q r s t u v w x y z a b c d e f g h
a b c d e f g h i j k l m n o p q r s
l m n o p q r s t u v w x y z a b
k l m n o p q r s t u v w x y z a
a b c d e f g h i j k l m n o p q r s
l m n o p q r s t u v w x y z a b c
p q r s t u v w x y z a b c d e f g
z a b c d e f g h i j k l n o p q r s
d e f g h i j l m n o p q r s t u v
o p q r s t u v w x y z a b c d e f
y z a b c d e f g h i j k l m n o p
i j k l m n o p q r s t u v w x y z
s t u v w x y z a b c d e f g h i j k
c d e f g h i j k l m n o p q r s t u
n o p q r s t u v w x y z a b c d e
x y z a b c d e f g h i j k l m n o

APPENDIX A

sample questions

Prose Literacy Question

Refer to the article on the next page to answer the following question.

According to the brochure, why is it difficult for people to know if they have high blood pressure?

_____

Correct answer

Any statement such as the following:

Symptoms are not usually present

High blood pressure is silent

Percentage of U.S. adults in college and the nation who answered the question correctly, 2003

2-year colleges	4-year colleges	All adults
95 (1.7)*	97 (1.2)*	74 (1.2)

* Significantly different from all adults.
Note: Standard errors are in parentheses.
Source: 2003 National Survey of America's College Students and 2003 National Assessment of Adult Literacy.

TOO MANY BLACK ADULTS DIE FROM THE EFFECTS OF HIGH BLOOD PRESSURE

DID YOU KNOW?

More than one out of every four Black adults has high blood pressure, according to a two-year survey by Public Health Service in the 1960's. Other studies show as many as one out of three Black adults has high blood pressure.

High blood pressure is the most common chronic disease treated by practitioners in the Black community.

More Black people die as a result of high blood pressure than any other disease.

For every Black person who dies of sickle-cell anemia, at least 100 others die from the effects of high blood pressure.

The rate of death from the effects of high blood pressure for Black people is nearly one and one-half times the rate for White people.

High blood pressure, along with cigarette smoking, contributes greatly to the apparent increased number of heart attacks among Black adults.

If high blood pressure is controlled, strokes, heart attacks and kidney disease can be substantially reduced.

YES, HIGH BLOOD PRESSURE CAN BE TREATED… AND CONTROLLED.

WHAT YOU CAN DO

Have your blood pressure checked regularly

Unfortunately, high blood pressure is a silent killer and crippler. At least half of the people who have high blood pressure don't know it because symptoms usually are not present. The only way you can be sure is to have the doctor check your blood pressure. You should have your blood pressure checked at least once a year, especially if: (1) you are Black, (2) if you are over 40, (3) if members of your family or close relatives have had high blood pressure or the complications of high blood pressure (stroke, heart attack, or kidney disease), or (4) if you have frequent headaches, dizziness, or other symptoms that may occasionally be related to high blood pressure.

Follow your doctor's instructions

High blood pressure can't be cured, but it can be kept under control. Control means keeping your blood pressure as close to normal as possible. That's very important to you — it can prevent a crippling stroke or other serious illness in the future.

The doctor will find a way to control your blood pressure that's most comfortable for you. Then it will be up to you — to take the medicine and follow the prescribed diet, to follow the instructions carefully and to come back regularly for checkups.

Yes, high blood pressure can be controlled, but only if *you* cooperate fully with your doctor.

Prose Literacy Question

Refer to the article on the next page to answer the following question.

What is the purpose of the *Se Habla Español* expo?

_____

Correct answer

Any statement such as the following:

- To enable people to better serve and sell to the Hispanic community
- To improve marketing strategies to the Hispanic community
- To enable people to establish contacts to serve the Hispanic community

Percentage of U.S. adults in college and the nation who answered the question correctly, 2003

2-year colleges	4-year colleges	All adults
24 (2.6)*	27 (3.0)*	16 (0.8)

* Significantly different from all adults.
Note: Standard errors are in parentheses.
Source: 2003 National Survey of America's College Students and 2003 National Assessment of Adult Literacy.

