



Roper Public Affairs



**NATIONAL
GEOGRAPHIC**

Education Foundation

Final Report

National Geographic-Roper Public Affairs 2006 Geographic Literacy Study

Prepared for:

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I. Introduction

A. Purpose of the Poll

The National Geographic – Roper Public Affairs 2006 Geographic Literacy Study assesses the geographic knowledge of young American adults between the ages of 18 and 24. The survey also asks respondents how much they think they know about geography and other subjects, and their views on the importance of geographic, technological and cultural knowledge in today's world.

The 2006 study is the latest in a series of surveys commissioned by the National Geographic Society, with the most recent previous wave being conducted in 2002. Past surveys found that Americans between the ages of 18 and 24 have a poor grasp of geography skills and knowledge. In the four years since the last survey, the world has witnessed significant events including the Iraq War and the Darfur crisis in Sudan. In the past year and a half alone, we have seen the power and the aftermath of natural disasters including the Indian Ocean tsunami, the earthquake in Pakistan, and Hurricane Katrina.

B. Geographic Literacy

This survey was designed to test the geographic skills and knowledge of young adults. Three kinds of questions are used to gauge geographic know-how. First, there is a series of questions on factual knowledge of important events and issues in the news. In this year's survey, these questions cover topics such as population sizes and growth, trade, and natural disasters. Second, a map of a hypothetical location is used to test respondents' skills in basic map reading. Third, a set of actual maps – three international and one of the continental United States – are used to gauge respondents' ability find specific countries regularly in the news and significant natural landmarks. Combined, the 2006 National Geographic study allows a look into young Americans' attitudes toward and capabilities in geographic knowledge – essential tools for living and succeeding in an increasingly interconnected world.

C. Methodology

The National Geographic-Roper Public Affairs 2006 Geographic Literacy Study assesses the geographic knowledge of young adults in the continental United States. In total, 510 interviews were conducted with a representative sample of 18- to 24-year old adults in the continental United States, using an in-home, in-person methodology.

Interviews were conducted from December 17, 2005 to January 20, 2006.

Interviews lasted an average of 26.8 minutes.

A full description of the sampling methodology and procedures and a copy of the questionnaire used in the study are provided in the Appendix.

D. About This Report

The findings in this survey cover 510 respondents between the ages of 18 and 24. The terms “young adults” and “young Americans” refer to this group. The margin of error for the total sample is +/- 4.4 percentage points at the 95% confidence level.

All differences noted between any subgroups (e.g., respondents of different education levels, genders, those who do vs. do not use the Internet for news, those who do vs. do not travel internationally, etc.) are also significant at the 95% confidence level.

II. Executive Summary

A. Highlights

Americans are far from alone in the world, but from the perspective of many young Americans, we might as well be. On this survey, most young adults between the ages of 18 and 24 demonstrate a limited understanding of the world beyond their country's borders, and they place insufficient importance on the basic geographic skills that might enhance their knowledge. In this survey, young Americans answer about half (54%) of all the questions correctly. But by and large, majorities of young adults fail at a range of questions testing their basic geographic literacy.

There is some good news. For instance, respondents have a fairly good understanding of how to use a map for simple navigation tasks, and many can say on which continents different countries and significant natural landmarks are found. They accurately recall a number of timely facts, such as the Asian origins of the current strain of avian influenza.

However, survey results show cause for concern. Six in ten (63%) cannot find Iraq on a map of the Middle East, despite near-constant news coverage since the U.S. invasion of March 2003. Three-quarters cannot find Indonesia on a map – even after images of the tsunami and the damage it caused to this region of the world played prominently across television screens and in the pages of print media over many months in 2005. Three-quarters (75%) of young men and women do not know that a majority of Indonesia's population is Muslim (making it the largest Muslim country in the world), despite the prominence of this religion in global news today. Neither wars nor natural disasters appear to have compelled majorities of young adults to absorb knowledge about international places in the news.

Also striking is young Americans' ignorance of how the United States fits into the wider world. Majorities overestimate the total size of the U.S. population and fail to understand how much larger the population of China is. Three-quarters (74%) believe English is the most commonly spoken native language in the world, rather than Mandarin Chinese. Although 73% know the U.S. is the world's largest consumer of oil, nearly as many (71%) do not know the U.S. is the world's largest exporter of goods and services – half think it's China.

Such lack of geographic literacy shows up closer to home, as well. Half or fewer of young men and women 18-24 can identify the states of New York or Ohio on a map (50% and 43%, respectively).

Moreover, their lack of knowledge does not seem particularly alarming to many young Americans. Half think it is "important but not absolutely necessary" either to know where countries in the news are located (50%) or to be able to speak a foreign language (47%) – and six in ten (62%)

young Americans cannot speak a second language fluently (38% report being able to speak one or more non-native languages “fluently”). Indeed, young adults are far more likely to say speaking a foreign language is “not too important” (38%) than to say it is “absolutely necessary” (14%).

On a positive note, however, young Americans have access to a potentially important tool for improving geographic knowledge and understanding: the Internet. Eight in ten (80%) young adults have been on the Internet within the past month, and majorities say computer and Internet skills are “absolutely necessary” in today’s world (60% and 56%, respectively). This is significant because use of the Internet to follow news about current events worldwide is positively associated with young Americans’ performance on the quiz. While still small (27%), the percentage of young adults who turn to the Web for world news has more than doubled in just the last four years (11% in 2002).

Taken together, these results suggest that young people in the United States – the most recent graduates of our educational system – are unprepared for an increasingly global future. Far too many lack even the most basic skills for navigating the international economy or understanding the relationships among people and places that provide critical context for world events.

B. Noteworthy Results

What Young Americans Know About the World

- Despite near-constant news coverage of conflict in the Middle East, young Americans have a **weak knowledge of the geography of this region**. Six in ten (63%) cannot find Iraq or Saudi Arabia on a map of the Middle East, while three-quarters (75%) cannot find Iran or Israel. In fact, 44% cannot find even one of these four countries.
 - Results are linked to educational attainment: Young Americans with college experience are nearly four times as likely as those with only up to a high school education to be able to find all four of these strategic countries (23% vs. 6%).
- Other **hot spots in the news** around the world also **fail to register** with 18- to 24-year-olds...
 - Nine in ten (88%) cannot find Afghanistan on a map of Asia.
 - Sizeable percentages do not know that Sudan and Rwanda are in Africa (54% and 40% answer incorrectly, respectively). In fact, 20% place Sudan in Asia and 10% put it in Europe.
 - Seven in ten (70%) cannot find North Korea on a map, and two-thirds (63%) do not know its border with South Korea is the most heavily fortified in the world.
- ...Even **natural disasters appear to have limited impact** on young Americans' awareness of the world.
 - Only a third (35%) correctly choose Pakistan from four possible choices as the country hit by a catastrophic earthquake in October 2005, killing over 70,000 people;¹ 29% think it was in Sri Lanka – these respondents are likely confusing the earthquake with the December 2004 tsunami.
 - Two-thirds (67%) can find Louisiana on a U.S. map and half (52%) can find Mississippi – leaving a third or more who cannot find these states, in spite of months of intensive media coverage of the 2005 hurricanes and their aftermath.
 - Moreover, half (50%) cannot find New York State, even though it is the third most populous state in the union, after California and Texas.
- Seven in ten (69%) young Americans can find China on a map – it is one of the few recognized countries outside North America. Yet even with a country as economically and politically dominant as China, young Americans have **a number of misconceptions about China**.

¹ The death toll from the Pakistan earthquake cited here was correct at the time this survey was fielded.

- Although a plurality (45%) says China’s population is only twice that of the U.S., it is actually four times as great.
 - Even when quizzed via a multiple choice format, few (18%) know Mandarin Chinese is the most widely spoken native language in the world; 74% say it is English;
 - Half (48%) think China – and not the U.S. – is the world’s largest exporter in dollar value.
- Young Americans appear to stick close to home, reporting **limited contact with other cultures outside the U.S.**
 - Three-quarters (74%) have traveled to another state in the past year, but seven in ten (70%) have not traveled abroad at all in the past three years.
 - Six in ten (62%) cannot speak a second language “fluently.”
 - Nine in ten (89%) do not correspond regularly with anyone outside the U.S.
 - Only two in ten (22%) have a passport.

Geographic Literacy: Skills and Attitudes

- Half say **map reading skills are “absolutely necessary”** in today’s world.
- Many can follow through on a functional level. On this survey, majorities of young adults can use a map for simple navigation tasks.
 - Three-quarters (76%) can find a port city on a fictitious map, based on indicators such as the convergence of roads and location on the waterfront.
 - Two-thirds (66%) recognize that the direction from Japan to Australia is south.
- Although they have some functional skills, some young Americans lack the basic practical skills necessary for safety and employment in today’s world.
 - One-third (34%) would go in the wrong direction in the event of an evacuation.
 - As many – one-third (32%) – would miss a conference call scheduled with colleagues in another time zone.
- Yet while many young Americans **know how to use a map, this doesn’t mean they know more about their country and the world.**
 - 21% say it’s “not too important” to know where countries in the news are located.
 - Young Americans are not consistently able to identify countries and significant natural landmarks around the world.
 - 38% consider speaking another language to be “not too important.”
 - Language skills are seen as no more important now than they were in the 2002 study (39% “not too important”).
- Yet **technological skills are seen as more essential than ever.** Majorities say computer and Internet skills are “absolutely necessary.”
 - Eight in ten young adults have been online within the past month.

- The percentage who use the Internet for news on current events around the world has more than doubled since 2002 (from 11% in 2002 to 27% in 2006).
 - This increased use of Internet news appears to have occurred without a drop in the number using more traditional media.
- Young Americans who go online for news about worldwide current events, and those who use two or more different news media demonstrate a greater knowledge of geographic issues.

C. Factors Correlated with Better Performance

Geographic Skills Stronger Among Those with Higher Education

Throughout the survey, the more education respondents have, the more likely they are to answer questions on geographic literacy correctly. Young adults with at least some college education are better informed than those with up to a high school diploma only, and those who are currently studying know more than non-students. People with college experience answered an average of 33.4 questions correctly (out of a possible 53), compared to 24.1 for people with up to a high school education and 28.6 for all 18- to 24-year olds. Likewise, students answered an average of 31.4 questions right, versus 26.5 for non-students.

This difference between high school and college educated respondents is not simply a reflection of age. Age is less of a factor than might be expected, with no significant difference in overall performance between 18-20 year olds and 21-24 year olds (averaging 27.6 and 29.5 correct answers, respectively). When looking for ways to explain how much people know, education is a much stronger and more consistent predictor of geographic knowledge and awareness than age.

Going Online to Get News is Correlated with More Geographic Know-How

Internet usage among 18- to 24-year-olds is higher now than in the 2002 poll (80%, up from 60%), and more than twice as many now turn to the Internet for news about current events around the world (27%, up from 11%). Although Internet use spans this age group, young Americans who specifically use the Internet for news about global events are much more likely than the average to have at least some college education (72%), and 55% are currently full-time students.

Moreover, using online news is correlated with better performance even among better educated people. Among people with at least some college education, 40% use the Internet to access news from around the world (versus 14% of those with up to a high school education). This group performs significantly better on this survey (averaging 36.8 correct questions) than college-educated respondents who do not read online news (average 31.2 correct).

Two Media Sources are Better than One.

The Internet appears to be supplementing, rather than replacing, traditional news sources like television. And the greater the number of media sources people use for news, the more they know about geography. Throughout the survey, respondents who use two or more media sources give the right answer more often (averaging 31.6 correct answers) than those who only use one news source (26.2). More avid news gatherers (2+ sources) are also more likely to:

- Have at least some college education (60% vs. 38% of those using one source);
- Have a passport, and have used it to travel abroad within the past three years.

