EXPLORING THE WEB

Chapter 1

1.24 The Gallup Poll. All the sample surveys mentioned in Examples 1.4 through 1.7 maintain websites:

- Gallup Poll (Example 1.4): www.gallup.com.
- Current Population Survey (Example 1.5): www.bls.gov/cps/.
- Nielsen Media Research (Example 1.6): www.nielsen.com.
- General Social Survey (Example 1.7): www.norc.org/Research/Pages/default.aspx.

We recommend the Gallup site for its current poll results and clear explanations of sample survey methods.

Visit the Gallup Poll website. Select one of the stories available to nonsubscribers. Identify the population and sample as exactly as possible. How many people were in the sample?

1.25 Power lines. You can find the report of the National Institute of Environmental Health Sciences (NIEHS) on the possible health effects of exposure to power lines at www .niehs.nih.gov/health/topics/agents/emf/. Visit the site. Although the few studies that have been conducted on adult exposures show no evidence of a link between adult cancer and exposure to residential electric and magnetic fields, what does the description given at the site say that NIEHS scientists have concluded? Why?

Chapter 2

2.27 An online poll. There are several voluntary response polls available on the Internet. Visit www.misterpoll.com and examine several of the current polls. What are the sample sizes in these polls? Who can vote? Is it possible to vote more than once? Do you think you can trust the results of the polls on www.misterpoll.com? Why?

2.28 Using an applet to select an SRS. You can select a simple random sample when the number of labels required is 144 or less by using the *Simple Random Sample* applet available from the book's website. Use the applet to do Exercises 2.16, 2.17, and 2.21.

2.29 Really random numbers. Random.org maintains an online tool that allows you to generate random numbers and a tool that allows you to rearrange any list in random order. The tools, with instructions, can be found at www.random.org/integers/ for generating random numbers and at www.random.org/lists/ for rearranging a list in random order.

(a) How could you use these tools to generate an SRS?

(b) What does the website say about its method for generating randomness?

2.30 Google surveys. Google provides a service that allows people to create consumer surveys. You can find information about this service at www.google.com/insights/ consumersurveys/home. Visit the website and read about this service. Do the surveys use random sampling? If not, how is the sample selected?

Chapter 3

3.41 Gallup's margin of error. Go to www.gallup.com and click on one of the story titles under Latest News. What does the article tell you about the margin of error for 95% confidence? (This can be found in the Survey Methods section at the bottom of the article.)

3.42 Trustworthy results from small samples. Read the Gallup Organization's own explanation of why surprisingly small samples can give trustworthy results about large populations at http://media.gallup.com/PDF/FAQ/HowArePolls.pdf. What does the article say about interpreting 95% confidence?

3.43 Poll trustworthiness. Read the *NBC News* article "Live Votes on msnbc.com: The Differences between Online and Scientific Polls." What does the article say about why a scientific poll with a smaller sample size will be more trustworthy than a live poll with a larger sample size?

Chapter 4

4.40 Questions to ask about an opinion poll. The website for the Pew Research Center for the People and the Press is www.people-press.org. Go to the website and read the featured survey. Page 80 lists several "questions to ask" about an opinion poll. What answers does the Pew Research Center for the People and the Press give to each of these questions? You may find the links at the end of the featured survey helpful for finding answers to some of these questions.

4.41 Examples of bad samples. The website for the American Association for Public Opinion Research discusses several issues about polls. This information can be found at www.aapor.org. In the search box at the top of the page, type in "Questions to Ask When Writing about Polls" for suggestions about how to determine if a poll is good or bad. Click on the highlighted words *random sampling*. After you land on the "What is a Random Sample?" page, click on the highlighted words *Bad Samples* for some examples of flawed samples.

4.42 No margin of error? The Harris Poll no longer provides a margin of error for its polls. The Harris Poll website is www.harrisinteractive.com/harris_poll/. Visit the site, read the Methodology section at the end of a recent poll, and write a brief report about why the Harris Poll no longer provides a margin of error.

4.43 Random sample? Visit the Gallup website at www.gallup.com/Home.aspx and look at a recent poll that includes, at the end, a description of the survey methods. Are the samples described as coming from random sampling?