MARKETING

Se Habla Español Hits Chicago

September 25, 26, and 27 are three days that will change your marketing.

"To some advertisers, the Hispanic market's like the weather —you hear a lot about it, but you can't do much about it," says veteran marketer Tony Martinez. "And other companies think Hispanics will buy their products anyway, so they don't need to do anything special.

"Both attitudes are way off base," Mr. Martinez says briskly, "and they'll both make the competition ecstatic. Because there's a lot of money to be made in the Hispanic market. Its spending power will be $160 billion this year, and that's growing maybe $1.4 billion a *month*," he exclaims, peering intensely over his glasses. "For example, we Hispanics buy 9 percent of all new automobiles.

"This is definitely a special market…you do have to have a special understanding of it," Mr. Martinez goes on, "because as one research firm said, it's 'a market with currents that are going in many directions.' But the rewards will be fantastic. Hispanics are very brand conscious and they tend to become brand loyal very quickly."

It's Mr. Martinez's job—his mission in life—to make sure companies learn how they can serve and sell to America's Hispanics. He has been marketing to the community for many years, working with the best in the business, including Coca-Cola and the advertising firm of Castor GS&B. Now his staff is organizing the largest annual Hispanic market trade show in the business—*Se Habla Español*.

The three-day *Se Habla Español* expo, put on by HISPANIC BUSINESS magazine, is in Chicago this year, at the Hyatt Regency. As in the two previous years in New York and Los Angeles, this conference will host a "big top"-like mix of activities.

The show draws thousands of the country's top marketers, media people, advertisers, researchers, and Hispanic contractors—all intent on gathering as much information as possible, and all hoping to explore new business opportunities. As in any really good big-top show, a hundred different things are happening all at once.

More than 60 Hispanic market specialists conduct fact-heavy seminars. Companies promoting everything from cars to demographic information to career opportunities for Hispanic professionals display and discuss their products in 30,000 square feet of exhibit space. Major exhibitors this year include Ford Motor Co., Lincoln-Mercury, Chevrolet, American Airlines, Telemundo, the Bureau of the Census, and many, many more.

"It's all contacts . . . contacts . . . contacts!" Mr. Martinez exclaims in his best marketing ringmaster style.

Each of the major media hosts its own luncheon or reception, playing to sold-out crowds. Leading participants in last year's Print Reception, for example, included *La Opinion* of Los Angeles, *Vista* magazine, The *Miami Herald*, and the *Los Angeles Times*. Some participants in the 1989 Radio Luncheon included Katz Hispanic Radio and Caballero Spanish Media. "We still have a few events open to corporate sponsors," Mr. Martinez mentions, not without interest. "They'll be able to count on considerable media play both in preliminary press coverage and during the events themselves."

Another opportunity for sponsor visibility is the *Se Habla Español* Scholarship Fund, which will publicly award scholarships to talented Hispanic students in the various communications fields.

A grand finale black tie banquet spotlights the leading figures in America's Hispanic media world, recognizing outstanding work in each medium with the *Se Habla Español Awards in Communication*. In 1989, Mr. Martinez recalls, almost 400 entries were submitted. Publicidad Siboney swept the top honors for "Ad of the Year" and "TV Ad of the Year" with its commercial for Pepsi-Cola.

One problem attendees find is that the conference offers more information than any one person can gather during just three days. "They should know their priorities," Mr. Martinez advises, "to ensure they focus on the events that will be of most value to their employers."

Document Literacy Question

Seventy-eight percent of what specific group agree that their school does a good job of encouraging parental involvement in educational areas?

_____

Parents and Teachers Evaluate Parental Involvement at Their School

Do you agree or disagree that...?

