the difficulties of communication, and the effects of successive mineral finds.

—Oliver Sacks

Geography is not egalitarian.

—Thomas Sowell

Telescopes, whether they're in the form of spotting scopes, spyplanes, or reconnaissance satellites, are more than simple instruments or tools. They beget infrastructures and geographies.

—Trevor Paglen

As a child I harbored a deep interest in geography. I remember that in the library of my house, immersed in my fantasies, my favorite readings were about the deserts, the mountains, the tribes and all that would take me with the imagination in distant lands and people that inhabited the Earth. And this is why, when I grew up, I decided to make traveling, my dream of life, to explore the world and to describe through my books all the wonderful emotions that evoke the places I visit.

—Barbara Athanassiadis

The Danish government has recreated the entire country in the hit computer game Minecraft. The first country to be fully transplanted into the blocky Minecraft games, the government hopes it could help make lessons more fun for students. It has even produced a series of lesson plans for teachers to help them navigate the virtual version of their country.

—Unknown

In the US, race is encoded in geography.

—Robin DiAngelo

Terra Australis Incognita was one of the great follies of European geography, an idea that made sense in the abstract but for which there was never any actual proof. It was based on a bit of Ptolemaic logic handed down from the ancient Greeks, which held that there must be an equal weight of continental matter in the Northern and Southern Hemispheres, or else the world would topple over and, as the great mapmaker Gerardus Mercator envisioned it, 'fall to destruction among the stars.'

—Christina Thompson

Authors introducing new characters often describe their features and dress first; when introducing a world, it seems polite to begin with its geography. It is a world of vast oceans and numberless tiny islands—an atlas would look strangely unbalanced to your eye, as if some ignorant artist had made a mistake and painted too much of it blue.

—Alix E. Harrow

Teens' use of social media is significantly shaped by race and class, geography and cultural background.

—Danah Boyd

The geography hypothesis claims that the great divide between rich and poor countries is created by geographical differences. Many poor countries, such as those of Africa, Central America, and South Asia are between the tropic of Cancer and Capricorn. Rich nations in contrast tend to be in temperate latitudes. This geographic concentration of poverty and prosperity gives superficial appeal to the geography hypothesis.

—Daron Acemođlu

In the past, Chicago acted as a regional locomotive, buying the Midwest's farm produce and other raw commodities and then converting them into products. The city was linked to its surrounding geography and vice versa. Now it mostly hovers above its hinterlands. In some ways it is also parasitic on them. Much like the giant sucking sound of London hoovering up the UK's talent, Chicago now takes the best and the brightest from the small towns of America and plugs them into the global economy. Chicago's success is no longer symbiotic with its rural neighbours. It comes at their expense.

—Edward Luce

In understanding Black Africa, geography is more important than history.

—Fernand Braudel

We've gone from a planet ruled by natural geography to political geography to kinetically functional geography to a cyber geography that is ruled by ideological variation rather than politically constructed borders.

—James Scott

The middle part of Maine, all the way from Bar Harbor to Portland, hangs down like stalactites that drip little islands into the Atlantic. It's divided by rivers and harbors with cozy names that sound like brands of bubble bath or places boats sink in folks songs.

—Linda Holmes

Because we are a northern people living in a vast country [Canada], we have learned that taking a risk in the middle of winter and failing lands you in big trouble. You can even die. In many other countries where the climate is more moderate and the distance between points is much less, a failure does not readily lead to a life-or-death situation. We are a product of our geography and our climate.

—Alex Benay

Indonesia's political geography has an amplifying effect on Indonesia's rise. It is the largest archipelagic state in the world, and oversees maritime trade routes, which are critical lifelines for the East Asian powers, such as China, Japan and South Korea. Indonesia is the only rising Asian power that has its feet both in the Pacific and Indian Oceans, entitling it to play a leadership role in an expansive canvas stretching from eastern African shores to the western coast in the Americas.

—Vibhanshu Shekhar

Trees and seas are geography's natural dictionaries, defining the horizon.

—Beryl Dov

The Pacific Northwest has a climate and a geography that makes human beings feel very welcome on the planet.

—Lorene Edwards
Forkner

Writing that is only about a time is not literature, it is history. If it is only about a place, it is geography.

—Ron Rozelle

ANTOECI (ANTO'ECI) n.s. It has no singular. [Lat. to inhabit.] In geography, those inhabitants of the earth, who live under the same meridian, and at the same distance from the equator; the one toward the north, and the other to the south. Hence they have the same longitude, and their latitude is also the same, but of a different denomination. They are in the same semicircle of the meridian, but opposite parallels. They have precisely the same hours of the day and night, but opposite seasons; and the night of the one is always equal to the day of the other.

—Samuel Johnson

A place is a storied landscape, somewhere that has human meaning. But another thing we have started to learn, or relearn, is that places aren't just about people; that they reflect our attempt to grasp and make sense of the non-human; the land and its many inhabitants that are forever around and beyond us. It can be an unnerving exchange, especially when what we hope to see is something purely natural, and what we find instead is our own reflection. Shorelines are waxing and waning with increasing speed, and old kingdoms, like Doggerland, as well as new ones in the once-inaccessible Arctic, are being revealed, demanding that we look at the landscape, and at the map, in new ways; as something in motion, unmoored by tradition.

—Alastair Bonnet

Britain's geography is odd. Peterhead is the eastern-most point of mainland Scotland although that puts it further west than Stratford-upon-Avon, which is on the western side of the British Midlands. It's sometimes difficult to believe that east coast Edinburgh and Dundee are both farther west than west coast Bristol.

—Steven Primrose-Smith

Individual identities and national destinies were shaped by the tripod of history, geography, and philosophy.

—Patrick Mendis

Topography defines place and the human situation therein.

—Lloyd Wedes

On a map oriented along the lines of this jingle: North to the ceiling, South to the floor, West to the window, East to the door it did appear that the Nile River flowed up. I can't tell you much else about what happened in that classroom that year.