Chapter 5

5.31 Randomized comparative experiments in medicine. Go to the *New England Journal of Medicine* website (http://content.nejm.org) and find the article "A Randomized, Controlled Trial of Financial Incentives for Smoking Cessation," by Volpp et al., in the February 12, 2009, issue. Was this a comparative study? Was randomization used? How many subjects took part? Were the results statistically significant? (If your institution does not have a subscription to the *New England Journal of Medicine*, you can find an abstract of the article at www.ncbi.nlm.nih.gov/pubmed/19213683.)

You can find the latest medical research in the *Journal of the American Medical Association* (www.jama.ama-assn.org) and the *New England Journal of Medicine* (http://content.nejm.org). Many of the articles describe randomized comparative experiments, and even more use the language of statistical significance.

Chapter 6

6.31 The powerful placebo? Not all researchers agree that placebos have a powerful clinical effect. Go to the *New England Journal of Medicine* website (http://content.nejm.org) and find the article "Is the Placebo Powerless? An Analysis of Clinical Trials Comparing

Placebo with No Treatment," by Hrobjartsson and Gotzsche, in the May 24, 2001, issue. What conclusions do the authors reach? Also, in the same issue, read the editorial "The Powerful Placebo and the Wizard of Oz," by Bailar. Does Bailar agree with the findings of Hrobjartsson and Gotzsche?

6.32 Unsupported health claims. You can find a (very) skeptical look at health claims not backed by proper clinical trials at the "Quackwatch" site, www.quackwatch.org. Visit the site and prepare a one-paragraph summary of one of the articles.

Chapter 7

7.39 Is anonymous blogging anonymous? Is "anonymous" blogging really anonymous? Read the article at http://arstechnica.com/tech-policy/news/2009/10/anonymous-real-estate -critic-on-the-verge-of-being-unmasked.ars and explain your answer.

7.40 Online interventions. The *Journal of Medical Internet Research* contains an article on ethical issues that arise in providing online psychotherapeutic interventions. Visit the web page www.jmir.org/2000/1/e5/ and read the article. Describe at least two of the ethical issues discussed in the article.

7.41 Informed consent. The University of Minnesota has a web page intended to educate readers about informed consent: www.research.umn.edu/consent/. Visit the web page and select either the *Health and Biological Sciences* or the *Social and Behavioral Sciences* link. Next, select the *Overview of Informed Consent* link. Read through the module and take the overview quiz.

7.42 An institutional review board. For a glimpse at the work of an institutional review board, visit the website of the University of Pittsburgh's board, www.irb.pitt.edu. Look at the *Policies and Procedures* (see the links along the left side of the page) to learn how elaborate the review process can be. According to the chapter on the informed consent process, what is the suggested wording of an informed consent document?

7.43 A code of ethics. The official ethical codes of the American Statistical Association and the American Psychological Association are long documents that address many issues in addition to those discussed in this chapter. From either of these documents, give one issue that is discussed in the document but not in this chapter. The websites where these documents can be found are www.amstat.org/committees/ethics/ and www.apa.org/ethics/code/index.aspx.

7.44 Early experiments in psychology. Some early experiments in psychology were highly unethical and led to the establishment of present-day standards. Read the article at http://listverse.com/2008/09/07/top-10-unethical-psychological-experiments/ and determine which of the experiments described you find most repugnant.

7.45 Research on animals. In the discussion of clinical trials, we quoted the 1964 Helsinki Declaration of the World Medical Association as saying, "The interests of the subject must always prevail over the interests of science and society." This applies to experiments with human subjects. What about experiments with animals?

(a) Do you think there should be similar or different standards for research involving animals? In a few sentences, state your opinion. (There are no wrong answers.)

(b) Visit the website www.stanford.edu/group/hopes/cgi-bin/wordpress/2010/07/animal-research/. What positions regarding research with animals are described at this site? Which of these positions do you favor?

(c) Visit either the website www.nc3rs.org.uk/page.asp?id=7 or the site www.ccac.ca/en _/training/niaut/stream. What are the three R's of humane animal experimentation? Give an example of one way each of the three R's might be satisfied.

Chapter 8

8.34 College rankings. Each year, *U.S. News & World Report* ranks the nation's colleges and universities. You can find the current rankings on the magazine's website, www.usnews.com. Colleges often dispute the validity of the rankings, and some even say that *U.S. News* changes its measurement process a bit each year to produce different "winners" and thus generate news. The magazine describes its methods on the website. Give three variables that you would use as indicators of a college's "academic excellence." You may or may not decide to use some of *U.S. News*'s variables.