People Who Say They Know More About Geography...Do Know More

When asked to evaluate their own knowledge of geography versus that of the average person, young Americans who say they know “more” than the average person – and who thus appear to

have a relatively greater interest in geography – do better on this survey. Young adults who say they know “more” about geography answer an average of 33.8 questions correctly (vs. 28.6 for all 18- to 24-year olds).

There is also a significant relation between quiz performance and owning maps *other than a street map*. Map owners, who tend to be more educated than those without maps, do better on questions using a map of a hypothetical location, as well as on finding real locations on U.S. and international maps.

Young adults who have taken a course dedicated to geography in middle or high school are more likely than those who haven’t to say they know “more” than others about geography (34% vs. 22%), and they tend to go online more often (86% vs. 75%).

Men Outperform Women, Despite Education Parity

As in the 2002 National Geographic survey, young men answer more questions correctly than young women do, despite both groups having very similar education levels and recent Internet access. Women place more importance on Internet and foreign language skills, but they say they know “less” than average about geography (45%, vs. 36% of men).

From the total of 53 factual questions, men got an average of 30.2 answers right, versus 27.0 correct for women. Looking at specific types of questions, there is no significant difference between women’s and men’s performance on questions requiring map reading skills, and they give similar answers – both right and wrong ones – on a majority of the factual questions. Yet men score better on matching countries with their continent, and on finding countries on the Asia, Middle East and world maps. For instance, 17% of men get all four countries included in this survey on the Middle East map right, compared to 11% of women.

International Travel and Language Skills Matter

Three in ten (30%) young adults have been abroad at least once in the past three years. These international travelers are also more likely than the average to have traveled frequently (5+ times) within the U.S. (28%), to have at least some college experience (61%), and to be a full-time student (43%). This experience and interest in other countries and cultures appear related to geographic literacy, as travelers get an above-average 31.1 questions correct.

Recent Family Immigration Affects Results

Young adults who are either the children of immigrants or immigrants to the U.S. themselves tend to answer fewer questions correctly, compared to respondents whose families have been in the country longer. Young adults who immigrated and first-generation Americans get an average of 25.1 questions correct, compared to 29.5 correct answers among later-generation residents. Yet new and first-generation residents also show different priorities – not surprisingly, they are more likely to profess fluency in second languages (74%, vs. 28% of later-generation Americans), and they place greater importance on the value of speaking foreign languages in today’s world (25%, compared to 12% of later generation Americans).

III. Detailed Findings

Americans are far from alone in the world, but from the perspective of many young Americans, we might as well be. Most young adults between the ages of 18 and 24 demonstrate a limited understanding of the world beyond their country's borders, and they place insufficient importance on the basic geographic skills that might enhance their knowledge. In this survey, young Americans answer about half (54%) of all the questions correctly. But by and large, majorities of young adults fail at a range of questions testing their basic geographic literacy.

This study was specifically designed to test the knowledge and abilities of 18- to 24-year-olds. First, participants were asked to rate the importance of a number of skills – and their own abilities – on map reading and geography, using technology and speaking other languages. Respondents were then asked quiz-type questions on a range of issues in the news, including energy, trade, climate and current events. Using a map of a hypothetical location, young Americans were asked questions about direction and geography. The survey also included a series of questions asking respondents to identify the location of a number of states, countries, and significant natural landmarks using four different outline maps without place names. The survey concluded with a section of demographic questions.

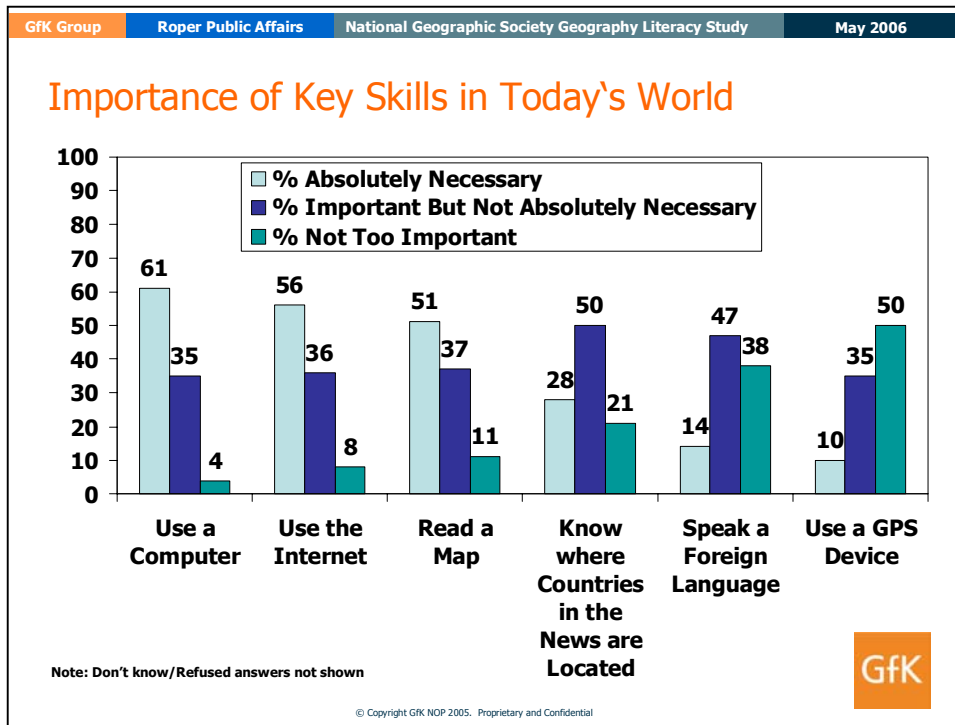
A. *Attitudes Toward Geography*

1. Importance of Basic Geographic Skills

Young Adults Say Map Reading Skills are Necessary

Most young Americans say map reading is an important skill to have. Half (51%) of 18- to 24-year-olds say the ability to read a map is “absolutely necessary” in today's world, up from 43% in 2002, and another 37% currently say it is “important but not absolutely necessary.” One in ten (11% “not too important”) downplay the importance of map reading.

Respondents who say map reading is “absolutely necessary” are more likely than those who think it's “important” to rate their own skills in geography more highly than the abilities of the average person (35% vs. 21%, respectively, say they know “more;” see Section 2, below). Moreover, young adults who consider map reading a “necessary” skill are better able than those who say it is “important” to complete correctly map reading exercises such as locating a port (84% correct vs. 72%, respectively) or to identify a direction in which they should evacuate in the event of a hurricane (72% vs. 62%) (see Part C, Section 1). But this advantage is not overwhelming; overall, respondents in both groups fare about the same on this survey.



Not only is map reading considered important, but more than three-quarters of young Americans have at least one kind of map in their home or car. The most popular item is a street map or atlas of the area where they live – overall, half (48%) own this item. Around a third have a U.S. map (38%) or a world or U.S. atlas (31%). Fewer than one in five have a world map (19%), a globe (15%) or map for outdoor recreation (14%). Just 6% say they have a Global Positioning Systems (GPS) device. One in five (22%) don't have any of these.

Young adults who own at least one map *other than a street map* tend to perform significantly better overall on this survey than those who do not (averaging 31.1 vs. 24.8 correct answers, respectively). Map owners do better on linking places with their continents, navigating via a hypothetical map, and finding countries and landmarks on each of the maps. However, the results also likely reflect map owners' higher education level than that of those who don't possess maps or atlases (56% vs. 35% have at least some college, respectively).

Although relatively few young adults already have a GPS device, about half are receptive to its usefulness, saying it is either "absolutely necessary" (10%) or "important" (35%) to know how to use a GPS device. The other half (50%) say it is "not too important."

Young Adults Agree – Computer Skills Are "Absolutely Necessary"

Computers are a big part of young Americans' lives, and a growing number of 18- to 24-year-olds say being able to use them is "absolutely necessary." Six in ten (61%) say it is "necessary" to be able to use a computer, and nearly as many (56%) say being able to use the Internet is "necessary;" an additional third say these skills are "important" (35% computer, 36% Internet). Fewer than one in ten think computer and Internet skills are not needed. Students are especially

likely to consider computer (71%) and Internet (69%) skills to be necessary. Four years ago, American 18- to 24-year-olds were divided on whether computer skills were “necessary” (49%) or “important” (44%).

Knowing about Foreign Countries and Languages Seen as Less Critical Skills

Slightly over a quarter (28%) say it is necessary to “know where countries in the news are located.” Half say it’s “important but not absolutely necessary” and a fifth (21%) say it’s “not too important.” Attitudes on this measure have changed little since the 2002 poll.

Also similar to the 2002 poll, six in ten (61%) young adults say it’s at least “important” to know a foreign language, though far more say it is “important” (47%) than think it is “absolutely necessary” (14%). Nearly four in ten (38%) consider knowledge of a foreign language to be “not too important.” Among these six skills, speaking a foreign language is seen as the least important to have in today’s world. More women (18%) than men (11%) consider fluency in other languages to be necessary, as do immigrants and first-generation Americans (25%, vs. 12% of later generation Americans).

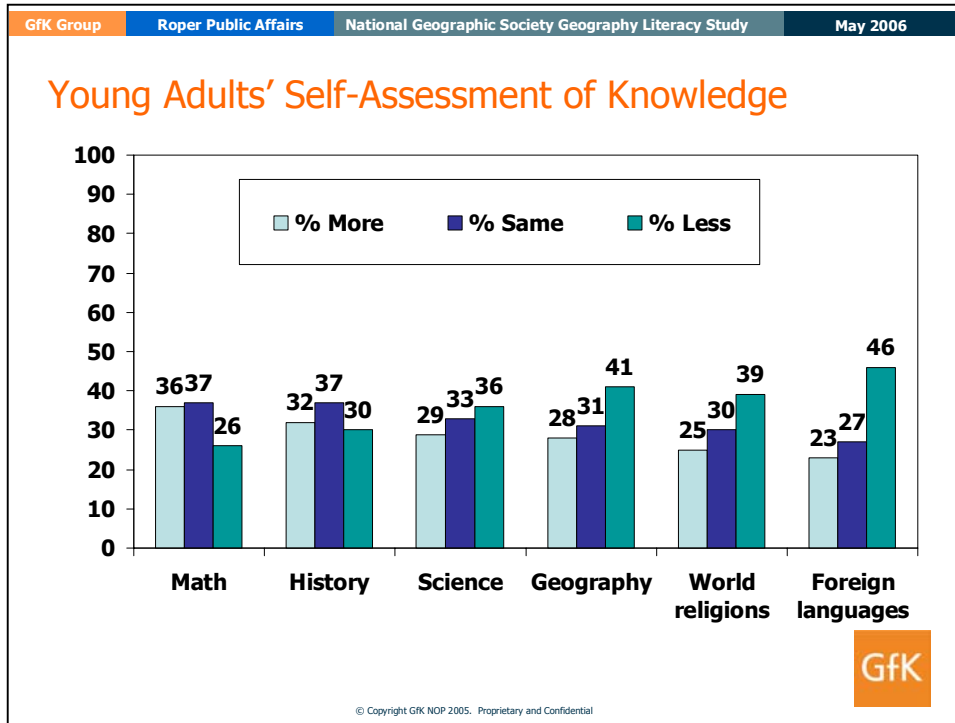
2. Assessment of Own Geographic Skills

How Much Do Young Adults Think They Know about Geography?

Six in ten young Americans say they know “the same” (31%) or “more” (28%) than the average person about geography. Four in ten (41%) think they know “less.” Those who say they know “more” often prove it: this group gets 33.8 questions right, versus an overall average of 28.6. While those who think they know “more” about geography perform better on the survey than those who know “less” (23.9 right) the gap is narrower between those who say they know “more” versus “the same” (30.4) as the average person.