—Kenneth C. Davis

Distances between Chile and the United States were simply too great for national interests to clash too seriously; pretty much all the two countries shared was the Western Hemisphere and an anticolonial birth. To most Chileans the North Americans were, in the words of one historian, 'a cipher,' and most North Americans would have been hard-pressed to name a Chilean writer, musician, or politician, even the capital. 'Chile' would never be a category on Jeopardy! It was just an oddly shaped country far to the south. Little wonder that Henry Kissinger, in one of his not infrequent moments of sarcasm, explained Chile's importance to Washington's policymakers by calling it 'a dagger pointed straight at the heart of Antarctica.'

—Barry Gewen

Ever since liquid water existed on the earth, the boundaries of water and land have eternally changed, and we may assert that the outlines of continents and islands have never remained for an hour, nay, even for a minute, exactly the same. For the waves eternally and perpetually break on the edge of the coast, and whatever the land in these places loses in extent, it gains in other places by the accumulation of mud, which condenses into solid stone and again rises above the level of the sea as new land. Nothing can be more erroneous than the idea of a firm and unchangeable outline of our continents, such as is impressed upon us in early youth by defective lessons on geography, which are devoid of a geological basis.

—William Scott-Elliot

Psychogeography: the study of the precise laws and specific effects of the geographical environment, consciously organized or not, on the emotions and behavior of individuals.

—Guy Debord (1955)

Psychogeography is a whole toy box full of playful, inventive strategies for exploring cities...just about anything that takes pedestrians off their predictable paths and jolts them into a new awareness of the urban landscape.

—Joseph Hart

The first law for a secret agent is to get his geography right, his means of access and exit, and assure his communications with the outside world.

—Ian Fleming

When you look at a map you'll be struck by the fact that Chile is the longest and thinnest country in the world. While averaging only slightly more than 100 miles wide from west to east, it's nearly 3,000 miles long from north to south: almost as long as the U.S. is wide. Geographically, Chile is isolated from other countries by the high chain of the Andes in the east separating it from Argentina, and by the world's most barren desert in the north separating it from Bolivia and Peru.

—Jared Diamond

If you drew a map of Europe based on languages it would bear scant resemblance to a conventional map. Switzerland would disappear, becoming part of the surrounding dominions of French, Italian, and German but for a few tiny pockets for Romansh (or Rumantsch or Rhaeto-Romanic as it is variously called), which is spoken as a native language by about half the people in the Graubünden district (or Grisons district—almost everything has two names in Switzerland) at the country's eastern edge. This steep and beautiful area, which takes in the ski resorts of St. Moritz, Davos, and Klosters, was once effectively isolated from the rest of the world by its harsh winters and forbidding geography. Indeed, the isolation was such that even people in neighboring valleys began to speak different versions of the language, so that Romansh is not so much one language as five fragmented and not always mutually intelligible dialects. A person from the valley around Sutselva will say, 'Vagned nà qua' for 'Come here,' while in the next valley he will say, 'Vegni neu cheu'....In other places people will speak the language in the same way but spell it differently depending on whether they are Catholic or Protestant.

—Bill Bryson

Religion, is a mistake of geography. If you were born in America you are Christian, if you were born in the middle east you are Muslim, China Buddha.

—Richard Dawkins

It's easy to take today's continental movements and predict ten or twenty million years down the road. The Atlantic will have widened by several hundred miles, while the Pacific will have shrunk by an equal amount. Australia will have moved north toward South Asia, and Antarctica will have shifted slightly away from the South Pole, also in the direction of South Asia. Africa is also on the move, inching northward to close off the Mediterranean Sea. In a few tens of millions of years, Africa will have collided with southern Europe, in the process closing up the Mediterranean and pushing up a Himalayan-size mountain range that will dwarf the Alps. So the map of the world twenty million years hence will appear familiar but skewed. Looking as far as one hundred million years into the future in this way is fairly safe, and most modelers arrive at similar geographies of a world where the Atlantic Ocean has overtaken the Pacific as the grandest body of water on Earth.

—Robert M. Hazen

Against this backdrop of diverse geography, farming and fishing still dominate the [Greek] economy. Many farmers rely on mule transportation and agricultural techniques that have persisted for generations. They tend citrus and olive groves planted by their forefathers, and cultivate grapes, figs, capers, olives, wheat, and tobacco. Family-run enterprises extract marble, pumice, and iron ore from local sources. The island of Halki derives its name from the Greek word for copper (*halkos*), a reminder of the copper mines that once covered it. Manufacturers on the island of Chios have longed produced *mastichochoria*, an aromatic resin used to make cosmetics and employed in other industries as well.

—Laura Brooks

Architecture in Council Bluffs and Omaha, this whole deeply embedded psychology of the use of space, simply conveys that there is a lot of it. There is no need to make things smaller. That is the American condition, a source of its optimism and its unfriendliness to elites and aristocracies of all kinds, which requires constraints on space in order to increase the value of their land—which then affords them their social position. This was a crucial difference between the Old World and the New. Virtually unlimited space is the essence of the frontier mentality.

—Robert D. Kaplan

Each [Greek] island is a world unto itself. Although outsiders and neighbors have inhabited, visited, and invaded these islands throughout the centuries, the islands' rugged geography and small size have also ensured a certain isolation. In this environment, traditional ways of life thrive. The arts—pottery, glass blowing, gem carving, sculpture, and painting, among others—flourish here today, as contemporary craft artists keep alive techniques begun in antiquity. In the remote hilltop villages of Kárpáthos, for example, artisans practice crafts that date back eons, and inhabitants speak a dialect close to ancient Greek.

Today, to walk along the pebbled pathways of a traditional Greek mountain village or the marbled streets of an ancient acropolis is to step back in time. To meander at a leisurely pace through these island chains by boat is to be captivated by the same dramatic landscapes and enchanted islets that make the myths of ancient Greece so compelling. To witness the Mediterranean sun setting on the turquoise sea is to receive one of life's greatest blessings.

—Laura Brooks

Studies have shown that games outperform textbooks in helping students learn fact-based subjects such as geography, history, physics, and anatomy, while also improving visual coordination, cognitive speed, and manual dexterity.

—Peter H. Diamandis

Geography is the mother of strategy.