8.35 What's the time? You can get the time directly from the atomic clock widget at NIST at http://time.gov/widget/widget.html. There is some error due to Internet delays, but the display even tells you roughly how accurate the time on the screen is. Look up the time for your state. What is the reported accuracy?

8.36 Best places to live in the U.S. *Money* magazine annually publishes a list of its best places to live. You can find the most recent rankings online at http://time.com/money/collection/best-places-to-live/. Read how the rankings are determined by clicking on *How MONEY Ranks the Best Places* and give five variables that are used to determine the rankings. Are there any additional variables that you think should be included?

8.37 More on measuring highway safety. In Example 8.4, we examined highway safety as reported by the Fatality Analysis Reporting System. Go to www.nhtsa.gov/FARS and click on *Run a Query Using the FARS Web-Based Encyclopedia*. What is the most recent year of data available? How many fatal crashes happened that year? How many total traffic crash fatalities were there? How many licensed drivers (in thousands) were reported for that year? Calculate the fatalities per 100,000 licensed drivers by calculating

$$\frac{\text{total traffic crash fatalities} \times 100}{\text{licensed drivers (in thousands)}}$$

Your answer should match the reported fatalities per 100,000 licensed drivers for the year.

Chapter 9

9.32 Check out *Chance*. Find an example of one of the following. Explain in detail the statistical shortcomings of your example.

Leaving out essential information.
Lack of consistency.
Implausible numbers.
Faulty arithmetic.

One place to look is in the online *Chance News*. The *Chance* website contains lots of interesting stuff (at least if you are interested in statistics). In particular, the *Chance News* section, www.causeweb.org/wiki/chance/index.php/Main_Page, offers a Wiki that keeps track of statistics in the press, including dubious statistics.

9.33 Stock market drops. In Exercise 9.19, you were asked to compute the percent drop in the Dow Jones Industrial Average on September 29, 2008. Because the index had gone up so much in previous years, this was not the biggest percent drop ever. Go to www.djaverages.com/?view=industrial&page=milestones and determine if this is even in the top 10 biggest percent drops. Explain, in plain language, how the drop on September 29, 2008, can be the biggest drop in actual value but not in percent.

Chapter 10

10.33 Poor graphics. Find an example of a poor graphic. One possible source is the *Chance* website at Dartmouth College. In particular, see the *Chance News* section, www.causeweb.org/wiki/chance/index.php/Main_Page. You can also try a Google search for something like "misleading graphical displays in the media."

10.34 Change over time. Find an example of a variable, such as the price of a commodity, that changes over time. One possible source is the Bureau of Labor Statistics website. Go to www.bls.gov/cpi/home.htm and click on the *Average Price Data* link.

Chapter 11

11.24 A graph from the Census. The U.S. Constitution requires a census every 10 years. Visit the homepage for the 2010 census, www.census.gov/2010census/. You will see two histograms pictured there. One histogram is depicting the distribution of age for females and the other males. These histograms are turned on their side and placed back to back for comparison. Describe the shape, center, and variability for the women's age distribution. Approximately how many women are between 15 and 20 years old? Discuss differences in age distribution for males and females. For example, discuss the difference for those aged 65 and older. Would a relative frequency histogram be better? Explain.

Chapter 12

12.40 Four great sluggers. As of August 2015, Alex Rodriguez is fourth on the career home run list, behind Barry Bonds, Hank Aaron, and Babe Ruth. You can find Alex Rodriguez's home run statistics at the website www.baseball-reference.com. Construct four side-by-side boxplots comparing the yearly home run production of Barry Bonds, Hank Aaron, Babe Ruth, and Alex Rodriguez. Describe any differences that you observe. It is worth noting that in his first four seasons, Babe Ruth was primarily a pitcher. If these four seasons are ignored, how does Babe Ruth compare with Barry Bonds, Hank Aaron, and Alex Rodriguez?

12.41 Mean and median. You can compare the behavior of the mean and median by using the *Mean and Median* applet at the book's website. Click to enter data, then use the mouse to drag an outlier up and watch the mean chase after it.