Current students (who may be in high school or college) are more likely than non-students to evaluate their own knowledge as above average in every category except history. Similarly, respondents with at least some college experience – whether they are currently studying or not – tend to say they know more about four of the six topic areas asked about: not just geography but also science, world religions and foreign languages. Conversely, respondents with up to a high school diploma only say they know relatively “less” across the board.

Looking just at gender, men are more likely than women to rate themselves as knowing “more” about math (41%, vs. 32% of women) and geography (32%, vs. 23% of women).



B. Overall Quiz Performance

The average respondent got 28.6 questions right (54%), out of a total of 53 possible correct answers.

Overall quiz performance is better among:

- Young adults who read about worldwide current events and news online (an average of 34.4 questions correct);
- Those who believe they know more than the average person about geography (33.8 correct), compared to those who know the same (30.4) or less (23.9);
- People who use two or more media sources for the news (31.6), versus 26.2 for those who use one media source.
- Students (31.4) than non-students (26.5);
- Men (30.2) than women (27.0);
- People with at least some college experience (33.4) than those with only up to a high school education (24.1);
- People from families long settled in the U.S. (29.5) than immigrants or first generation Americans (25.1).

Do Geography Students Do Better?

Half Took Geography as a Stand-Alone Course in Middle or High School

Half (48%) of 18- to 24-year-olds say they had a class “devoted entirely to geography” at least once between the sixth grade and senior year in high school. As many (49%) did not. Respondents age 21 and over (52%) are more likely than those under 21 (43%) to report having taken this type of geography class in school. There is no measurable difference in the current education level of those who have had a course devoted to geography and those who have not.

Overall, young adults who had a class devoted to geography (34%, vs. 22% of those who did not) are more likely to say they know “more” about geography than the average person. They are also relatively more likely to say they have an above average knowledge of math (44% of geography students, 30% of others) and history (40% and 24%, respectively, know “more”). Those who have not had a class devoted to geography recognize their disadvantage: a plurality (47%) says they know “less” about geography than the average person.

How Geography Class Affects Performance

Encouragingly, young adults who have had a specific course in geography do better than others on a number of questions, including finding locations such as Australia (79% vs. 70%) and the Gulf of Mexico (81% vs. 68%) on a world map, and knowing the Asian origins of avian influenza (71% vs. 61%). While majorities of young people across the board have been online in the past month, those who report taking a specific geography class are more connected than those who have not (86% vs. 75% have been online in the past month). Respondents who specifically studied geography get their news from more media sources – 25% use three or more news sources, compared to 15% of those who have not taken a geography-specific class. They are more likely to own an atlas (39% vs. 26%), U.S. map (45% vs. 32%) and world map (25% vs. 15%).

Yet despite these differences, and perhaps not surprisingly, at the broadest level young Americans who took at least one course devoted to geography demonstrate only a marginal advantage over their peers on certain questions, and overall they perform the same on this survey as the those who did not have a specific geography course (29.2 versus 28.0 correct answers out of 53).

C. *Map Skills*

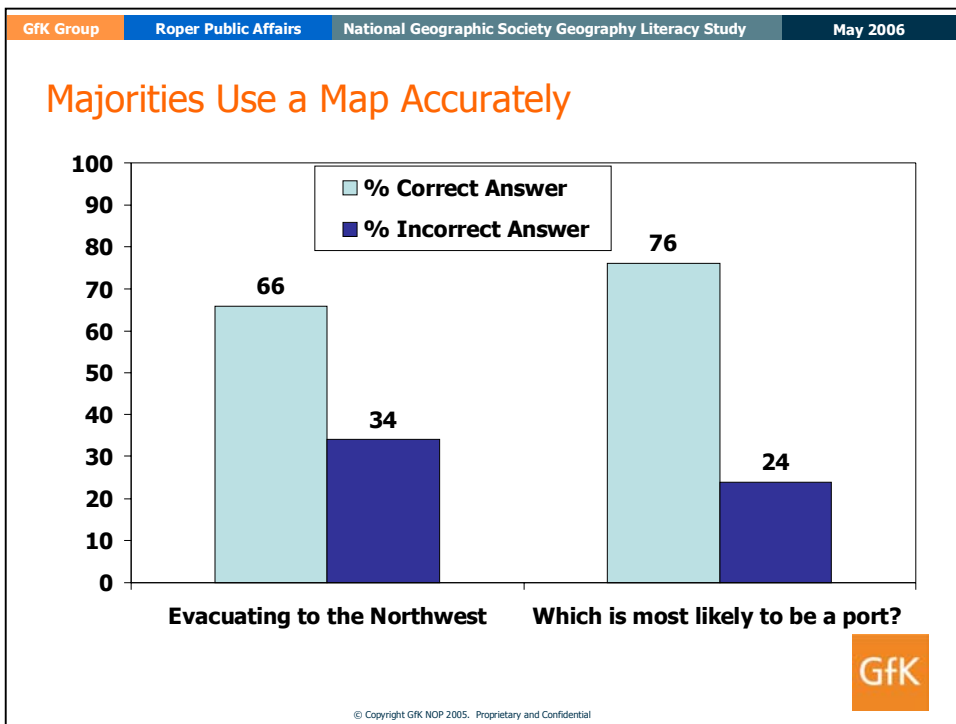
1. **Navigation and Map Reading**

Basic Navigation Tasks Not a Challenge for Two-Thirds or More

Majorities of young Americans show a basic understanding of map features, and can use them to navigate. Shown a map of a hypothetical location and told they would need to evacuate in advance of an oncoming hurricane, 66% of 18- to 24-year-olds are able to identify City K as the city that lies northwest of City C (see Map A, next page). Success rates are higher among:

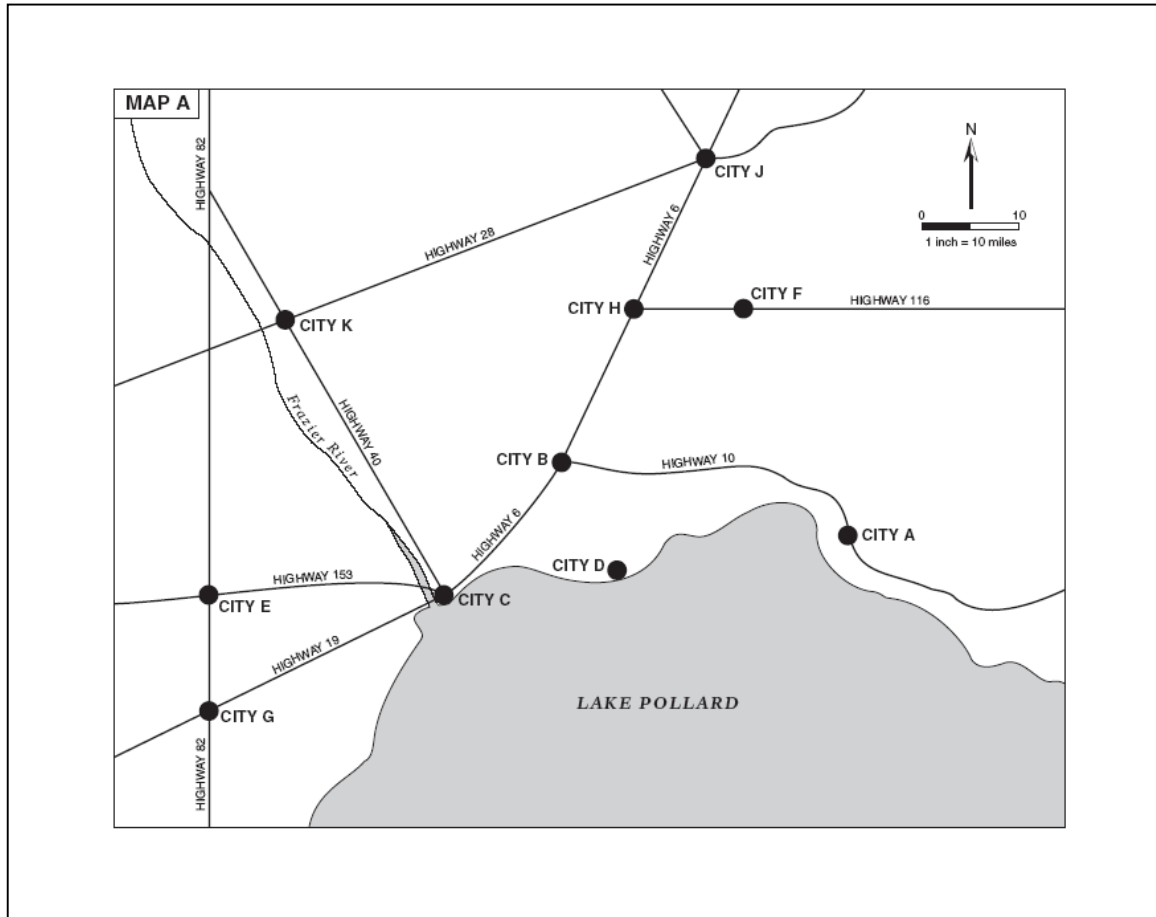
- People who get their news online (79%);
- Those who say they know more about geography (77%);
- Those who say map reading is necessary (72%).

While these results are encouraging, it is still of concern that fully one-third of these respondents would not evacuate to safety because of their inability to read a map and follow basic compass directions.



Map A: Fictional Location

Actual size of map: 8 1/2 x 11 inches



An even greater number – 76% – can use the same map to identify the city most likely to be a port. Considering its position on the lakefront and at the mouth of a river, with four highways converging, substantial majorities across all the main demographic groups identify City C as the best location for a port. This ability is even more pronounced, as with the previous question, among those who consider map reading necessary (84%), get news about worldwide events online (88%), and say they know more about geography (83%) – as well as international travelers (83%).

In a similar question, but using a map of the world (without country names; see Map E, page 27), two-thirds (66%) of respondents know that a ship traveling from Japan to Australia would travel south. Although current students (74% correct) and those with at least some college education (76% correct) do better on this question, majorities of non-students (60% correct) and the high school educated (57% correct) also get it right – a result that likely reflects the relatively high awareness of Australia’s location on the world map.

2. Country Identification

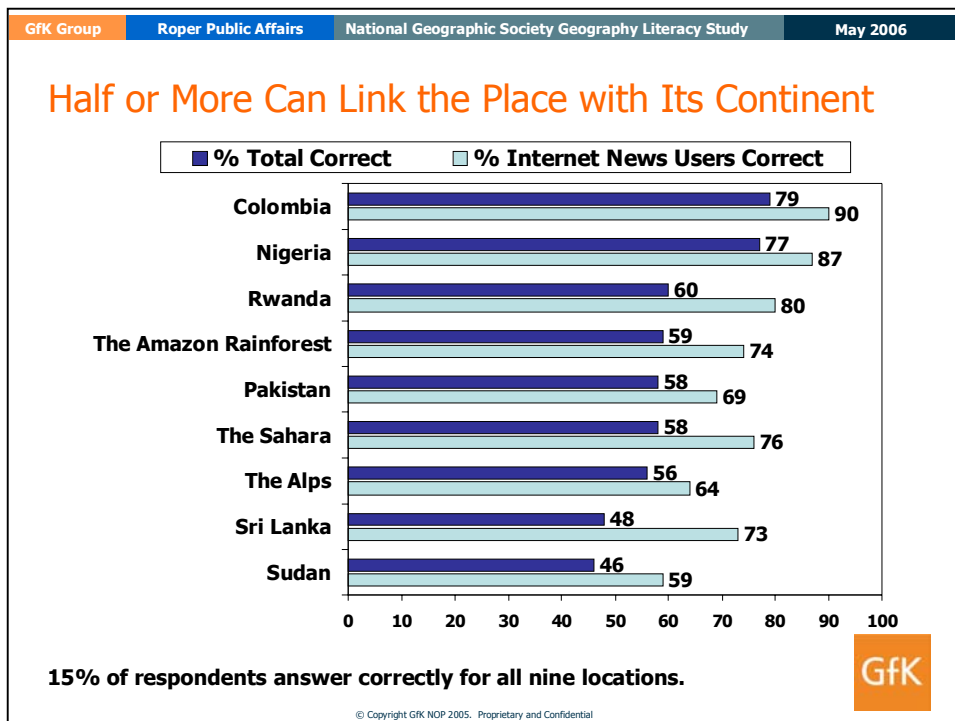
Mixed Results on Linking Well-Known Locations with their Continents

Overall, young Americans are generally able to say on which continent specific countries and locations are found. Using a list of the seven continents, more than three-quarters know on which land masses Colombia and Nigeria (79% and 77%, respectively) are located, and slight majorities are able to associate Rwanda (60%) and the Sahara (58%) with Africa, place Pakistan in Asia (58%) and know the Alps are in Europe (56%).