—Lois McMaster Bujold

With the Cantino Map of 1502, the Portuguese achieved a breakthrough in cartography: the first modern projection of the world's geography, with largely accurate depictions of the world's major continents aside from Australia and Antarctica.

—Niall Ferguson

People believed the world was flat before Columbus discovered America. An Ancient Greek mathematician, Eratosthenes deduced that the Earth was round in 500 B.C. He perfectly calculated the circumference of the Earth over a millennium before it was confirmed because why the hell not. He had some spare time one weekend and invented geography. Columbus didn't even think the Earth was round. He thought it was pear-shaped. And he didn't discover it. Bjarni Herjolfsson of Iceland was the first to find America 500 years before Columbus. In fact, Columbus didn't even land in America (DID COLUMBUS DO ANYTHING???) He landed in the Bahamas and ventured from Dominica all the way southward. He never went to the area that became the United States in his entire life.

—James Egan

The charm, the delight of this countryside composed of hills and of valleys so narrow that some are ravines, lies in the woods—the deep, encroaching woods that ripple and wave away into the distance as far as you can see Green meadows make rifts in them here and there, so do little patches of cultivation. But these do not amount to much, for the magnificent woods devour everything. As a result, this lovely region is atrociously poor and its few scattered farms provide just the requisite number of red roofs to set off the velvety green of the woods.

Dear woods! I know them all; I've scoured them so often.

—Colette

It is part of the human condition for personal meaning to be intimately tied to a collective identity that is rooted in geography.

—Donald E. Miller

Placeless events are inconceivable, in that everything that happens must happen somewhere, and so history issues from geography in the same way that water issues from a spring: unpredictably but site-specifically.

—Robert Macfarlane

On losing a player due to academics—‘Our team traveled 25,000 miles, then he fails geography.’

—John Heisler

We Americans typically discover foreign lands as a result of our military involvement. Thus we now know some of the geography of Korea, Vietnam, Afghanistan, and Iraq.

—Robert L. Beir

Geography, climate, population determine communications, economy, political organization.

—Robert D. Kaplan

Geography, from a Greek word that means essentially a ‘description of the earth.’

—Robert D. Kaplan

The earth is becoming intensely citified. ‘The megacity will be at the heart of twenty-first-century geography,’ Robert D. Kaplan writes in *The Revenge of Geography*.

—Paul Theroux

The essential traits we associate with maps today evolved gradually over millennia. We first see cardinal directions on Babylonian clay tablet maps from five thousand years ago, for instance, but distances don’t appear on maps for three thousand more years—our oldest such example is a bronze plate from China’s Zhou Dynasty. Centuries more pass before we get to our oldest surviving paper map, a Greek papyrus depicting the Iberian Peninsula around the time of Christ. The first compass rose appears in the Catalan Atlas of 1375. ‘Chloropleth’ maps—those in which areas are colored differently to represent different values on some scale, like the red-and-blue maps on election night—date back only to 1826.

—Ken Jennings

Columbus's fateful voyage was inspired by his study of a map by Paolo Toscanelli. But there was also the 1854 cholera outbreak in London, which killed hundreds of people until a physician, John Snow, drew a map demonstrating that a single contaminated water pump was the source of the illness, thereby founding the science of epidemiology. There was the 1944 invasion at Normandy, which succeeded only because of the unheralded contribution of mapmakers who had stolen across the English Channel by night for months before D-Day and mapped the French beaches. Even the moon landing was a product of mapping. In 1961, the United States Geological Survey founded a Branch of Astrogeology, which spent a decade painstakingly assembling moon maps to plan the Apollo missions. The Apollo 11 crew pored over pouches of those maps as their capsule approached the lunar surface, much as Columbus did during his voyage. It seems that the greatest achievements in human history have all been made possible by the science of cartography.

—Ken Jennings

It doesn't matter the country—this desert is all the same.

—Natalie
Scenters-Zapico

We are all affected by our location in unique ways. To some extent, our identity changes every time our location changes.

—Zachariah Renfro

When we are talking about England's past, we are talking about its natural geography—its shape, location, weather, soil and raw materials. These set in motion the forces that shaped its history.

—Robert Winder

Race, poverty, and geography determine who gets the death penalty.

—Helen Prejean

The debates over U.S. peacekeeping, the complex discussions over appropriate government roles for international efforts and environmental change, economic development and population issues, as well as human rights—all these have a strong geographic component to which we can contribute and that young people studying geography can learn about. The importance of geography in the United States is fundamental because of its leadership position in the world. To continue our leadership mandate we need to train the next generation of Americans to appreciate the complexity and dynamics of this rapidly changing world. Geographic education is central to this effort.

—William Wood

Peace Corps volunteers work in Africa, in Latin America, and in the Asian Pacific region. They work in education, agriculture, environment, health, and small business development. When our volunteers return from overseas they may go into education, international relations, or development work. So what does geography mean to us?

Knowledge of geography and its skills allows us to effectively connect with our host country families and colleagues. Professionally, it enables us to see ourselves and our host country colleagues as part of a culture, environment, or economic system. Geography always influences us and it always involves people. To be effective in our work we need flexible, globally minded citizens who recognize the interdependence of the world as well as the diversity within its nations. We need people who understand that culture is a lens that colors all our perceptions; who can learn other languages; who can solve problems creatively; and who can evaluate and reevaluate constant flows of information and misinformation. We need basic information about countries and culture on all continents.

Geography is alive and well at the Peace Corps.

—Margaret Legowski

Geography standards aim to create a geographically informed person, someone who understands that geography is the study of people, places, and environments from a spatial perspective. Geographically informed persons understand and appreciate the interdependent worlds in which they live. Further, the study of geography has practical value through the application of a spatial view to life situations.

—Anthony R. De Souza

Geography standards reflect the belief that geography must be as vigorously taught in the United States as it is in other countries. All countries depend upon their citizens' knowledge of the world to compete in the current global economy, to ensure the quality of the Earth's environment, and to comprehend the cultures of the diverse people who share our planet. The standards are designed to inspire students to do better and to learn enough geography to enable them to lead fulfilling and responsible lives.