	Total	Level of School		
		Elementary	Junior High	High School
		percent agreeing		
Our school does a good job of encouraging parental involvement in sports, arts, and other nonsubject areas				
Parents	77	76	74	79
Teachers	77	73	77	85
Our school does a good job of encouraging parental involvement in educational areas				
Parents	73	82	71	64
Teachers	80	84	78	70
Our school only contacts parents when there is a problem with their child				
Parents	55	46	62	63
Teachers	23	18	22	33
Our school does not give parents the opportunity for any meaningful roles				
Parents	22	18	22	28
Teachers	8	8	12	7

Source: The Metropolitan Life Survey of the American Teacher, 1987

Reduced from original copy

Correct answer

Junior high teachers

Percentage of U.S. adults in college and the nation who answered the question correctly, 2003

2-year colleges	4-year colleges	All adults
65 (3.0)*	74 (3.7)*	36 (1.2)

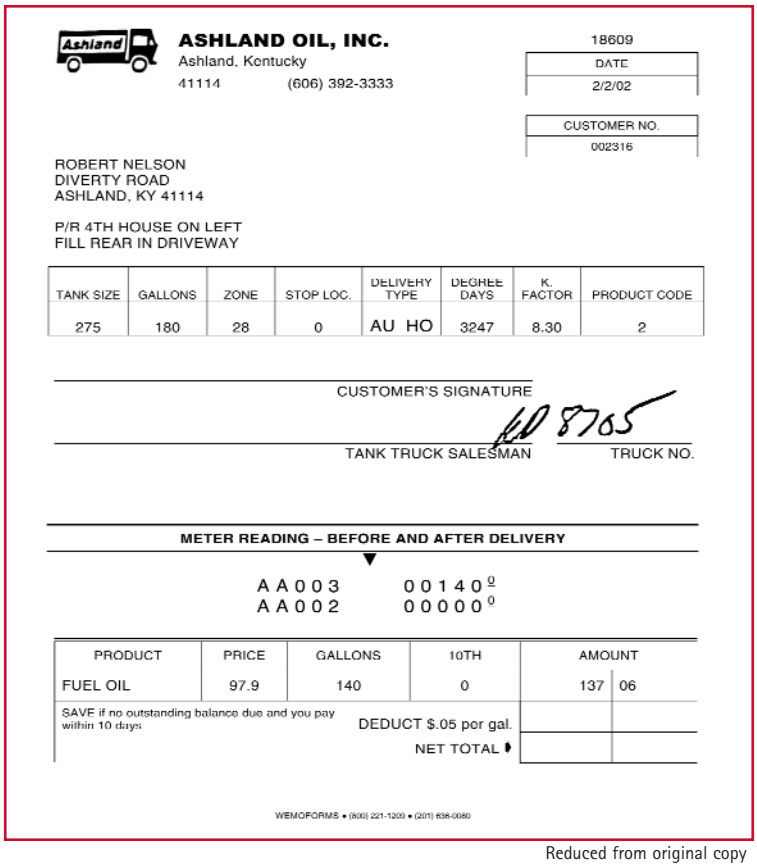
* Significantly different from all adults.
Note: Standard errors are in parentheses.
Source: 2003 National Survey of America's College Students and 2003 National Assessment of Adult Literacy.

Quantitative Literacy Question

Suppose that you had your oil tank filled with 140.0 gallons of oil, as indicated on the bill, and you wanted to take advantage of the five cents ($.05) per gallon deduction.

1. Figure out how much the deduction would be if you paid the bill within 10 days. Enter the amount of the deduction on the bill in the space provided.

_____



ASHLAND OIL, INC.
Ashland, Kentucky
41114 (606) 392-3333

18609

DATE
2/2/02

CUSTOMER NO.
002316

ROBERT NELSON
DIVERTY ROAD
ASHLAND, KY 41114

P/R 4TH HOUSE ON LEFT
FILL REAR IN DRIVEWAY

TANK SIZE	GALLONS	ZONE	STOP LOC.	DELIVERY TYPE	DEGREE DAYS	K. FACTOR	PRODUCT CODE
275	180	28	0	AU HO	3247	8.30	2

CUSTOMER'S SIGNATURE

TANK TRUCK SALESMAN 8705 TRUCK NO.