However, fewer than half know Sri Lanka is in Asia (48%), despite intense media coverage of its devastation by the December 2004 Indian Ocean tsunami. Young adults are no more able to place Sudan in Africa (46%), even with the extensive attention from the media, international organizations and celebrities toward the plight of the millions of refugees in the Darfur region. In fact, 20% of respondents place Sudan in Asia and 10% place it in Europe.

Six in ten (59%) know that the Amazon Rainforest is in South America. Even though the region is vital for not only important for biodiversity as well as for the global climate, fully four in ten young Americans are unable to make this connection. Nearly one in five (18%) think the Amazon is in Africa.

As shown in the graph below, Internet news users are among those most likely to associate all nine countries and significant natural landmarks with the right continent (28% vs. 15% overall).



Other respondents who are more likely to get all of the locations right include:

- International travelers (24%);
- Those using two or more news sources (21%);
- Students (21%, vs. 10% of non-students).

3. Map Locator Questions

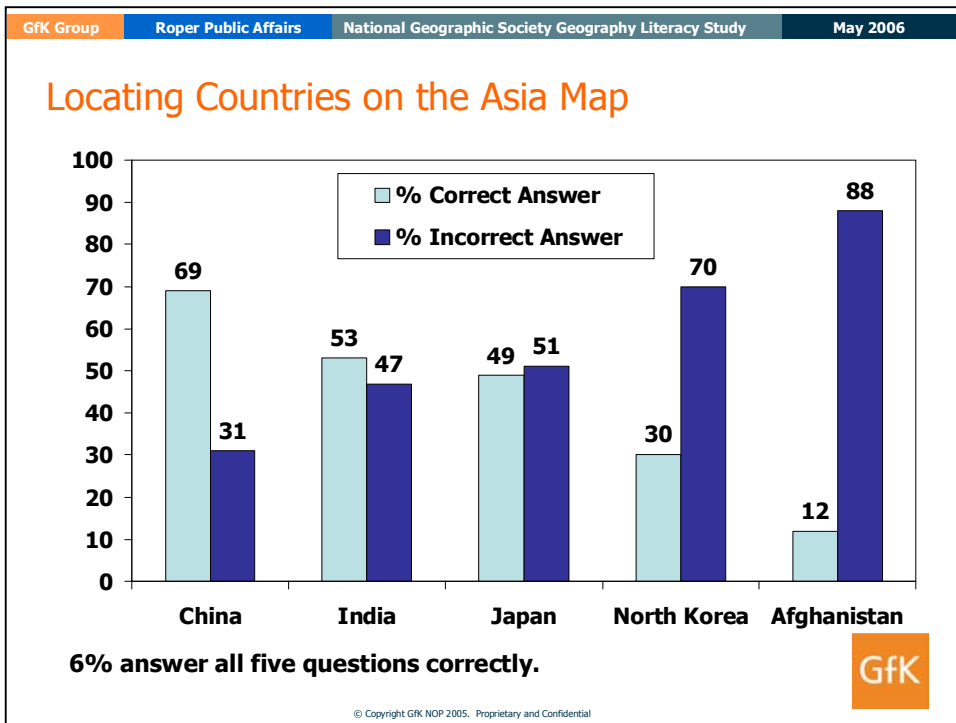
In this survey, respondents were shown three international outline maps – a world map (Map E), a view of Asia (Map B), and a Middle East map (Map C). The maps were not labeled with any identifying names (with the exception of major bodies of water, which were labeled on the Asia and Middle East maps), but numerous geographic locations were labeled with a random number. For each map they were shown, respondents were asked to identify a series of specific countries and geographical features.

While many young adults can decipher a map of a hypothetical location, and are able to associate different countries and physical landmarks with their continents, they are far less able to find places on an actual unlabeled map.

Map Locator Questions: Asia

Seven in Ten Spot China – One in Ten Find Afghanistan

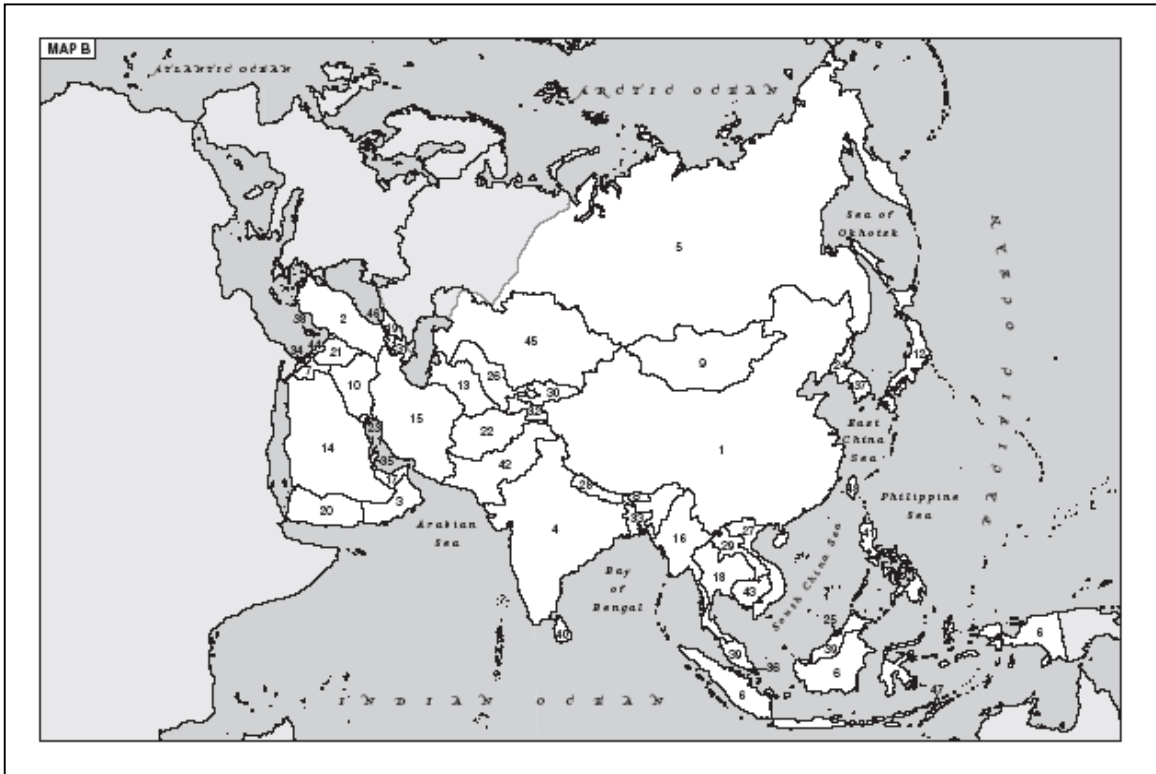
First, 18- to 24-year-olds were asked to use Map B (next page) to find five Asian countries that are often in the news: North Korea, Afghanistan, India, China and Japan. In total, young Americans could find, on average, two of the five countries. Only 6% of young adults can identify all five countries correctly; 21% are not able to find any.



Seven in ten (69%) can find China. Only about half can spot rising economic, political, and nuclear power India (53%) or long-time U.S. ally and trade partner Japan (49%) – both countries with large parts to play in the U.S.'s strategic and economic future.

Map B: Asia Map

Actual size: 11 x 17 inches



If economic importance has a limited impact on awareness, conflict may factor even less prominently. Seven in ten young Americans cannot identify North Korea on the Asia map, even with international attention focused on the tensions over its nuclear capacity. Fully nine in ten (88%) fail to find Afghanistan on this map – even after more than four years (since October 2001) of U.S. and allied military action in that country in pursuit of Osama bin Laden and the Taliban. Fully one in four respondents do not even venture a guess as to the location of these two countries (for each, 25% “don’t know”).

On average, respondents can locate two of the five countries (2.1 correct on average), and as noted just 6% can find all of them. Students (average 2.5 correct) do slightly better than non-students (1.9) on the Asia map. However, just 9% of students can find all five Asian countries; 16% get all five wrong. Internet news users fare similarly (9% get all five right and 9% get all five wrong; 2.8 correct on average). People who say they know “more” about geography (2.7 mean) do better than those who know “less” than the average person (1.6 mean) – but not significantly better than those who know the “same” (2.4 mean).

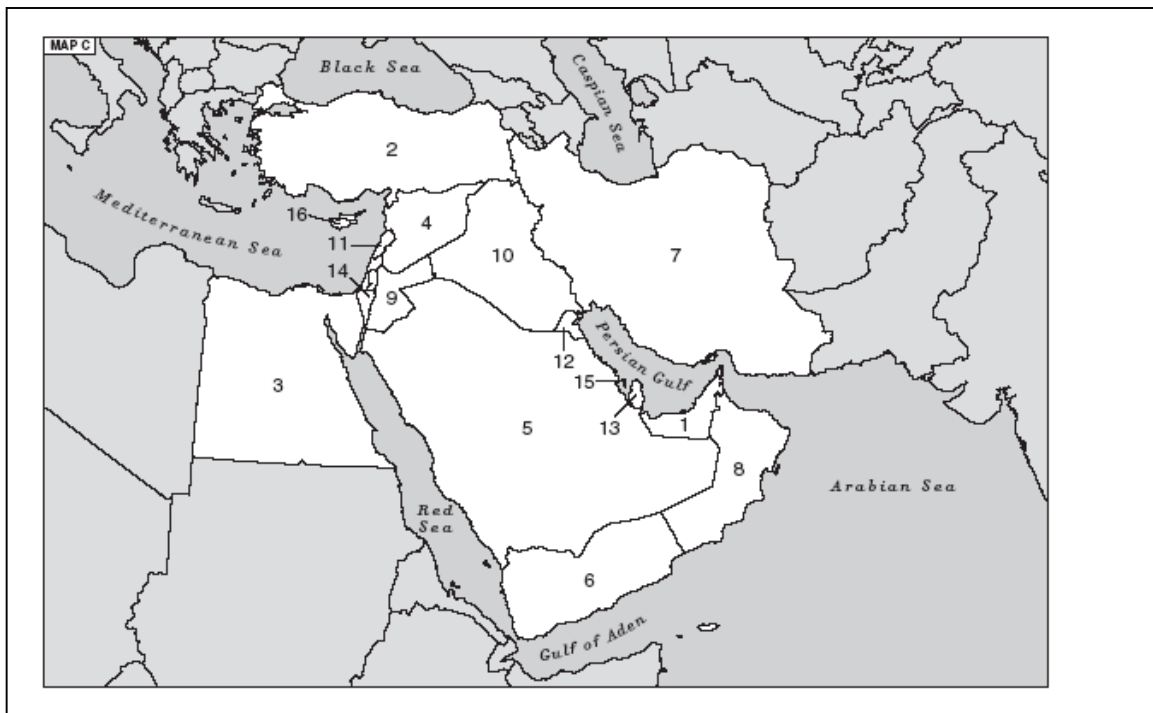
Map Locator Questions: Middle East

Six in Ten Cannot Find Iraq on Middle East Map

Next, respondents were shown a map of the Middle East (Map C, below) and asked to find four countries: Israel, Iraq, Saudi Arabia and Iran. On average, young Americans can find one (1.3) of these four countries. Fourteen percent can point out all four countries correctly, while 44% cannot find any of them.