To bring all American students up to world-class levels of understanding in geography requires time. Educators must give attention to the time allocated to geography. There must be adequate space for geography in the curriculum for students to become geographically informed and teachers to be able to foster student learning.

—Anthony R. De Souza

Geography, in the context of history, social studies, or vitally any educational enterprise, presents a powerful tool for the development of skills in observation.

—Christopher L. Salter

THE EIGHTEEN NATIONAL STANDARDS (and Six Essential Elements)

The geographically informed person knows and understands...

Essential Element I. THE WORLD IN SPATIAL TERMS

Standard 1. How to use maps and other geographic representations, tools, and technologies to acquire, process, and report information from a spatial perspective.

Standard 2. How to use mental maps to organize information about people, places, and environments in a spatial context.

Standard 3. How to analyze the spatial organization of people, places, and environments on Earth's surface.

Essential Element II. PLACES AND REGIONS

Standard 4. The physical and human characteristics of places.

Standard 5. That people create regions to interpret Earth's complexity.

Standard 6. How culture and experience influence people's perceptions of places and regions.

Essential Element III. PHYSICAL SYSTEMS

Standard 7. The physical processes that shape the patterns of Earth's surface.

Standard 8. The characteristics and spatial distribution of ecosystems on Earth's surface.

Essential Element IV. HUMAN SYSTEMS

Standard 9. The characteristics, distribution, and migration of human populations on Earth's surface.

Standard 10. The characteristics, distribution, and complexity of Earth's cultural mosaics.

Standard 11. The patterns and networks of economic interdependence on Earth's surface.

Standard 12. The processes, patterns, and functions of human settlement.

Standard 13. How the forces of cooperation and conflict among people influence the division and control of Earth's surface.

Standard 14. How human actions modify the physical environment.

Essential Element V. ENVIRONMENT AND SOCIETY

Standard 15. How physical systems affect human systems.

Standard 16. The changes that occur in the meaning, use, distribution, and importance of resources.

Essential Element VI. THE USES OF GEOGRAPHY

Standard 17. How to apply geography to interpret the past.

Standard 18. How to apply geography to interpret the present and plan for the future.

—*National Council for
Geographic
Education (2012)*

Geographic skills provide the necessary tools and techniques for us to think geographically. They are central to geography's distinctive approach to understanding Earth's physical and human patterns and processes. Geographic skills are used in making decisions important to everyday life—where to buy or rent a home; where to get a job; how to get to work or to a friend's house; and where to shop, vacation, or go to school. All of these decisions involve the ability to acquire, arrange, and use geographic information. Daily decisions and community activities are linked to thinking systematically and spatially about environmental and societal issues.

—*National Geographic
Society*

The goal of teaching geography is to equip students with the knowledge, skills, and perspectives to 'do' geography. Reaching this goal requires that students learn how to use geographic thinking and information to make well-reasoned decisions and to solve personal and community problems. Many valuable applications of K-12 geog-

graphy education lie beyond the classroom walls. Geographic education enables students to use geographic perspectives, knowledge, and skills to engage in ethical action with regard to self, other people, other species, and Earth's diverse cultures and natural environments. Geography connects students to world events, problems, and decisions throughout their lives.

—*Geography For Life:
National
Geography
Standards, Second
Edition*

A historical perspective focuses on the temporal dimension of human experience (time and chronology), while geography is concerned with the spatial dimension of human experience (space and place). The space of Earth's surface is the fundamental characteristic underpinning geography. The essential issue of whereness—embodied in specific questions such as, "Where is it? Why is it there?"—helps humans contemplate the context of spatial relationships in which the human story is played out. Understanding spatial patterns and processes is essential to appreciating how people live on Earth. People who approach knowing and doing with a habit of inquiring about whereness possess a spatial perspective.

—*National Geographic
Society*

The world facing the high school graduates of 2025 will be even more crowded than the world of today. The physical environment will be even more threatened. The global economy will be even more competitive and interconnected.

Understanding and responding to the challenges and opportunities of the world in the twenty-first century will require many skills; the capacities to think and communicate mathematically and scientifically will remain at a premium. Geographic literacy will also be necessary for reasons of enhancing economic competitiveness, preserving quality of life, sustaining the environment, and ensuring national security. As individuals and as members of society, humans face decisions on where to live, what to build where, how and where to travel, how to conserve energy, how to wisely manage scarce resources, and how to cooperate or compete with others.

—*National Geographic
Society*

Geography provides students with skills for the work place and skills for civic decision making. Events around the world affect jobs and business daily. A hurricane in Florida affects the quality and availability of water in that state, a change in the price of Persian Gulf oil affects the number of jobs in Louisiana and Texas, and agricultural politics in Japan and the European Community affect agricultural

markets throughout the United States. By learning geography thoroughly, students come to understand the connections and relationships among themselves and people, places, cultures, and economies across the world. This is vital knowledge in today's society.

—Anthony R. De Souza

Geography standards reflect the belief that geography must be as vigorously taught in the United States as it is in other countries. All countries depend upon their citizens' knowledge of the world to compete in the current global economy, to ensure the quality of the Earth's environment, and to comprehend the cultures of the diverse people who share our planet.

—Anthony R. De Souza

Ultimately, students need to understand how their classroom lessons connect with their world. Geography is one of the best means to demonstrate these connections because geographers describe, map, categorize, and analyze space. Geography helps students find crucial information, and it demonstrates how to use that information effectively. Geographic understanding can link a world of seemingly disparate facts to a student's personal space.

—Robert E. Dulli and
James M.
Goodman

Many students lack basic geographic skills and a working knowledge of geography. When places and issues come to their attention, nothing comes to their minds. They have no mental map; they have no geographic eye. In their minds, the names are insignificant and abstract; there is no means of conceptualizing the locales and issues associated with them....the current generation of educators, decisionmakers, and leaders, must equip today's students with the ability to view the world as informed global citizens.

—Robert E. Dulli and
James M.
Goodman

American students are often portrayed as kids who can't find Canada and Mexico on a map....This lack of knowledge of specific locations can show up in strange places. Gilbert Grosvenor, president of the National Geographic Society, once held a press conference to give American students a failing grade in a survey the Society and conducted. "We have found another lost generation," he said. "They do not know where they are." A reporter asked Grosvenor to name the states that adjoin Texas. He could not.