Chapter 13

13.36 *Normal Curve* applet. Tables of areas under a Normal curve, like Table B at the back of this book, are still common but are also giving way to applets that let you find areas visually. Go to the book's website and look at the *Normal Curve* applet. This applet can be used for Normal curve calculations. Use the applet to answer the following question. Scores on the Wechsler Adult Intelligence Scale for the 20 to 34 age group are approximately Normally distributed with mean 110 and standard deviation 15. How high must a person score to be in the top 10% of all scores? The top 1% of all scores?

13.37 Using the *Normal Curve* applet. If you did any of Exercises 13.21 through 13.30, check your calculations using the *Normal Curve* applet described in the previous exercise.

Chapter 14

14.38 Drive for show, putt for dough. A popular saying in golf is, "You drive for show, but you putt for dough." You can find this season's Professional Golfers Association (PGA) Tour statistics at the PGA tour website, www.pgatour.com/stats. You can also find these statistics

at the ESPN website, http://espn.go.com/golf/leaders. Look at the most recent putting, driving, and money earnings data for the current season on the PGA Tour.

(a) Make a scatterplot of earnings and putting average. Use earnings as the response variable. Describe the direction, form, and strength of the relationship in the plot. Are there any outliers?

(b) Make a scatterplot of earnings and driving distance. Use earnings as the response variable. Describe the direction, form, and strength of the relationship in the plot. Are there any outliers?

(c) Do your plots support the maxim "You drive for show, but you putt for dough"?

14.39 *Correlation and Regression* **applet.** The best way to grasp how the correlation reflects the pattern of the points on a scatterplot is to use an applet that allows you to plot and move data points and watch the correlation change. Go to the book's website and look at the *Correlation and Regression* applet. The correlation is constantly recalculated as you click to add points or use your mouse to move points. Create a plot with a correlation near 1 and then add a point to make the correlation negative. Where did you add the point?

Chapter 15

15.44 Association and causation. Find an example of a study in which the issue of association and causation is present. This can be either an example in which association is confused with causation or an example in which the association is not confused with causation. Summarize the study and its conclusions in your own words. The *Chance* website at www.causeweb.org/wiki/chance/index.php/Main_Page is a good place to look for examples.

15.45 Exploring regression lines. The best way to develop some feeling for how a regression line fits the points on a scatterplot is to use an applet that allows you to plot and move data points and watch the least-squares line move as the points change. Go to the book's website and look at the *Correlation and Regression* applet. Click in the "Show least-squares line" box to see the regression line. Where should one place or move points to in order to have the largest effect on the least-squares line?

15.46 The federal budget. Go to the Congressional Budget Office website, www.cbo.gov. What is the current prediction for the federal budget in five years' time? Is a surplus or a deficit predicted?

15.47 Big data. For a discussion of problems with big data, read Gary Marcus and Ernest Davis, "Eight (No, Nine!) Problems with Big Data," which appeared in the opinion pages of the April 6, 2014, issue of the *New York Times*. The article is available online at www.nytimes.com/2014/04/07/opinion/eight-no-nine-problems-with-big-data.html?_r=0. What are the nine problems listed by the authors?

15.48 Big data. Microsoft Excel is a popular tool for managing data. How much data can an Excel worksheet handle? To answer this, visit http://office.microsoft.com/HA103980614. What are the maximum number of rows and columns a worksheet can have? Thought question: what would you do if you had 2,000,000 observations on each of 17,000 variables and wished to calculate the average for each of these 17,000 variables?

Chapter 16

16.38 The Bureau of Labor Statistics. Go to the Bureau of Labor Statistics website and find the most recent index number for the cost of college tuition. You can find this by conducting a public-data query. Go to the web address www.bls.gov/cpi. Under *CPI*

Databases, click on the link *ONE-SCREEN-DATA-SEARCH* in the row labeled "All Urban Consumers (Current Series)." Select the area "U.S. City Average" and the item "College tuition and fees" from the two menus. Then click on the button "Get Data." How does this index number compare with the CPI for the corresponding period?

16.39 Do you like data? If you like data, you can go to the BLS data page, www.bls.gov/cpi/home.htm, and under *CPI Databases,* choose *Average Price Data* and see for yourself how the prices of such things as white bread and gasoline have changed over time. How does the current price of white bread compare with the price 10 years ago? Twenty years ago?

In the NEWS **16.40 The CPI in the news.** Search the Internet to find a recent news report about the CPI. For example, a Google search of "latest CPI" turned up a couple of articles. Summarize what the article you choose says about any changes in the CPI.