METER READING – BEFORE AND AFTER DELIVERY

AA003 00140
AA002 00000

PRODUCT	PRICE	GALLONS	10TH	AMOUNT	
FUEL OIL	97.9	140	0	137	06
SAVE if no outstanding balance due and you pay within 10 days			DEDUCT $.05 per gal.		
			NET TOTAL		

WEMOFORMS • (800) 221-1200 • (201) 838-0080

Reduced from original copy

Correct answer

$7.00

Percentage of U.S. adults in college and the nation who answered the question correctly, 2003

2-year colleges	4-year colleges	All adults
72 (3.2)*	84 (2.4)*	52 (1.1)

* Significantly different from all adults.
Note: Standard errors are in parentheses.
Source: 2003 National Survey of America's College Students and 2003 National Assessment of Adult Literacy.

Document and Quantitative Literacy Questions

This is an example of a task that was scored in three separate parts and treated as three separate questions. The first two questions were included on the document scale and the third question was included on the quantitative scale.

Refer to the form on the next page to answer the following question.

Use the following information to fill in the receipt for certified mail. Then fill in the "TOTAL Postage and Fees" line.

- You are sending a package to Doris Carter.
- Her address is 19 Main Street, Augusta, GA 30901.
- The postage for the package is $1.86.
- The fee for certified mail is $0.75.

Correct answer

Question 1 (Document): Enters name and address correctly. No penalty for misspelling.

Percentage of U.S. adults in college and the nation who answered the question correctly, 2003

2-year colleges	4-year colleges	All adults
83 (2.7)*	75 (2.7)*	65 (1.3)

* Significantly different from all adults.
Note: Standard errors are in parentheses.
Source: 2003 National Survey of America's College Students and 2003 National Assessment of Adult Literacy.

Correct answer

Question 2 (Document): Enters $1.86 and $0.75 on the postage and certified fees lines, respectively.

Percentage of U.S. adults in college and the nation who answered the question correctly, 2003

2-year colleges	4-year colleges	All adults
96 (1.4)*	97 (1.1)*	76 (1.2)

* Significantly different from all adults.
Note: Standard errors are in parentheses.
Source: 2003 National Survey of America's College Students and 2003 National Assessment of Adult Literacy.

Correct answer

Question 3 (Quantitative): Either of the following:

Correctly totals postage and fees: $2.61.

Correctly totals incorrect fees entered on form.

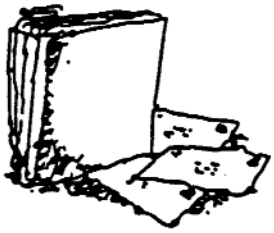
Percentage of U.S. adults in college and the nation who answered the question correctly, 2003

2-year colleges	4-year colleges	All adults
96 (1.3)*	97 (1.4)*	78 (1.0)

* Significantly different from all adults.
Note: Standard errors are in parentheses.
Source: 2003 National Survey of America's College Students and 2003 National Assessment of Adult Literacy.

What may be Certified?

Only items of no intrinsic value such as letters, files, records, etc., that are sent Priority First-Class Mail may be sent by certified mail. No insurance coverage is provided against loss or damage for this service. (For valuables and irreplaceable items, you should use insured or registered mail.)



How to use Certified Mail.

Simply fill out Form 3800, *Receipt for Certified Mail*, and attach (to the address side of the mail) the numbered label portion and the required postage and fee. You may obtain these forms at post offices or from rural carriers. Many customers find it convenient and a "time-saver" to have the form completed before approaching the window. Certified mail, with proper postage and fees affixed, may be dropped in a mailbox unless an official dated receipt is required.