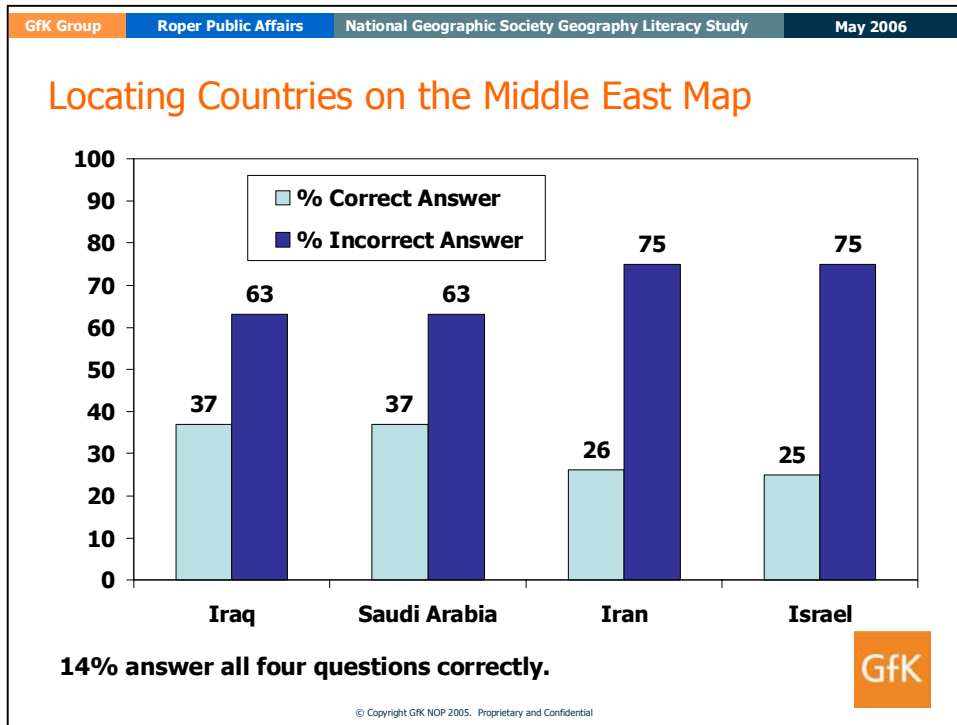
Map C: The Middle East

Actual size: 11 x 17 inches



After three years of war in Iraq, only 37% of young Americans can find Iraq; 63% cannot. As many can – and cannot – identify Saudi Arabia. The result is even worse for Iran and Israel. Only one in four can find Iran (26%) or Israel (25%). Three-quarters cannot find these two countries. Overall, up to one in five say they “don’t know” where these four countries are located (ranging from 16% for Iraq to 20% for Iran).

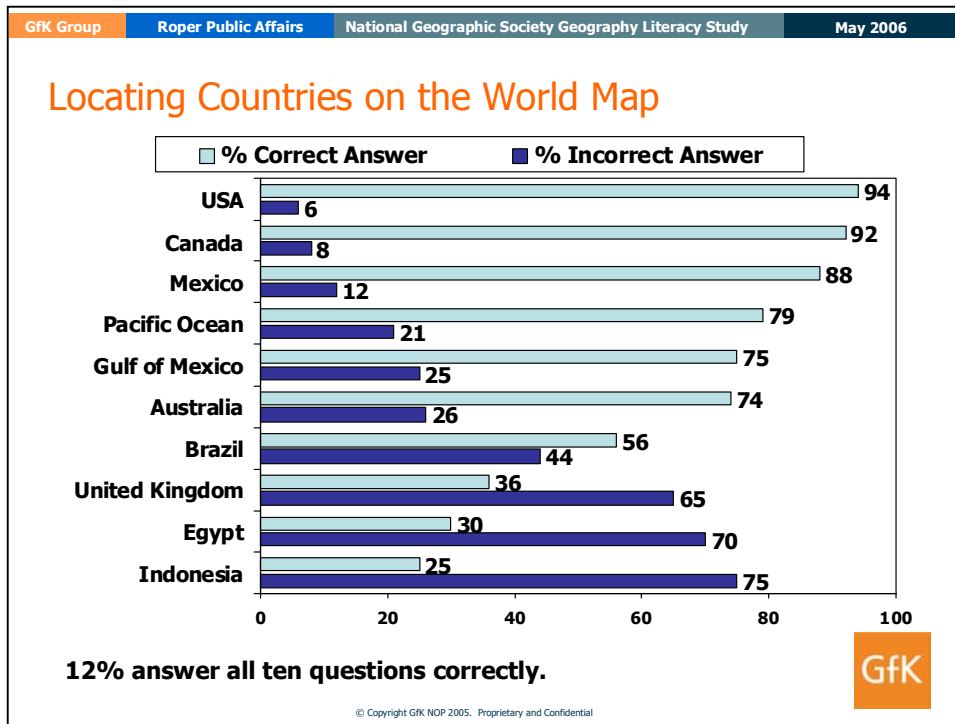
Education makes a difference in young adults’ ability to locate these four countries in the headlines: young Americans with college experience (1.6 correct answers on average) are more likely than those with up to a high school education (0.9 correct) to locate these countries. That said, even the more educated group fares relatively poorly, with less than a quarter of those with a college education able to find all four countries (23%, 6% of those with up to a high school diploma).



People who rate their geographic knowledge as “more” (1.7 correct) or the “same” (1.5) as the average do slightly better than those who know “less” (0.7). People who use two or more news sources (1.5) do marginally better than those who use one news source (1.0).

Map Locator Questions: The World

Asked to identify ten countries and natural landmarks on a world map (Map E, next page), young Americans were able to locate 6.5 of these, on average. About one in ten (12%) are correct on all ten items, and 3% do not get any right.



Pinpointing North America on a Map Is a Breeze

Nearly all (94%) young Americans can find the United States on the world map, and Canada (92%) and Mexico (88%) are nearly as familiar. Wide majorities can find bordering bodies of water including the Pacific Ocean (79%) and the Gulf of Mexico (75%). Trends from 2002 suggest that more young adults can pick out Canada and Mexico (with few signs of change for other countries). However, it is concerning that one in ten of those with up to a high school education cannot identify the U.S., and one in five cannot find the Pacific Ocean.

Places Beyond North America are Less Often Identified

Moving further abroad, three-quarters of young Americans can spot the distinctive landmass of Australia (74%), and over half (56%) identify Brazil, the largest country by far in South America. However, majorities cannot find the U.S.'s closest ally, the United Kingdom (36% correct, 65% incorrect), nor can they find Egypt (30% vs. 70%) or Indonesia (25% vs. 75%).

Map E: World Map

Actual size: 18 x 24 inches

**Education Appears Pivotal in Establishing Global Knowledge**

Overall, students and people with college experience are more able to identify each of these global locations than are those without. In addition, men are better able than women to find Brazil (63% of men are correct, vs. 48% of women), Egypt (38% vs. 23%) and the UK (41% vs. 30%) on the map.

Young adults who use the Internet for news about current events around the world are more likely to pick out all ten locations correctly (23% vs. 12% overall). In fact, 40% of Internet news users know where Indonesia is, 56% can find the United Kingdom off the coast of Europe, and 50% can pick out Egypt. Likewise, respondents who say they “know more” (25%) about geography are much more likely than those who say they know the “same” (10%) or “less” (4%) to match all of the items with their location on the map. Those who report knowing “more” show an above average ability to identify the United Kingdom (55%), Egypt (48%) and Indonesia (44%) on the map.

4. U.S. Political Geography

Young Adults Don't Fare Much Better at Home

Young Americans knowledge of the geography of the United States is only marginally better than their knowledge of other countries around the globe. Each of the participants in this survey was shown a map of the continental United States (Map D, next page) – the same map used in the 2002 and 1988 surveys – and asked to identify seven states. On average, young Americans can accurately locate about half (3.4) of these states. One in five (20%) get all seven right, and just 3% can't find any of these states on the map.

State Identification – U.S. Map

	1988 %	2002 %	2006 %
California	86	89	92
Texas	89	89	92
Louisiana	n/a	n/a	67
Nevada	n/a	n/a	63
Mississippi	n/a	n/a	52
New York	45	51	50
Ohio	36	35	43
Average correct (7 possible)	n/a	n/a	3.4

Nine in ten young adults can find California and Texas, and more than six in ten can find Nevada. Half of 18- to 24-year-olds can find New York State, and half cannot. Only four in ten (43%) can identify Ohio.

After Katrina and Rita, Familiarity with Southeastern U.S. Still Not Complete

The news coverage given to Hurricanes Katrina and Rita last year may have affected awareness of the southeastern portion of the country. Three-quarters (75%) of young Americans can point out the Gulf of Mexico on the world map; both storms tracked through the Gulf before making landfall. Although two-thirds can find Louisiana on the U.S. map and about half can find Mississippi (52%), this means that a third of 18- to 24-year-olds do not recognize where Louisiana is located, 48% can't find neighboring Mississippi, and a quarter can't find the Gulf of Mexico on a world map.

Respondents who say they know "more" about geography (40%) are more likely than those who know the "same" (15%) or "less" than average (10%) to get all seven states right. Students (27%) and those with college experience (28%) are twice as likely as non-students (14%) and those without college (13%) to point out all seven states correctly.

When respondents are wrong, many are at least looking in the right area of the country. Mississippi is often confused with Alabama (11%) or Arkansas (9%). Young adults who can't find New York most often confuse it with neighboring states Pennsylvania (13%) or New Jersey (9%). Respondents tend to relocate Ohio in Indiana (10%), Illinois (7%) or Iowa (5%).

Map D: Continental United States

Actual size: 11 x 17 inches



Two-Thirds Have U.S. Time Zones Figured Out

Calculating differences across time zones poses less of a problem than finding some states. Two in three (68%) know that when it is noon in New York City, it is 9:00 a.m. in Los Angeles. Fifteen percent reverse the calculation, saying it is 3:00 p.m. in L.A. when it's noon in New York. People who say they know more about geography (80%) and those who use two or more media sources (73%) more often get this question right, along with those with some college education (78%), men (74%), and 21-24 year olds (73%).

D. Knowledge of Geography Related to Current Events and Issues in the U.S. and the World

1. Inaccurate Views of U.S.

Most Know U.S. is Leading Petroleum Consumer

The sharp rise in energy prices in 2005 likely brought home to many Americans the cost paid for their energy consumption. As shown in the table below,² young Americans (73%) know that the United States – and not China, Russia, or India³ – is the world's largest consumer of oil. Young Americans with college experience (81%, vs. 65% high school) are more likely to know this answer, as are those age 21 and over (77%, vs. 68% of those under 21).

SHOW CARD

Q. Which of the following countries is the world's largest consumer of oil?

	%
United States	73
<u>Incorrect answers incl. DK (net)</u>	<u>27</u>
China	11
Russia	7
India	6
Don't know	3

Knowledge is also proportionately higher among:

- Internet news users (83%, vs. 71% TV news users);
- Those who use two or more news sources (79%, vs. 67% for one source);
- Those who say they know the same or more about geography (78%, vs. 66% of those who say they know less).

How Many of Us Are There? Majority Overstate Size of U.S. Population...

Nearly six in ten young Americans overestimate the number of U.S. inhabitants, often vastly so. Choosing from four possible answers, three in ten respondents (31%) accurately say the U.S. population falls within the range of 150 million to 350 million, in keeping with the 2002 study. The Census Bureau currently estimates the total U.S. population to be over 298 million. As in 2002, three in ten respondents put the U.S. population at an astounding one to two billion people, and an equal number estimate the U.S. population to be in the range of 750 million to one billion.