—Gerald W. Bracey

Classical scholars from Eratosthenes to Kant attempted to set down geography's distinctive place among the scholarly endeavors of their time. Kant, one of the easiest philosopher-geographers, placed geography and history in parity by noting that geography is the study of things as they are arrayed across the Earth's surface, and history is the study of things arranged in progression or succession.

The parallels between geography and history come from their common concern with events and places in space and time; geography emphasized spatial arrangements while history emphasizes temporal arrangements.

—Robert E. Dulli and
James M.
Goodman

Geography is vital to basic education because it helps us understand human survival. It is about the fundamental needs of people: the way they live, the jobs they do, and their dependence on resources. Geography students learn to question—a vital skill to functioning in a complex society—by querying from a geographic perspective: Where is it located? Why is it there? How does it operate and cause a spatial condition?

Students also inquire how people interact with the natural environment, how they use the resources that the Earth offers, and how their actions modify the environment and affect the quality of life. Students develop an awareness that people and environment are interconnected and interdependent in a massive, global system. This awareness can promote more ethical conduct toward humanity and the natural environment.

—Robert E. Dulli and
James M.
Goodman

More on less. Learning should not be confused with covering material. Covering is a euphemism in social studies for teaching by mentioning; it implies superficial instruction. Covering typically means the teacher tells students a few facts about a person or event and then moves on to telling a few facts about another person or event. This parade-of-facts approach to social studies misrepresents the curriculum plan and undercuts authentic learning. More on less means that students will go into greater depth on a limited number of important topics. When topics are studied in depth, lessons can challenge students to perform near the ceiling of their abilities, going beyond the facts gathered to form durable and flexible understandings.

—Walter Parker

Geographers create regions to help make sense out of the great physical and human diversity on the earth's surface. Regions are formed using ideas associated with three different themes. For example: a set of similar place characteristics (e.g., the Russian language region); a system of human /environment relationships (e.g., the 'Corn Belt'); and the patterns of movement that connect one place with other places (e.g., a school's region can be defined by the area encompassing the homes of all its pupils).

—A. David Hill

If the curricular canvas were open and completely uncluttered—and if I were charged with designing an intelligent curriculum—I would declare that geography would be taught from grade 1 through grade 12. Themes in observations and intimate sensing would open such a curriculum and by grade 12 the student would be deeply involved in analysis of spatial patterns in a remote as well as field medium, and with all manner of library activity. Human and physical geography would be a part of every school curriculum.

—Christopher L. Salter

Consider...Napoleon's failure in his attack on Moscow, the sinking of the Titanic, the massive American Dust Bowl migrations in the 1930s, the demographic shifts in the United States from the cities to the suburbs in the 1950s, the American failure to comprehend the real parameters of the Vietnam War in the late 1960s, or the international drug trade and traffic of the 1980s.

Each these events, or phenomena, have their reality shaped in good part by the nature of the setting in which they must be discussed—or more accurately—the setting in which they occurred.

—Christopher L. Salter

Infusion of geography, particularly with history and /or social studies, is a means of calling attention to the force and significance of geography. As courses give more attention to the role of geographic themes in the unfolding of societal development, not only will students gain a better sense of the role of setting, environment, and the cultural landscape in the development of human society., but teachers themselves will grow more comfortable with such blending of influences.

Since all history and society change have been shaped by the dual influences of time and place, this wedding of geography and history is easily supportable by any teacher willing to give thought to the role of geographic influences. Once teaching begins to outline the complementary forces of these two disciplines (as well as others), then learning brings them together as well.

By blending the discipline of geography with history, with social studies, or with other disciplines that attempt to chart the course of societal growth and change, you give a spatial base to all learning. Such a base does, in fact, underlie all reality.

Curricular infusion thus forces teachers and students to acknowledge and grow familiar with that reality. Such a move can only improve American education, even as it enhances student understanding of geography.

—Christopher L. Salter

Geography teaches people how to put things in their proper place. The siting of schools, office buildings, recreational facilities and commercial buildings is normally accomplished by some form of group decision making. It is, therefore, important for educated citizens to understand the major patterns of land uses and connections among places.

—David A. Lanegran

The geography teacher must be aware of the physical processes that shape and give character to the world and realize that humans interacting with their environment must be aware of the consequences of their actions. Problems such as erosion, acid rain, air pollution, and solid waste disposal are widely distributed and can be made very real to students. The teacher has the responsibility to help students understand that these and other problems have long-term consequences which may negatively influence a student's career choices or future quality of life.

—Dennis L. Spetz

Basic cartographic skills are an absolute necessity in geographic education, and are particularly effective when used with 'hands-on' activities. Simple mapping exercises, which might involve no more than mapping a student's room or backyard, are easy ways to expose students to the complexities of map scale, legend, and the other requisites of a good map. The use of a globe is also a necessity, particularly when teaching about map projections and the problems inherent in representing a sphere on a two-dimensional surface.

—Dennis L. Spetz

Geography is about spatial relationships. It examines the distribution of physical and human phenomena over the earth's surface. This means that there are two distinct branches in the discipline: physical geography and human geography. Both should be included in any secondary world geography course. Landforms, climate, and vegetation patterns form the content of physical geography, and human geography examines the cultural characteristics of populations and their arrangement across the world.

—James F. Marran

Courses in geography encourage the typical cognitive development in such areas as problem solving, critical thinking, inquiry, numeracy, and written and oral communication. These, of course, are interdisciplinary. But there are also in such courses a

set of skills special to geography. They entail the following processes: asking the right kind of questions; being able to use geographic data displayed on maps, graphs, charts, and tables in answering such questions; interpreting and analyzing geographic information; developing and testing hypotheses about geographic themes; making generalizations from recurring physical and human patterns; and presenting geographic information in a coherent manner.

—James F. Marran

Geography as a discipline lends itself to basic scientific inquiry using the real world as a laboratory. In the field, students can be taught to test hypotheses by observing and recording natural and cultural phenomena and using their records to answer questions. A simple example might be measuring traffic flow at an intersection near the school to determine if a traffic signal is needed there.