Restricted Delivery

If you want to restrict the delivery of certified mail, you must endorse the mail "Restricted Delivery." This service is available for a $1.00 fee and can only be used for items addressed to specific individuals by name. However, the addressee can and often does authorize an agent to receive his or her restricted mail.

Fees

The fee for certified mail is 75 cents (in addition to your postage). For an additional fee, you also may purchase a return receipt which provides you proof of delivery.

P 138 573 931

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

Sent to	
Street and No.	
P.O., State and ZIP Code	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date	

PS FORM 3800, June 1985

Fold at line over top of envelope to the right of the return address.

CERTIFIED

P 138 573 931

MAIL

q r s t u v w x y z a b c d e f g h
a b c d e f g h i j k l m n o p q r s
l m n o p q r s t u v w x y z a b
k l m n o p q r s t u v w x y z a
a b c d e f g h i j k l m n o p q r s
l m n o p q r s t u v w x y z a b c
n o p q r s t u v w x y z a b c d e
x y z a b c d e f g h i j k l n o p
d e f g h i j l m n o p q r s t u v
z a b c d e f g h i j k l m n o p q
j k l m n o p q r s t u v w x y j k
c d e f g h i j k l m n o p q r s t u
n o p q r s t u v w x y z a b c d e
x y z a b c d e f g h i j k l m n o
h i j k l m n o p q r s t u v w x y
r s t u v w x y z a b c d e f g h i

APPENDIX B

technical notes

Sampling and Data Collection

The NSACS assessment was administered to a nationally representative sample of 1,827 students across eighty 2- and 4-year institutions. The NSACS sample was a two-stage, stratified random sample with the first stage of selection a sample of degree-granting 2- and 4-year undergraduate institutions and the second stage of selection a sample of students in their last year of a degree at these institutions. Institutions were selected through a systematic random sampling procedure, with sampling probabilities proportionate to size (PPS). The measure of size was the number of full- and part-time degree-seeking students in either their second year and up (for 2-year institutions) or their fourth year and up (for 4-year institutions), as measured by the 1998-1999 Integrated Postsecondary Education Data System (IPEDS) dataset. Explicit strata were defined by 2-year/4-year status. The second stage of selection consisted of a sample of full- and part-time degree-seeking students at 2- and 4-year undergraduate institutions who had accumulated enough credits to be eligible to graduate in spring 2003. The sampling design was a stratified systematic random sample. The alphabet as applied to the last and first name of students was used as an implicit stratifying variable.

The final institution response rate was 89 percent and the final student response rate was 49 percent, for a combined overall response rate of 43 percent. Because this response rate was lower than expected, AIR conducted a nonresponse bias analysis. The nonresponse bias analysis revealed significant differences in the background characteristics of the respondents who participated in the assessment and those who did not. A nonresponse bias adjustment was performed to reduce the bias due to nonresponse.[1] The analyses presented in this report are based on data from the corrected sample.

[1]The nonresponse bias adjustment was conducted using the following variables: institutional type (2-year vs. 4-year), institutional control (public vs. private), institutional selectivity, curricular emphasis, and gender.

Item Response Theory (IRT) Scaling

Item response theory (IRT) models were used to estimate average literacy scale scores. IRT models the probability of answering a question correctly as a mathematical function of proficiency or skill. The main purpose of IRT analysis is to provide a common scale on which performance (or some other trait) can be compared across groups.

IRT models assume that an examinee's performance on each item reflects characteristics of the item and characteristics of the examinee. An examinee's performance on a particular item reflects item difficulty, his or her proficiency, and the effects of other forces that are not correlated across items or individuals. All models assume that all items on a scale measure a common ability or proficiency (e.g., prose literacy) and that the probability of a correct response on an item is uncorrelated with the probability of a correct response on another item, an assumption known as conditional independence. Items are measured in terms of their difficulty as well as their ability to discriminate among examinees of varying ability and the probability that examinees with low ability will obtain a correct response through guessing.