² In this report, correct answers are indicated in the tables by bold font.

³ When respondents were shown a card with a list of response options, this is indicated on the tables in this report by the phrase "show card."

Internet news users, people who say they know more about geography, people with higher education, and men are substantially more likely than others to estimate the total U.S. population correctly.

SHOW CARD

Q. Which of the ranges on this card contains the correct population of the United States today? Just read off the letter please.

	2002	2006
	%	%
150 million – 350 million	25	31
Incorrect answers incl. DK (net)	76	69
10 million – 50 million	6	5
500 million – 750 million	28	29
1 billion – 2 billion	30	29
Don't know	12	6

...And Low Ball What Immigration Adds to U.S. Population Growth

While the U.S. population is large and growing, three in four young Americans cannot say how much of this growth results directly from immigration. About one in four (27%) respondents correctly say that 33% of U.S. population growth in 2004 was due to immigration. Of the rest, young adults tend to underestimate the impact of immigration on population growth.

SHOW CARD

Q. In 2004, what percentage of population growth in the U.S. was due to immigration?

	%
33%	27
Incorrect answers incl. DK (net)	73
5%	13
22%	34
54%	10
Don't know	15

2. Misperceptions about China Prevail

Youth Know Where China Is, But Estimate Wrong on How Many People Live There

Seven in ten (69%) respondents are able to pick out China on a map of Asia, making China one of the most recognizable countries tested outside North America. But perhaps related to young Americans' inflation of the size of the U.S. population, many underestimate the relative population of China, the most populous country on Earth.

Provided with a list of four possible answers, nearly half (45%) of 18- to 24-year-olds incorrectly believe China's population is only double that of the U.S. Four in ten (39%) correctly say that China's population is four times that of the United States. Although young Americans with less education are more likely to answer incorrectly (73% wrong), they are not alone. Even students (52%) and those with college experience (50%) are prone to error – half of the people in these groups also get the question wrong.

SHOW CARD

Q. How does the size of the population of China compare to the population of the United States?

	%
China's population is more than four times the size of the population of the United States.	39
Incorrect answers incl. DK (net)	61
China's population is less than half the size of the population of the United States.	4
China's population is about the same size as the population of the United States.	7
China's population is about double the size of population of the United States.	45
Don't know	6

Young adults who more often get the relative size of the Chinese population right include:

- Web news users (57% correct);
- International travelers (50% correct);
- Those who say they know more about geography (50% correct).

Majority Believe English – Not Mandarin Chinese – is Most Common Native Tongue

In another reflection of young Americans' lack of knowledge of the world beyond the U.S., three in four (74%) wrongly believe that English is spoken by more native speakers worldwide than any other language. Fewer than one in five recognizes that Mandarin Chinese is spoken by the greatest number of people as their first language.

SHOW CARD

Q. Which language is spoken by the most people in the world as their primary language?

	%
Mandarin Chinese	18
<u>Incorrect answers incl. DK (net)</u>	<u>82</u>
Russian	2
English	74
Arabic	5
Don't know	1

This knowledge is more common among:

- Young adults with some college education (28% correct, vs. 9% of those with up to a high school education);
- International travelers (29% correct);
- Internet news users (32% correct);
- Those who know “more” about geography (29% correct).

Young Americans’ belief that English is the most common native tongue (as well as the United States’ relative geographic isolation from non-native English speaking countries other than Mexico) may help explain the lack of effort they have personally put into learning one themselves (62% do not speak a second language fluently).

China’s Export Power Overestimated

Although, as shown above, respondents underestimate China’s population relative to that of the U.S., they overestimate China’s export power. From a list of four countries, half (48%) incorrectly say that China is the world’s largest exporter of goods and services as measured in dollar value. Far fewer – 29% – correctly say the U.S. is the largest exporter by value.

This question is one of the most interesting in the survey because some of the most informed respondents get this question wrong. Nearly six in ten among those who say they know “more” about geography (59%) and those using two or more news sources (55%) say China is the largest exporter. Young adults without college experience (34% U.S.) answer correctly more often than their peers with college experience (24% U.S.).



SHOW CARD

Q. Which of these countries is the world's largest exporter of goods and services measured in dollar value?

	%
United States	29
Incorrect answers incl. DK (net)	71
China	48
Japan	17
France	1
Don't know	5

3. Religion and Borders

Uncertainty over India and Indonesia

Despite the importance of Islam in world events, when respondents are asked which of a list of four countries has a majority of Muslim residents, only one in four (25%) young adults correctly name Indonesia. Nearly twice as many (48%) incorrectly say Muslims are in the majority in India. In fact, only 13% of the Indian population is Muslim, while 80% is Hindu, and 7% of Sikh, Christian and other faiths. People with some college experience (29% correct) fare slightly better on this question than those with just up to a high school education (22% correct). International travelers (34% correct) and those who say they know “more” than the average about geography (34% correct) are also more likely than others to answer correctly.

SHOW CARD

Q. In which of these countries is a majority of the population Muslim?

	%
Indonesia	25
Incorrect answers incl. DK (net)	75
South Africa	9
Armenia	10
India	48
Don't know	9

Three-quarters (75%) of young Americans cannot find Indonesia on a world map, despite its being the world's most populous Muslim country, and having been in the news in 2005 for terrorist attacks in Bali, and several human cases of avian influenza, as well as for having sustained the largest loss of life of any country affected by the 2004 tsunami.

Moreover, as shown in the section above, nearly half (47%) of young adults cannot find India on a map of Asia, despite its status as the world's largest democracy and a nuclear power, as well as a top destination for the much-debated outsourcing of technology and customer service jobs from the U.S. Not to mention, India was one of the countries affected by the December 2005 tsunami.

Lack of Clarity on North Korea

When asked where the world's “most heavily fortified border” exists, choosing from a list of four key international borders, only 37% of young Americans correctly point to the border between North and South Korea. More than six in ten get this question wrong, most often mistaking the U.S.-Mexico border (30%) as the most fortified, followed by the Russia-China border (21%).

SHOW CARD

Q. The most heavily fortified border in the world exists between which two countries?

	%
North Korea and South Korea	37
Incorrect answers incl. DK (net)	63
China and Russia	21
United States and Mexico	30
Syria and Lebanon	5
Don't know	7

Men (42% correct), students (44%) and the college educated (48%) more often give the right answer, as well as international travelers (44% correct), those using two or more media sources (44%) and those who say they know "more" (48%) than the average about geography.

This lack of awareness about the Korean peninsula is consistent with the finding, noted earlier, that seven in ten young adults cannot find North Korea on a map. North Korea appears to fall below the radar for most young Americans, despite the ongoing diplomatic crisis over its nuclear capacity.

4. Catastrophes, Climate and Epidemics

Many Unsure Why Hurricane Katrina Was So Devastating to New Orleans

As shown earlier, two in three (67%) respondents can spot Louisiana on a map of the continental U.S., and half (52%) can find Mississippi.

Yet while half or more can pick out these affected locations, there is confusion about the factors that did – and did not – contribute to the severity of the flooding in New Orleans. Given a list of four options, only one-third (33%) of young Americans correctly say that record high flow levels in the Mississippi River were not a significant contributing factor in Katrina’s devastating impact on New Orleans. As many (36%) incorrectly say the disappearance of coastal marshes was not a key factor; experts have identified this as a contributing element to the intensity of the disaster.

SHOW CARD

Q. Which of the following was not a significant contributing factor in Hurricane Katrina’s impact on the city of New Orleans?

	%
The Mississippi River was at record high flow levels	33
Incorrect answers incl. DK (net)	<u>67</u>
Much of the city was located below sea level	9
Flood protection walls failed	12
Protective coastal marshes had disappeared	36
Don’t know	11

Education is again the key factor (41% of the college educated are correct), as is Internet news usage (40%), general Internet access (37%) and saying they know more about geography (45%).

Majority Can’t Place Devastating October 2005 Earthquake in Pakistan

Looking abroad, two-thirds of young Americans do not know that the catastrophic earthquake in October 2005 – which killed over 70,000 people – struck Pakistan. Given a list of four countries, 35% name Pakistan – but three in ten (29%) name Sri Lanka, likely confusing the October 2005 earthquake with the December 2004 tsunami. A separate question finds that many do not know that either Pakistan (42%) or Sri Lanka (52%) are located on the continent of Asia.

SHOW CARD

Q. In which of these countries did a catastrophic earthquake occur in October 2005, killing over 70,000 people?

	%
Pakistan	35
Incorrect answers incl. DK (net)	65
Sri Lanka	29
Japan	20
Mexico	5
Don't know	11

There are more right answers among young adults who use at least two news media sources (41% name Pakistan, vs. 30% among those using one news source).

Six in Ten Know Mexico City Safe from Tsunami

Without the aid of a map, six in ten (62%) correctly say that the inland capital of Mexico City is the least likely of a list of four cities to be threatened by a tsunami.

SHOW CARD

Q. Which city would be LEAST likely to be threatened by a tsunami?

	%
Mexico City, Mexico	62
Incorrect answers incl. DK (net)	38
Honolulu, United States	12
Manila, Philippines	9
Tokyo, Japan	9
Don't know	9

In addition to education and gender, those who answer correctly more often include:

- Internet news users (77% correct);
- International travelers (75% correct, vs. 56% of non-international travelers);
- 21-24 year olds (66% correct, vs. 57% of 18-20 year olds);
- Those who know the same (66% correct) or more (70%) about geography.

Two-Thirds Know Bird Flu Strain Came from Asia

A broad majority – two in three – are aware that the strain of avian flu currently causing concern among world health officials originated in Asia. Men and women, respondents over and under age 21, students and non-students are all likely to give the right answer.

SHOW CARD

Q. World health officials are very concerned about a particular strain of avian flu. Which continent did that strain of flu come from originally?

	%
Asia	67
Incorrect answers incl. DK (net)	33
Europe	7
South America	12
Australia	5
Don't know	9

Years of education does matter (74% correct among those with some college vs. 60% among those with up to a high school education), as does knowing "more" about geography (79%), and using two or more news sources (73%).

E. Demographic Profile

1. Internet Use is Up, Including for News

Eight in Ten are Online

Eight in ten (80%) young Americans have accessed the Internet within the past thirty days; one in five has not. Compared to the 2002 poll (60%), Internet use is up dramatically. While most young adults, from all different backgrounds, have gone online within the past month, some evidence of a digital divide remains. For instance, nearly all 18- to 24-year-olds with at least some college experience (94%) have been on the Internet, compared to two-thirds of those with only up to a high school education (66%). New and first generation Americans are almost twice as likely not to have been online, compared to people from second and later generations (32% vs. 17%).

More Turn to Internet for News About Current Events Around the World

The Internet is not just a widely available source of communication and entertainment, but it is increasingly used by young Americans as a resource for news on current events around the world. While television news – including both network and cable channels – remains the most popular source among these respondents for world news, one in four young adults turns to the Internet. This is double the number who reported using the Internet to keep up with current events in 2002.

Q. Which of the following news sources, if any, do you use regularly to keep up with current events around the world?

	2002	2006
	%	%
Newspapers	38	35
Magazines	10	14
Radio	13	20
Television News (net)	82	81
[NOT ON CARD] If TV News, Ask: Is that Cable or Network News?		
Cable TV News (such as CNN, MSNBC)	43	48
Network TV News (such as NBC, ABC, CBS, FOX)	50	47
Internet/Web	11	27
Don't know	1	2

While the percentage using the Internet for news on world events has doubled, there has been little change in the proportion who read newspapers and magazines, watch television news and listen to the radio now, compared to 2002. More educated respondents are more likely to use newspapers (42% some college, 28% up to high school diploma) and the Internet (40% vs. 14%) to keep up with current events around the world. People with just up to a high school education tend to use only one media source (61%, vs. 41% of those with some college) – and for many, this one source is television.