—Dennis L. Spetz

In 1945, the attention of high school teachers and students had been on World War II. Geography was important for understanding the military activities of the United States, the Allies, and the hostile forces in the various theaters of action. The importance that the war brought to geography continued into the early 1950s, given additional impetus by the European Cold War and the Korean war. This may have resulted from geography's usefulness in explaining current events of the times, but it was also a continuation of the pre-war tradition that geographic knowledge was of fundamental importance.

—Joseph P. Stoltman

Geography is basic preparation for understanding, interacting with, living in, and moving about in our world. Neither local nor global changes in the environment and their consequences have meaning to a person who is geographically illiterate. As a world leader, our nation has a basic responsibility to be informed about human activities and their influences on the earth and its environment.

—Joseph P. Stoltman

Geographic education makes an important contribution to citizenship. In a democratic society, responsible citizens must be aware of issues, problems, and conditions. Geography provides essential information, concepts, and skills for making informed judgments and choices. Citizens must be aware of and participate in a host of decisions, including those that affect our country's foreign policies. Geographic education is important in developing citizenship competencies for dealing with those issues.

—Joseph P. Stoltman

The clearest justification for requiring a separate high school course in geography is that the present system of social studies education produces graduates who are geographically illiterate. Surveys, polls, and tests document the state of geographic ignorance of the American population. The system is 'broke' and it needs 'fixing.'

—Mary Crampton and
David A. Lanegran

The discipline of geography is older than the concept of social studies. Therefore, it does not fit neatly into the teaching categories that were developed in educational institutions of the early decades of the twentieth century. In this respect, geography is like history—an older body of knowledge and method of inquiry that is inclusive and integrative.

In order to understand any place on the surface of the earth, a geographer uses natural science, history, social sciences, and in some cases the arts. For example, physical geography requires students to understand the interactions among climate, soils, vegetation, and landforms in a particular place. In addition, it is impossible to teach the human geography of North America without reference to the seasons, mountain ranges, glaciers, soil types, forest types, distribution of water, and prevailing wind patterns.

—Mary Crampton and
David A. Lanegran

Maps are the foundation of geography. They are most frequently used to describe locations; that is, they enable the map reader to find a specific place on the surface of the earth. As such, they are an invaluable tool for all people. Geographers also use maps to analyze situations.

When they use maps, students combine a set of skills and mental processes that are different from those used to read social studies texts. To use maps effectively requires unique geographic skills....

In order for students to make effective use of maps in their normal communication, and if they are not to be swayed by propaganda maps, they must have time to learn basic map making and interpretation. Only then will they learn the advantages and limitations of maps as a scientific tool.

In order for a map to be understood, students must understand how the curved surface of the earth is projected onto a flat piece of paper. They also need to learn how maps can be used to show distributions and patterns of movement.

—Mary Crampton and
David A. Lanegran

Geography is a very useful subject for college-bound students. Knowledge of where things are and why they are there can enhance the understanding of many subjects such as biology, geology, history, foreign languages, political science, planning,

business administration, and economics. In addition, geography is now frequently part of the core curriculum in many universities.

For example, at Texas A&M University geography courses may be used to satisfy three different parts of the core curriculum. A physical geography course may count toward the natural science requirement. Several different geography courses may be used to fulfill the six-hour social science requirement. Eight geography courses are found on the list designed to meet the cultural heritage requirement.

—Richard G. Boehm

GEOGRAPHY CAREERS

An interest in geography in high school should be encouraged, since it may well lead to advanced study at college and then to a meaningful career upon graduation:

- Area Specialist
- Travel Agent
- International Business Representative
- Environmental Manager
- Forestry Technician
- National and State Park Rangers
- Hazardous Waste Manager
- Urban and Community Planner
- Transportation Planner
- Health Services Planner
- Location Expert
- Traffic Manager
- Real Estate Agent/Broker/Appraiser
- Weather Forecaster
- Outdoor Guide
- Coastal Zone Manager
- Cartographer
- Computer Mapper
- Air Photo Analyst
- Geographic Information Systems Specialist

Location Expert—One of the ways that a business or industry can ensure its success is to select the best possible location. This is true for McDonald's, shopping malls, cafeterias, movie theaters, industries, and banks. A geography background will help to provide information to make these location decisions. Large companies often employ location experts, many of whom are geographers.

Traffic Manager (Shipper)—Many companies employ key people to arrange for the shipping of their products. This job includes selecting the type of transportation (rail, truck, air) and making arrangements for domestic or overseas shipments. It also requires knowledge of financial matters, packaging, and legal matters related to ownership of products and commodities.

Coastal Zone Manager—The area where the ocean meets the land has become a critical environment. One-half of all Americans live within 50 miles of the coast. Bays, marshlands, river mouths, deltas, and coastal islands have become ‘at risk’ because of oil spills, industrial pollution, heavy population density, and crowds of tourists

Area Specialist—A person with extensive knowledge about regions of the world. Usually requires good foreign language skills. For example, one could become a Brazil specialist or a Soviet specialist. Such people are often hired by the State Department or the Central Intelligence Agency as analysts.

Environmental Manager—Environmental managers have the job of protecting and conserving our natural resources. They work for governments or private industry. Many work for the Environmental Protection Agency (EPA). Others work for state and local agencies that are responsible for policies concerning water, air, soil, solid waste disposal, hazardous and toxic waste disposal, energy, and reclamation, coastlands, and river basins.

Geographic Information Systems (GIS) Specialist—GIS refers to a computerized method for storing, retrieving, and then displaying geographic information. GIS is necessary for planners, land developers, municipal officials, and mappers. It requires skill in the use of computers and some of the available GIS software packages.

Richard G. Boehm

For a number of years, Canadian students (and many of their teachers) have sat smugly in their geography classes, telling tales of the apparent geographical ignorance throughout the U.S. Every year my students return with stories of ‘the American’ who arrives in Canada in July looking for a ski slope or ‘the American’ who asks the Canadian whether he lives in an igloo. My favorite stories are the ones in which an American meets a Canadian who lives in Montreal; the American smiles, tells the Canadian about a cousin in Vancouver, and asks the Canadian whether he knows him.