The NSACS assessment used two types of IRT models to estimate scale scores. The two-parameter logistic (2PL) model, which was used for dichotomous items (that is, items that are scored either right or wrong), takes the form

$$P(x_{ij}=1 \mid \theta_j, a_i, b_i) = \frac{1}{1+e^{-1.7a_i(\theta_j - b_i)}},$$

where x_{ij} is the response of person j to item i, θ_j is the proficiency of person j, a_i is the *slope* or *discrimination* parameter for item i, and b_i is the *location* or *difficulty* parameter for item i.

For the partial credit items, the Graded Response Logistic (GRL) model was used. This model follows the 2PL model for the probability of a score of 1 (at least partially correct):

$$P(x_{ij} \geq 1 \mid \theta_j, a_i, b_{i1}) = \frac{1}{1+e^{-1.7a_i(\theta_j - b_{i1})}}.$$

It also follows the 2PL model for the probability of a score of 2 (completely correct):

$$P(x_{ij}=2 \mid \theta_j, a_i, b_{i2}) = \frac{1}{1+e^{-1.7a_i(\theta_j - b_{i2})}}.$$

In the equations above, b_{i1} and b_{i2} are the step parameters.[2]

Weighting and Variance Estimation

A complex sample design was used to select assessment respondents. The properties of a sample selected through a complex design could be very different from those of a simple random sample, in which every individual in the target population has an equal chance of selection and in which the observations from different sampled individuals can be considered to be statistically independent of one another. Therefore, the properties of the sample for the complex data collection design were taken into account during the analysis of the data. Standard errors calculated as though the data had been collected from a simple random sample would generally underestimate sampling errors. One way that the properties of the sample design were addressed was by using sampling weights to account for the fact that the probabilities of selection were not identical for all respondents. All population and subpopulation characteristics based on the NSACS data used sampling weights in their estimation.

The statistics presented in this report are estimates of group and subgroup performance based on a sample of respondents, rather than the values that could be calculated if every person in the nation answered every question on the instrument. It is therefore important to have measures of the degree of uncertainty of the estimates. Accordingly, in addition to providing estimates of percentages of respondents and their average scale score, this report provides information about the uncertainty of each statistic.

Because the assessment uses clustered sampling (students clustered in colleges and universities), conventional formulas for estimating sampling variability that assume simple random sampling and hence independence of observations are inappropriate. For this reason, the NSACS assessment uses a Taylor series procedure to estimate standard errors (Binder, 1983).[3]

Statistical Testing

All comparisons discussed in this report are *statistical* comparisons based on the t statistic, using a 95 percent confidence interval (two-tailed). The formula used to compute the t statistic was

$$t = \frac{(P_1 - P_2)}{\sqrt{(se_1^2 + se_2^2)}},$$

where P_1 and P_2 are the estimates to be compared and se_1 and se_2 are their corresponding standard errors.

[2]For further discussion of these models the reader is referred to U.S. Department of Education, National Center for Education Statistics. (forthcoming). *2003 National Assessment of Adult Literacy Technical Report*. Washington, DC: U.S. Government Printing Office.

[3]Binder, D.A. (1983). On the Variances of Asymptotically Normal Estimates for Complex Surveys. *International Statistical Review,* 51, 279–92.

q r s t u v w x y z a b c d e f g h
a b c d e f g h i j k l m n o p q r s
l m n o p q r s t u v w x y z a b
k l m n o p q r s t u v w x y z a
a b c d e f g h i j k l m n o p q r s
l m n o p q r s t u v w x y z a b
h i j k l m n o p q r s t u v w x y
r s t u v w x y z a b c d e f g h i j
v w x y z a b c d e f g h i j l m n
g h i j k l m n o p q r s t u v w x
n o p q s t u v w x y z a b c d e f
y j k l m n o p q r s t u v w x y z
n o p q r s t u v w x y z a b c d e
x y z a b c d e f g h i j k l m n o
h i j k l m n o p q r s t u v w x y
r s t u v w x y j k l m n o p q r s