Four in Ten Play Video Games on Regular Basis

Looking at other uses of computers and electronics, four in ten (41%) young adults between the ages of 18 and 24 play video games such as Xbox, PS2 or a handheld device, and 14% go online to play online games other than casino games. Despite their frequent use of technology, video game players do not show any advantage or edge in their knowledge of geography.

2. Domestic and International Travel

Three in four (74%) young Americans have traveled within the past twelve months to a U.S. state other than the one where they live – and one in five (20%) has done so more than five times. Men (26%), people aged 21 to 24 (24%), and the college educated (26%) are most likely to say they have made five or more trips across state lines.

Thirty percent of young Americans report that they have traveled outside the U.S. at least once within the past three years. One in ten (9%) have traveled abroad three or more times. Seven in ten have not taken an international trip.



One in five (22%) young Americans has a passport; 78% do not. New and first generation Americans (38%) are more likely than others to have a passport, as are those with college experience (28%, vs. 16% of those without).

3. International Links

Six in ten (62%) young Americans report that they can't speak any language other than their native tongue fluently. A quarter (26%) can speak one non-native language, and one in ten say they can speak two or more.

No apparent link emerges between education and language proficiency. Students are no more likely than non-students to be able to speak at least one foreign language fluently, and the college-educated have no greater ability than those with only up to a high school diploma.

What does matter is how recently one's family emigrated to the U.S. Among immigrants and first generation young adults, three-quarters (74%) can speak at least one other language fluently. Among second and later generation Americans, 28% claim fluency in at least one language other than their native language.

One in ten (11%) correspond with someone in another country; most do not have any regular contact with people in other countries. Interestingly, young Americans who are immigrants or the child of immigrants are no more or less likely to correspond regularly with someone abroad, compared to those whose family immigrated several generations ago.

4. Demographic Tables

Age

	%
18-20 (net)	42
18	17
19	12
20	13
21-24 (net)	58
21	13
22	15
23	12
24	18
Refused	1

Education

	2006	2005 Census Estimate
	%	%
Medium low (net)	51	52.19
Less than high school graduate	15	
High school graduate	33	
Technical or trade school	4	
Medium high (net)	48	47.37
Some college	41	
College graduate	7	7.99
High (net)	1	0.44
Post-graduate or professional school	1	
Refused	*	

Family Immigration Status

	2006
	%
1 st Generation (I was, Parents, Sibling net)	14
Other Generation (Grandparents, Great-Grandparents or earlier net)	78
I was the first	6
My child	1
One of my parents	6
One of my grandparents	17
One of my great-grandparents or earlier ancestors	58
(VOL) None in family born in the US	3
(VOL) My sibling	1
Don't know	7

Student Status

	%
Full time student	35
Part time student	7
Not a student	55
(Vol.) Don't know	3

Ethnicity

Q. Do you consider yourself Hispanic?

	%
Yes	18
No	81
(Vol.) Don't know/ Refused	1

Q. Which of the following best describes your race or ethnicity?

	%
White	63
African-American/Black	19
Asian/Pacific Islander [DO NOT READ: INCLUDING SOUTH ASIAN]	2
American Indian or Native American	*
Other	15
(Vol.) Don't know	1

IV. Methodology

A. Population Represented

Men and women aged 18 to 24 in the continental United States.

B. Geographic Coverage

Nationally representative (excluding Alaska and Hawaii).

C. Target Sample

A randomly selected sample was designed to represent the target population nationally.

A total of 510 men and women aged 18 to 24 were interviewed with quotas by age group and by sex.

The assigned quotas reflect the structure of the population in the 18-24 age group.

D. Achieved Sample

<u>Total Age 18-24</u>	510
Age 18-20	213
Age 21-24	297
Males	256
Females	254

E. Sampling and Interviewing Method

A multistage, stratified area probability sample applied down to the Secondary Sampling Unit (SSU) stage (i.e. street/block group or similar classification) was used for this research. For the selection of households, interviewers followed randomly selected, pre-determined interviewing routes with skip intervals. At the household level, quotas for sex and age were applied for respondent selection.

All interviews were conducted face-to-face, in homes.

Respondents were not screened based on their general literacy level or their student status. To ensure a proper proportion of men and women who are students, fieldwork was conducted over the winter holiday period, with most interviews conducted in the evening and on weekends. Guidelines were provided to monitor the proportion of students and non-students in the sample, based on Census data for the target population represented.

F. Interviewing Period

Interviews were conducted between December 17, 2005 and January 20, 2006.

G. Survey Materials

Survey materials included a questionnaire, show cards and maps. Maps were provided by the National Geographic Society.

Several questions were identical to those asked in the 2002 Geographic Literacy Study.

H. Data Processing and Weighting

All data collected were coded, keypunched and edited. All data were centrally tabulated by GfK.

Data were weighted for sample balancing by sex and age.



V. Questionnaire and Field Materials

A. Questionnaire

NOTE: Correct Answers are indicated by bold type.



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Roper Public Affairs Geography Literacy Study GfK NOP
75 Ninth Avenue
New York, NY 10011

QUESTIONNAIRE ID NUMBER: |____| |____| |____| |____|

1-4/

MALE	FEMALE
18-20-----01	18-20-----03
21-24-----02	21-24-----04

6-7/

INTERVIEWER ID NUMBER: |____| |____| |____| |____|

8/ 9/ 10/ 11/

CF #

<input type="checkbox"/>	P <input type="checkbox"/>	S <input type="checkbox"/>	U <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Block <input type="checkbox"/>
12-	13-	14-	15-	16-	17-	18-	19-	20-

TIME STARTED	AM.....1 PM.....2	TIME FINISHED	AM PM	TOTAL MINUTES	
_____	21-24/	_____		_____	26-29/

Hello, my name is [NAME]. I represent a research company called Roper Public Affairs. I am not selling anything. We are taking a ROPER poll about some topics of interest. This survey is for research purposes only and all of your responses will be completely confidential.

[IF NECESSARY: This is a national survey; your household was selected at random.]
 [IF NECESSARY: The length of the survey varies depending on your responses to questions. We generally find that this survey takes about 15 minutes.]

May I please speak to someone in the household between the ages of 18 and 24?

S1 May I confirm your age please?

18-20	1
21-24	2

30/

(CHECK QUOTAS)

[IF AGE 18-24, GO TO S3. IF AGE 25+, PROCEED TO S2 THEN TERMINATE]

S2 [IF NO ONE AT HOME AGE 18-24] In order to achieve a representative sample of Americans, we may need to contact additional people between the ages of 18 and 24. Is there anyone between the ages of 18 and 24 who lives here but is not at home at the moment? [IF YES, ASK FOR DAY AND TIME WHEN TO REACH THIS PERSON]

RESPONSE _____

[THANK AND END]

S3. Record Gender:

Male	1
Female	2

31/

Cd 1

First, I'd like to ask you a few questions about your attitudes and opinions. There are no right or wrong answers to these questions, we are just interested in your own opinion.

1. I am going to name some skills or abilities that people may or may not have. Please tell me how important you think it is to have each of these skills or abilities in today's world. Would you say absolutely necessary, important but not absolutely necessary, or not too important? First, how important is it to be able to . . . [READ EACH ITEM IN TURN]

	Absolutely Necessary	Important But Not Absolutely Necessary	Not Too Important	Don't Know (Vol)	
a) use a computer	1	2	3	9	32/
b) use a GPS, or Global Positioning System, device	1	2	3	9	33/
c) read a map	1	2	3	9	34/
d) use the Internet	1	2	3	9	35/
e) speak a foreign language	1	2	3	9	36/
f) know where countries in the news are located	1	2	3	9	37/

2. Compared to the average person, would you say you know more or know less about each of these subjects?

	Know more	Know less	Same (Vol)	Don't Know (Vol)	
a) foreign languages	1	2	3	9	38/
b) math	1	2	3	9	39/
c) history	1	2	3	9	40/
d) geography	1	2	3	9	41/
e) science	1	2	3	9	42/
f) world religions	1	2	3	9	43/

Now, I'd like to ask you some questions about the world and world events. If you are not sure of an answer please don't be reluctant to say so. Very few people will know the answers to all of these questions. We are not interested in EVALUATING YOUR KNOWLEDGE. We just want to get an idea of what people IN GENERAL know. Your responses, remember, are being kept strictly confidential, so let's just have some fun with this.

SHOW CARD 3

3. Which of the ranges on this card contains the correct population of the United States today? Just read off the letter please.

A	10 million – 50 million	1
B	150 million – 350 million	2
C	500 million – 750 million	3
D	1 billion – 2 billion	4
	Don't know	9

44/

SHOW CARD 4

4. Which of these cities is the setting for the original television series *CSI: Crime Scene Investigation*?

San Francisco	1	45/
Las Vegas	2	
Chicago	3	
Los Angeles	4	
(DO NOT READ) Don't know	9	

SHOW CARD 5

5. In which of these countries did a catastrophic earthquake occur in October 2005, killing over 70,000 people?

Sri Lanka	1	46/
Japan	2	
Pakistan	3	
Mexico	4	
(DO NOT READ) Don't know	9	

SHOW CARD 6

6. In 2004, what percentage of population growth in the U.S. was due to immigration?

5%	1	47/
22%	2	
33%	3	
54%	4	
(DO NOT READ) Don't know	9	

7. **SHOW CARD 7 WITH NAMES OF CONTINENTS**

1	Africa	5	Europe
2	Antarctica	6	North America
3	Asia	7	South America
4	Australia		

Please tell me on which continent each of the following is located? (IF DON'T KNOW, CODE 9)

Colombia	<u>7</u>	48/	Sudan	<u>1</u>	53/
Nigeria	<u>1</u>	49/	The Amazon Rainforest	<u>7</u>	54/
Pakistan	<u>3</u>	50/	The Alps	<u>5</u>	55/
Rwanda	<u>1</u>	51/	The Sahara	<u>1</u>	56/
Sri Lanka	<u>3</u>	52/			

SHOW CARD 8

8. In which of these countries is a majority of the population Muslim?

Indonesia	1	57/
South Africa	2	
Armenia	3	
India	4	
(DO NOT READ) Don't know	9	

SHOW CARD 9

9. Which of the following was not a significant contributing factor in Hurricane Katrina's impact on the city of New Orleans?

Much of the city was located below sea level	1	58/
The Mississippi River was at record high flow levels	2	
Flood protection walls failed	3	
Protective coastal marshes had disappeared	4	
(DO NOT READ) Don't know	9	

SHOW CARD 10

10. If it is noon in New York, New York, what time is it in Los Angeles, California?

3:00 a.m.	1	59/
9:00 a.m.	2	
12:00 pm (or Noon)	3	
3:00 p.m.	4	
(DO NOT READ) Don't know	9	

SHOW CARD 11

11. Which language is spoken by the most people in the world as their primary language?

Russian	1	60/
Mandarin Chinese	2	
English	3	
Arabic	4	
(DO NOT READ) Don't know	9	

SHOW CARD 12

12. The most heavily fortified border in the world exists between which two countries?

China and Russia	1	61/
United States and Mexico	2	
North Korea and South Korea	3	
Syria and Lebanon	4	
(DO NOT READ) Don't know	9	

SHOW CARD 13

13. Which of these countries is the world's largest exporter of goods and services measured in dollar value?

China	1	62/
United States	2	
Japan	3	
France	4	
(DO NOT READ) Don't know	9	

SHOW CARD 14

14. Which city would be LEAST likely to be threatened by a tsunami?

Honolulu, United States	1	63/
Manila, Philippines	2	
Tokyo, Japan	3	
Mexico City, Mexico	4	
(DO NOT READ) Don't know	9	

SHOW CARD 15

15. World health officials are very concerned about a particular strain of avian flu. Which continent did that strain of flu come from originally?