There are a number of possible explanations for geographic elitism among Canadians. For one thing, Canadians have a good sense of the geography of Canada and the United States. We Canadians see America in our films, on television, and in our

books and magazines. The U.S. also offers year-round vacation destinations to a great many Canadians—especially warm winter vacations during school breaks. So Canadians feel they are well-informed about the geography of the U.S. Many assume, therefore, that Americans should know an equal amount about their neighbor to the north.

—Michael J. Fox

Too many Americans, students and adults alike, are embarrassingly ignorant of geography. They have very little understanding of fundamental geographic concepts—like location, place, human-environmental interplay, aspects of movement and other human interaction on the earth, and the basic unit of spatial study—the region. Knowledge of these core concepts is essential to understanding the earth and its people.

—Gilbert M. Grosvenor

There is nothing more basic than having an understanding of our earth and its people. That's what geographic knowledge provides. But geography as a school subject lost ground in the decades following World War II. It became a part of the social studies smorgasbord, and was pushed to the back burner on the ever-expanding social studies menu. And I believe it's evident that our students' grasp of the world around them has suffered dramatically because of this neglect. Perhaps this decline of geography was due to a misunderstanding, or an underestimation of geography's usefulness, its power in helping us understand the world.

—Gilbert M. Grosvenor

Geographic literacy is much more than knowing where places are and what they're like. Geography furnishes a method of examining the earth, a spatial look at the earth's human and natural features. Let me put it this way—geography looks at what is where, and why it is there. It's a unique way of looking at things; it's a unique discipline, one that can act as a bridge to join other disciplines—physical sciences, social sciences, even arts and humanities. By linking pieces of information from diverse fields of study, and employing this spatial methodology, geography can truly help us to better understand the incredibly complex natural and human 'puzzle' that is today's world.

Basic geographic skills would include such things as knowing how to use maps—and understanding of scale, of direction, of distance—how to read mapped information, how to make maps, how to chart information.

—Gilbert M. Grosvenor

There are just not enough teachers prepared to teach geographic skills and concepts to this nation's students. We need to provide the sort of solid, innovative training—in-service training included—that will allow our teachers to use modern resources

and methods to make geography exciting to learn. If there are teachers or administrators out there who think the teaching and learning of geography is just a memorization of place names, they've got the wrong idea about geography. But for years, I think, that is how too many teachers, administrators, and curriculum makers saw geography.

—Gilbert M. Grosvenor

I'm not so sure...that this country would have been involved in Vietnam to the extent it was if our leaders had had an articulate knowledge of geography. I don't think the decision-makers of that time thoroughly understood the importance of geography and history in Southeast Asia. Did they really understand the relationship between the Chinese and the Soviets, between the people of China and Vietnam? Did they understand the problems of the lowland Tonkinese and of the Montagnard people who lived in the highlands? Did they really understand the 2,000 years of cultural conflict in Southeast Asia?

Consideration of geography and history are critical...to the decision-making process, and without a sense of geography, and a proper historical perspective, we're going to make lot of bad decisions in dealing with other cultures around the world.

—Gilbert M. Grosvenor

I don't see how one can study history without a knowledge of geography. More often than not, geography drives history and if you don't know the geographic background, I can't imagine being able to properly understand history. I suspect that if Napoleon and Hitler had really studied the geography the Soviet Union, they would not have been quite so eager to invade its heartland. By glancing at a map, one can see that Hitler's armies couldn't have hoped to occupy such an immense and physically harsh land. As an example, in 1943, when Hitler's forces were knocking on the gates of Moscow and Leningrad, Soviets in Novosibirsk a couple thousand miles to the east, were building an opera house. They were oblivious to a war going on. So geography drives history.

—Gilbert M. Grosvenor

Geography is not an easy subject to teach. It demands specialized training; and this, or course, is part of the problem. We know that...a survey of teachers teaching geography showed only 10 percent of them had majored in geography, 30 percent had minored in it, about the same number had just one or two geography courses, and as many as 30 percent had never had a single college geography class! So it makes it very difficult for many of them to adequately teach it. You can't teach what you don't know.

—Gilbert M. Grosvenor

As for integrating geography...all subjects can benefit from the use of the geographic perspective—not to push out other subjects—but to enhance them, to improve overall learning. Novels and plays have settings, even paintings and music often have geographic settings. Why not use real-world problems of time and distance, latitude and longitude, to help teach math skills? I would use maps in every history or current events discussion, or lesson about cultures, or languages, or politics.

—Gilbert M. Grosvenor

I can't imagine trying to grasp the meaning of current events—events that involve people and cultures, environmental problems, political drama, natural disasters—without reference to location, distinctive characteristics of the places involved, and their relationships to other places. Without a spatial reference—a geographic perspective—current events, or historical events, for that matter, are just a confused jumble of unrelated pieces. I would let students see where things are located, where events took place, so that they can better understand how things fit together, how things work.

—Gilbert M. Grosvenor

The good geography teacher can make a pretty solid case that you can't teach literature, say English literature, without a knowledge of geography. How in the world is a child supposed to understand *A Tale of Two Cities* if he doesn't know where Paris is, if he doesn't know where London is, that the English Channel and a world of cultural differences lie between them—if he has no idea of the geography of the area on the eve of the French Revolution? Dickens' novel is great literature, with a message that may be lost if students don't understand geography.

—Gilbert M. Grosvenor

Japan is an intriguing nation, a culture vastly different from our own, a country that we are deeply involved with. Let's take this right back to the core concepts of geographic education. Japan's location is across the vast Pacific...seven time zones away from our West coast—it's Tuesday there when it's Monday here! It's much... closer to China and the Soviet Union than it is to the U.S. It's an island nation—I'm describing place now. It's mountainous, it's small in area. In fact...it's about the size of California, but it has fully half the population of the U.S. And it's prone to earthquakes. Also, and this is important, it has few natural resources, like oil.