Chapter 17

17.33 The law of averages. Search the Web to see if you can find an example of a misuse or misstatement of the law of averages. Explain why the statement you find is incorrect. (We found some examples by doing a Google search on the phrase "law of averages.")

17.34 A probability applet. One of the best ways to grasp the idea of probability is to watch the proportion of trials on which an outcome occurs gradually settle down at the outcome's probability. Computer simulations can show this. Go to the book's website and look at the *Probability* applet. Select a probability for heads between 0.2 and 0.8 and run the applet for a total of 400 trials. Describe the pattern you see. How quickly did the proportion of heads settle down to the true probability?

17.35 Poker hands. The probabilities of various poker hands refer to the proportion of times these hands will appear in many, many games. You can find a simulation of the results of dealing many poker hands at http://wiki.stat.ucla.edu/socr/index.php/SOCR_EduMaterials_Activities_PokerExperiment. Visit this website and simulate the results of several thousand poker hands by repeatedly running 1000 simulations of hands. You can simulate multiple 1000 hands at a time by setting the update button to 1000, the stop button to stop 1000, and clicking repeatedly on the double arrow button. How quickly does the percent of hands containing a straight converge to the expected percent? Note that $V = 4$ corresponds to obtaining a straight.

Chapter 18

18.29 Super Bowl odds. On the Web, find the current odds, according to an oddsmaker, of winning the Super Bowl for each NFL team. Convert these odds to probabilities. Do these probabilities satisfy Rules A and B given in this chapter? If they don't, can you think of a reason?

18.30 *Normal Curve* applet. Tables of areas under a Normal curve, like Table B at the back of this book, are still common but are also giving way to applets that let you find areas visually. Go to the book's website and look at the *Normal Curve* applet. This applet can be used for Normal curve calculations. If you did either Exercise 18.17 or 18.18, check your calculations using the *Normal Curve* applet.

Chapter 19

19.29 The hot hand. The basketball player Stephen Curry makes about 44% of his three-point shots over an entire season. At the end of a game, an announcer states that "Stephen

had a hot hand tonight when it counted. He made all three of his three-point shots in the final two minutes of the game." Take Stephen's probability of making a three-point shot to be 0.44 on each shot. Simulate 100 repetitions of his performance at the end of a game in which he shoots three three-point shots, using the *Probability* applet at the book's website. What proportion of the time did Stephen make all three of his three-point shots? (To use the applet, we had to repeatedly take one shot at at time and observe what happened after each group of three shots.)

19.30 Simulations with random number generators. There are websites that will generate random digits for simulations, providing an alternative to using Table A. One example is the Research Randomizer at www.randomizer.org. We discussed how to use the Research Randomizer in Example 2.3 (page 26) of Chapter 2. Another example is the *Simple Random Sample* applet available on the book's website. To use the Research Randomizer for simulations, you will need to select No for the box that asks "Do you wish each number in a set to remain unique?" This will allow the same digit to appear multiple times. If you did any of Exercises 19.9, 19.10, or 19.14 through 19.27, repeat your simulation using the Research Randomizer or the applet as a random number generator in place of Table A.

19.31 Buffon's needle. The Web abounds in applets that simulate various random phenomena. One amusing probability problem is named *Buffon's needle*. Draw lines 1 inch apart on a piece of paper, then drop a 1-inch-long needle on the paper. What is the probability that the needle crosses a line? You can find both a solution by mathematics and a simulation at http://mste.illinois.edu/activity/buffon/. Visit the site and try the simulation 100 times. What do you get as your estimate of the probability?

Personal sites sometimes vanish; a search on "Buffon's needle" will turn up alternative sites. The probability turns out to be $2/\pi$, where any circle's circumference is π times its diameter. So the simulation is also a way to calculate π, one of the most famous numbers in mathematics.

19.32 Online simulations. One of the Web exercises in Chapter 17 involved simulating the results of dealing many poker hands. The simulation is at http://wiki.stat.ucla.edu/socr/index.php/SOCR_EduMaterials_Activities_PokerExperiment. Visit this website. You can find several other simulations at this site, including roulette, the birthday problem (see Exercise 19.27), and some games. Try the birthday problem, located under Experiments, and repeat Exercise 19.27 (set $n = 23$ in the simulation).