Europe	1	64/
Asia	2	
South America	3	
Australia	4	
(DO NOT READ) Don't know	9	

SHOW CARD 16

16. How does the size of the population of China compare to the population of the United States?

China's population is less than half the size of the population of the United States.	1	65/
China's population is about the same size as the population of the United States.	2	
China's population is about double the size of population of the United States.	3	
China's population is more than four times the size of the population of the United States.	4	
(DO NOT READ) Don't know	9	

SHOW CARD 17

17. A person is able to wear lightweight clothing all year round. He probably lives near the...

Arctic Circle	1	66/
British Isles	2	
South Pole	3	
Equator	4	
(DO NOT READ) Don't know	9	

SHOW CARD 18

18. Which of the following countries is the world's largest consumer of oil?

United States	1	67/
China	2	
Russia	3	
India	4	
(DO NOT READ) Don't know	9	

HAND RESPONDENT MAP A (Fictional Place)

Take a minute and look at this map. Please refer to the map to answer the next two questions.

19. Which of the cities on this map is most likely to be a port?

City A	1	68/
City B	2	
City C	3	
City D	4	
City E	5	
City F	6	
City G	7	
City H	8	
City J	9	
City K	0	
Don't know	X	

20. A hurricane is headed for City C and you have been told to evacuate to the Northwest. In which city would you be most likely to find refuge?

City A	1	69/
City B	2	
City D	3	
City E	4	
City F	5	
City G	6	
City H	7	
City J	8	
City K	9	
Don't know	X	

(80)1

HAND RESPONDENT MAP B (Asia)

21. Will you please tell me the number on this map which locates each of the following countries? Just call off the numbers please. (RECORD COUNTRY NUMBER FROM THE MAP. IF DON'T KNOW, CODE 99)

a)	North Korea	<u>24</u>	(5-6)
b)	Afghanistan	<u>22</u>	(7-8)
c)	India	<u>4</u>	(9-10)
d)	China	<u>1</u>	(11-12)
e)	Japan	<u>12</u>	(13-14)

HAND RESPONDENT MAP C (Middle East)

22. Now looking at a different map, will you please tell me the number on this map which locates each of the following countries? Just call off the numbers please. (RECORD COUNTRY NUMBER FROM THE MAP. IF DON'T KNOW, CODE 99)

f)	Israel	14	(15-16)
g)	Iraq	10	(17-18)
h)	Saudi Arabia	5	(19-20)
i)	Iran	7	(21-22)

Cd 2

HAND RESPONDENT MAP D (United States)

23. Now, a little closer to home, here is a map of the lower forty-eight states. Will you please tell me the number on this map which locates each of the following states? Just call off the numbers please. (RECORD STATE NUMBER FROM THE MAP. IF DON'T KNOW, CODE 99)

a)	New York	10	(23-24)
b)	Nevada	45	(25-26)
c)	Mississippi	24	(27-28)
d)	California	46	(29-30)
e)	Texas	37	(31-32)
f)	Louisiana	25	(33-34)
g)	Ohio	21	(35-36)

HAND RESPONDENT MAP E (World Map) and CARD 24

24. Now looking at this map of the world please answer the following question. A ship carrying cars directly from Japan to Australia travels in which direction?

North	1	37/
South	2	
East	3	
West	4	
(DO NOT READ) Don't know	9	

KEEP WORLD MAP IN FRONT OF RESPONDENT

25. Now will you please tell me the number on this map which locates each of the following places? Just call off the numbers please. (RECORD NUMBER FROM THE MAP. IF DON'T KNOW, CODE 99)

a)	United States of America	15	(38-39)
b)	Canada	10	(40-41)
c)	Australia	11	(42-43)
d)	Mexico	21	(44-45)
e)	United Kingdom	5	(46-47)
f)	Pacific Ocean	30	(48-49)
g)	Egypt	13	(50-51)
h)	Brazil	12	(52-53)
i)	Gulf of Mexico	61	(54-55)
j)	Indonesia	26	(56-57)

The following questions are for background purposes only.

26. Do you have a current passport? 58/

Yes 1
No 2
Don't know 9

27. In the past twelve months, approximately how many times have you traveled within the United States, but outside the state where you live most of the year?

None	0
One	1
Two	2
Three	3
Four	4
Five or more	5
Don't know	9

59/

28. In the past three years, approximately how many times have you traveled outside the United States?

None	0
One	1
Two	2
Three or more	3
(Vol.) Don't know	9

60/

29. How many languages can you speak fluently other than your native language?

None	0
One	1
Two	2
Three or more	3
(Vol.) Don't know	9

61/

30. When you were in grades 6-12, did you ever take a course devoted entirely to geography?

Yes	1
No	2
(Vol.) Don't know	9

62/

SHOW CARD 31

31. Which of the following news sources, if any, do you use regularly to keep up with current events around the world?

A. Newspapers	
B. Magazines	2
C. Radio	3
D. Television News:	4
[NOT ON CARD] If TV News, Ask: Is that Cable or Network News?	
Cable TV News (such as CNN, MSNBC)	5
Network TV News (such as NBC, ABC, CBS, FOX)	6
E. Internet/Web	7
Don't know	9

63/

SHOW CARD 32

32. Which of the magazines listed on this card does your household subscribe to or buy on a regular basis, that is at least 3 out of every 4 issues? Just call off the letters please. (ACCEPT MULTIPLE RESPONSES)

News magazines (e.g., Time, Newsweek)	1	64/
Entertainment magazines (e.g., People, Entertainment Weekly)	2	
National Geographic	3	
Sports Illustrated	4	

33. Have you personally accessed the Internet in the past 30 days?

Yes	1
No	2
Don't know	9

65/



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SHOW CARD 34

34. Which of the following, if any, do you currently have in your home or car? Just call off the letters, please. (ACCEPT MULTIPLE RESPONSES)

- 66/ A Atlas, such as a world atlas or U.S. atlas 1
- B Globe 2
- C Street map or atlas of the area where you live 3
- D U.S. map 4
- E World map 5
- F Maps used for outdoor recreation, such as topographical maps 6
- G GPS, or Global Positioning System, device 7

SHOW CARD 35

35. In your spare time, which of the following, if any, do you do on a regular basis? (ACCEPT MULTIPLE RESPONSES)

- Play video games on systems like Xbox or PS2 or on a handheld device 1 67/
- Play multiplayer online games other than casino games 2
- Correspond with someone in another country 3
- Volunteer your time for an organization or a cause you believe in 4
- None of these 5

DEMOGRAPHICS

C1. What is your age?

18
19
20
21
22
23
24

68-69/

Refused.....99

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C2. What was the last grade or class you completed in school?

Less than high school graduate	1
High school graduate	2
Technical or trade school	3
Some college	4
College graduate	5
Post-graduate or professional school	6
Refuse	9

70/

SHOW CARD C3

C3. Of all the people listed on this card, who was the first member of your family to be born in the United States? Just call off the letter please.

A	I was the first	1
B	My child	2
C	One of my parents	3
D	One of my grandparents	4
E	One of my great-grandparents or earlier ancestors	5
	(VOL) None in family born in the US	0
	Don't know	9

71/

C4 For most of the year, do you normally live at this address, or do you normally live at another address?

Live at this address [GO TO C6] 1
 Live at another address [GO TO C5] 2
 (DO NOT READ) Don't know [GO TO C6] 9

72/

SHOW CARD C5

C5 Which of these best describes your relation to this household?

Visiting parents 1
 Visiting other family or relatives 2
 Visiting friends 3
 (DO NOT READ) Don't know 9

73/

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C6 Are you a student? [IF YES, ASK] Are you a full-time or part-time student?

Full time student	1	74/
Part time student	2	
Not a student	3	
(DO NOT READ) Don't know	9	

[IF A STUDENT IN C6, ASK C7]

SHOW CARD C7

C7 Which of these best describes your usual place of residence:

Live at home with parents or other family members	1	75/
Live in on-campus housing	2	
Live in off-campus housing	3	
Other	4	
(DO NOT READ) Don't know	9	

C8. Do you consider yourself Hispanic?

Yes	1	76/
No	2	
DK/REF	9	

C9. Which of the following best describes your race or ethnicity? 77/

White	1
African-American/Black	2
Asian/Pacific Islander [DO NOT READ: INCLUDING SOUTH ASIAN]	3
American Indian or Native American	4
Other [SPECIFY]	5
DK/REF	9



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CHECK DAY OF WEEK INTERVIEW WAS COMPLETED

1 Mon	2 Tues	3 Wed	4 Thurs	5 Fri	6 Sat	7 Sun
-------	--------	-------	---------	-------	-------	-------

78/

(80)2

ASK EVERYONE:

My supervisor randomly checks a percentage of the interviews we complete. So that my supervisor can check my work in this interview, if needed, may I have your name, address and telephone number, please?

NAME: _____

ADDRESS: _____

CITY: _____

STATE CODE: _____ ZIP CODE: _____

TELEPHONE: _____

=====

I hereby attest that this is a true and honest interview:

(Interviewer signature)

(Date)



B. Show Cards

Q3

A	10 million – 50 million
B	150 million – 350 million
C	500 million – 750 million
D	1 billion – 2 billion

Q4

A	San Francisco
B	Las Vegas
C	Chicago
D	Los Angeles

Q5

A	Sri Lanka
B	Japan
C	Pakistan
D	Mexico

Q6

A	5%
B	22%
C	33%
D	54%

Q7

1	Africa
2	Antarctica
3	Asia
4	Australia
5	Europe
6	North America
7	South America

Q8

A	Indonesia
B	South Africa
C	Armenia
D	India

Q9

A	Much of the city was located below sea level.
B	The Mississippi River was at record high flow levels.
C	Flood protection walls failed.
D	Protective coastal marshes had disappeared.

Q10

A	3:00 a.m.
B	9:00 a.m.
C	12:00 pm (or Noon)
D	3:00 p.m.

Q11

A	Russian
B	Mandarin Chinese
C	English
D	Arabic

Q12

A	China and Russia
B	United States and Mexico
C	North Korea and South Korea
D	Syria and Lebanon

Q13

A	China
B	United States
C	Japan
D	France

Q14

A	Honolulu, United States
B	Manila, Philippines
C	Tokyo, Japan
D	Mexico City, Mexico

Q15

A	Europe
B	Asia
C	South America
D	Australia

Q16

A	China's population is less than half the size of the population of the United States.
B	China's population is about the same size as the population of the United States.
C	China's population is about double the size of the population of the United States.
D	China's population is more than four times the size of the population of the United States.

Q17

A	Arctic Circle
B	British Isles
C	South Pole
D	Equator

Q18

A	United States
B	China
C	Russia
D	India



Q24

A	North
B	South
C	East
D	West

Q31

A	Newspapers
B	Magazines
C	Radio
D	Television News
E	Internet/Web

Q32

A	News magazines (e.g. Time, Newsweek)
B	Entertainment magazines (e.g. People, Entertainment Weekly)
C	National Geographic
D	Sports Illustrated

Q34

A	Atlas, such as a world atlas or U.S. atlas
B	Globe
C	Street map or atlas of the area where you live
D	U.S. map
E	World map
F	Maps used for outdoor recreation, such as topographical maps
G	GPS, or Global Positioning System, device

Q35

A	Play video games on systems like Xbox or PS 2 or on a handheld device
B	Play multiplayer online games other than casino games
C	Correspond with someone in another country
D	Volunteer your time for an organization or a cause you believe in
E	None of these

C3

A	I was the first
B	My child
C	One of my parents
D	One of my grandparents
E	One of my great-grandparents or earlier ancestors

C5

A	Visiting parents
B	Visiting other family or relatives
C	Visiting friends

C7

A	Living at home with parents or other family members
B	Live in on-campus housing
C	Live in off-campus housing
D	Other