If we have an idea about the characteristics of Japan—and we would also have to include an understanding of the rich culture, the people, the homogeneous population—it's a complex society. But along with describing aspects of place, we can look at how the people of Japan have interacted with their environment. As an island nation, Japan is tied heavily to the sea—for food, for transport. Because there is not much area and a large population, the land is intensively used, so Japan has large cities, and not much room for agriculture. To cope with the threat of earthquakes,

they have become world leaders in the design of buildings and homes to withstand earthquakes. And the people have made their nation, in spite of a lack of natural resources, into perhaps the top economy in the world, in terms of competitiveness. Someone going to Japan should understand the critical aspect of movement as they relate to its people. Without enough natural resources at home, Japan has developed extensive trading relations with the rest of the world, especially with the United States. They import raw materials and food for their population, and export sophisticated products and technology—that's movement.

To give an example of the concept of region, I would tell students that Japan is a part of a region known as the Pacific Rim, a dynamic region of growing economic strength, as well as one that has nations of many differing forms of government. This aspect of the Pacific Rim region makes the area open to potential conflicts between neighboring nations. So Japan and the U.S., which...is also a part of this region, both have a vital interest in changes taking place in it....What I hope I've shown is the way in which the geographic perspective can help to organize the discussion of a nation like Japan, to provide a framework for asking questions about places on earth, and the relationships of those places to the people who live in them. That's the beauty of geography.

—Gilbert M. Grosvenor

The physical-cultural (or holistic) environment is...the environment as one person sees it, as other people see it, and as it really is. The examples of differences of perception are legion. To cite some:

- In selecting the site of the D-Day invasion of France in World War II, the Allies and Germans looked at the terrain in the same general area and came to different conclusions.
- The Mormons in the mid-nineteenth century perceived the land lying between the Great Salt Lake and the Wasatch Mountains as a good location for settlement and irrigation agriculture; other pioneers, emigrating from the forested and humid east of the United State or from Western Europe, passed through the same area and saw nothing but useless desert.

—Marvin Gordon

The worst famine in the history of man occurred in Communist China between 1958 and 1961. Most people are not aware of this tragedy, in which some 30 million people died.

Why do famines occur? How can they be prevented? It is simplistic to suggest that modern agricultural research and development (e.g., the Green Revolution or bigger or better types of machines) can solve the problem for the Third World. Neither will it do to follow the political tack and think that only a more suitable distribution of farm land will cut the Gordian Knot.

Important as these facts may be, a more holistic appraisal of agriculture in both the developed and the Third Worlds are needed. Geography can help provide the student with a much more informed and incisive view of food availability, the problems associated with it, and the precarious balance between people and food. With all their vaunted yet troublesome surpluses, why can't the developed nations supply enough food to the starving populations of the Third World?

Economics and politics surely play important roles in this regard, but to understand the situation with somewhat more critical insight, one must also consider such other factors as social and ethnic structure, accessibility, problems of acculturation, demographic trends, and regional organizations and function. These are all subjects with which geography is concerned in a holistic sense.

As for population, students should know why density data (the people per square mile measure) are of little use and can indeed be misleading in making regional or international comparisons. They should also know why these figures are so often cited as being meaningful.

They should be aware of differential growth patterns; why religious or governmental policies do not always seem to be effective (compare, for example, very high growth rates in Roman Catholic countries of Central America with very low growth rates in Roman Catholic countries in Western and Eastern Europe); and what problems are created by major migration streams such as movements of Latin Americans to the United States or some Middle Eastern-North African groups into Western Europe.

The social, politically and economic impact of growth also must be assessed. What exactly does it mean to West Germany if its population is decreasing at the rate of 100,000 per year or that the annual population increment for Bangladesh runs in the millions?

—Marvin Gordon

As for use and misuse of the environment, students require a basic understanding of physical phenomena to determine the proper or improper adaptation of humans to a particular area or region. Armed with this information, they are in a better position to evaluate the problems posed by forest overcutting, accelerated erosion, acid rain, water and air pollution, or the greenhouse effect.

—Marvin Gordon

Many installations depend on the technology to plan their energy models and determine locations for placement of solar panels and wind farms. We couldn't get information on parameters—power lines, transformers, communication lines, wind potential, land use and structures on our projects without GIS [Geographic Information Systems] technology. It's necessary for everyone to do their jobs well.

— John Trudell

It is vital that today's students understand that many of the great problems of the contemporary world such as hunger, starvation, food distribution, overpopulation, resource division and depletion, energy consumption, air and water pollution, and social and political revolution are directly related to the human perception and utilization of the natural environment.

—Randall C. Anderson

One of geography's foremost objectives is to continually direct students' attention to human society's modification of the earth's environment and to the relationships that exist between human behavior, culture, and the natural habitat. At all grade levels, geography must emphasize that human society changes its environment in a variety of ways and continues to modify and reconstruct the habitat of every highly populated global region. Students must understand that the effect of man's impact on this natural environment has been greatly increased not only by industrialization and the revolution in energy use, but by the rise in human population that has resulted from the increase in productivity.

—Randall C. Anderson

In its broadest sense, geographic education involves the study of the earth and how it is used by humans. Studies in geography should contribute to a broad general education in a manner that combines both local curriculum objectives and the major objectives of geographic education. Geographic education should incorporate the rich and varied life experiences of the students into an examination of local, regional, national, and international issues.

—Walter G. Kemball

Broad categories of geographic skills include:

- *Field Study*—observe, describe, record, collect, classify, and report on primary data gathered outside the classroom
- *Maps and Globes*—interpret and present information from a variety of maps, globes, and gazetteers
- *Charts and Graphs*—interpret and present information from a variety of graphs, tables, and charts
- *Photographs, Pictures, and Images*—identify, describe, and interpret pictures, regular photographs, air photographs, and other remotely sensed images
- *Models*—interpret and present information from diagrams, scale models, flow charts, simulations, and sample studies.

—Walter G. Kemball

Who we are cannot be separated from where we're from.

—Malcolm Gladwell

Keywords: #Quotes #Quotations #Education #School #Teacher #Teaching #Reference #college #learning #research #students #wisdom #geography #earthscience #geology #topography #maps #cartography #socialstudies #geographyquotes