Chapter 20

20.29 State lotto games. Most states have a lotto game that offers large prizes for choosing (say) six out of 51 numbers. If your state has a lotto game, find out what percent of the money bet is returned to the bettors in the form of prizes. You should be able to find this information on the Web. What percent of the money bet is used by the state to pay lottery expenses? What percent is net revenue to the state? For what purposes does the state use lottery revenue?

20.30 Simulations with random number generators. As mentioned in Exercise 19.30, there are websites that will generate random numbers. These websites can be used in place of Table A to select random digits for simulations. The Research Randomizer at www.randomizer.org that we discussed in Example 2.3 (page 26) of Chapter 2 is one such site. Another example is the *Simple Random Sample* applet available on the book's website. To use the Research Randomizer for simulations, you will need to select No for the box that asks "Do you wish each number in a set to remain unique?" This will allow the same digit to appear multiple times. If you did any of Exercises 20.19 or 20.22 through 20.27, repeat your

simulation using the Research Randomizer or the applet as a random number generator in place of Table A.

20.31 Three-point shots. Information about basketball players can be found at www .basketball-reference.com. Go to this website and find the percent of three-point shots that WNBA star Jeanette Pohlen has made in her career. (Pohlen is among the career leaders in percent of three-point shots made.) On average, how many three-point shots must she take in a game before she makes her first shot? In other words, we want the expected number of shots she takes before she makes her first. Estimate this by using 10 simulations of sequences of three-point shots, stopping when she makes her first. What is your estimate of the expected value?

Chapter 21

21.43 Binge drinking. Results from the Behavioral Risk Factor Surveillance System can be found at www.cdc.gov/brfss/. Find the sample proportion of college graduates in your state who engaged in binge drinking for the most recent year reported at the website. Construct a 95% confidence interval for the population proportion (assume that the sample is a random sample). Write a short explanation of your findings for someone who knows no statistics.

21.44 Searching for poll results. Search the Web for a recent poll in which the sample statistic is a proportion, for example, the proportion in the sample responding Yes to a question. Calculate a 95% confidence interval for the population proportion (assume that the sample is a random sample). Write a short explanation of your findings for someone who knows no statistics. Your report should include the exact wording of the question asked, how the sample was collected, the sample size, the population of interest, and how the reader should interpret your confidence interval. One possible website for recent polls, including the information needed for your report, is the Gallup Poll website at www.gallup.com.

Chapter 22

22.41 Web-based exercise. Choose a major journal in your field of study. A faculty member in your major or a web search engine may help you identify an appropriate journal. Use a web search engine to find the journal's website—just search on the journal's name. Find a paper in a recent issue that uses a phrase like "significant ($p = 0.01$)." Write a paragraph explaining what the authors of the paper concluded. Your explanation should be understandable to someone who knows no statistics and is not an expert in your major.

Chapter 23

23.30 Practically important? Find an example of a study in which a statistically significant result may not be practically important. Write a paragraph summarizing the study and its conclusions in your own words. Be sure to explain why the results are not practically important. The *Chance* website at www.causeweb.org/wiki/chance/index.php/Main_Page is a good place to look for examples. You can also try entering a phrase such as "statistically significant but not practically significant" or "statistically significant but not meaningful" into a web search engine.

23.31 More on the banning of *P*-values. The controversy for this chapter addresses the ban of *P*-values by the *Basic and Applied Social Psychology* journal. *Nature* had a commentary about the ban. You can find the commentary on the Web at www.nature.com/news/psychology-journal-bans-p-values-1.17001. Read the commentary. Make an argument for why *P*-values are important and should not be banned entirely.

Chapter 24

24.27 Professor rank and sex. The chapter-opening Case Study gave information on faculty by sex and rank at Purdue University for the 2013–2014 academic year. Similar data can be found for other universities. Search the Web to find the number of faculty by rank and sex at another university. Do you see the same patterns as were noted for the Purdue University data? We found several sources by doing a Google search on "faculty headcount by rank and sex."

24.28 Simpson's paradox. Find an example of Simpson's paradox and discuss how your example illustrates the paradox. Two examples that we found (thanks to Patricia Humphrey at Georgia Southern University) are www.nytimes.com/2006/07/15/education/15report.html and http://online.wsj.com/article/SB125970744553071829.html.