APPENDIX C

standard errors for tables and figures

Table C1. Estimates and standard errors for Figures 2.1 and 2.2: Average prose, document, and quantitative literacy scores and percentage in each literacy level, for U.S. adults in college and the nation

Literacy scale and population	Average	Percent *Below Basic*	Percent *Basic*	Percent *Intermediate*	Percent *Proficient*
PROSE					
2-year colleges	311 (2.2)	1 (0.5)	11 (2.1)	65 (3.9)	23 (3.8)
4-year colleges	326 (3.0)	1 (0.5)	6 (1.8)	56 (4.9)	38 (5.1)
All adults	275 (1.3)	14 (0.6)	29 (0.6)	44 (0.7)	13 (0.5)
DOCUMENT					
2-year colleges	306 (2.9)	1 (0.6)	7 (2.3)	69 (5.9)	23 (5.9)
4-year colleges	323 (3.1)	1 (0.4)	5 (1.3)	55 (5.2)	40 (5.4)
All adults	271 (1.2)	12 (0.5)	22 (0.5)	53 (0.7)	13 (0.6)
QUANTITATIVE					
2-year colleges	310 (2.8)	4 (1.6)	29 (3.5)	49 (4.2)	18 (4.1)
4-year colleges	330 (3.5)	1 (0.9)	19 (3.0)	46 (4.8)	34 (5.4)
All adults	283 (1.2)	22 (0.6)	33 (0.5)	33 (0.5)	13 (0.5)

Note: Percentages may not add to 100 because of rounding. Standard errors are in parentheses.
Source: 2003 National Survey of America's College Students and 2003 National Assessment of Adult Literacy.

Table C2. Estimates and standard errors for Table 2.1: Average prose, document, and quantitative literacy scores for U.S. adults in college and the nation, by selected characteristics

	Prose			Document			Quantitative		
Characteristic	2-year	4-year	All adults	2-year	4-year	All Adults	2-year	4-year	All Adults
GENDER									
Female	312 (2.2)	326 (3.2)	277 (1.4)	306 (3.2)	322 (4.1)	272 (1.2)	306 (2.9)	326 (3.6)	279 (1.3)
Male	309 (4.0)	327 (3.8)	272 (1.5)	307 (5.1)	325 (3.7)	269 (1.5)	316 (4.1)	336 (4.5)	286 (1.3)
RACE/ETHNICITY									
White	319 (2.1)	332 (3.2)	288 (1.5)	315 (2.9)	329 (3.4)	282 (1.5)	321 (2.3)	337 (3.5)	297 (1.3)
Black	296 (5.5)	296 (9.0)	243 (1.8)	286 (6.3)	293 (9.2)	238 (2.1)	289 (4.4)	292 (5.6)	238 (2.1)
Hispanic	308 (7.5)	313 (9.3)	216 (3.5)	294 (6.5)	313 (11.6)	224 (3.6)	296 (8.7)	310 (7.8)	233 (3.2)
Asian/Pacific Islander	274 (7.9)	307 (7.0)	271 (4.0)	286 (10.2)	302 (5.5)	272 (5.0)	278 (7.2)	314 (7.6)	285 (5.1)
LANGUAGE SPOKEN BEFORE STARTING SCHOOL									
English only	316 (2.1)	329 (3.3)	283 (1.4)	311 (2.8)	326 (3.5)	276 (1.3)	317 (2.5)	333 (3.6)	289 (1.2)
English and other language	~ ~	327 (8.9)	272 (2.2)	~ ~	316 (9.2)	264 (2.4)	~ ~	317 (7.0)	278 (3.0)
Non-English	288 (6.3)	303 (5.8)	212 (3.5)	283 (5.5)	306 (6.4)	222 (3.9)	284 (4.7)	318 (7.4)	235 (4.0)

~ Literacy score could not be estimated because of small sample size.
Note: Standard errors are in parentheses.
Source: 2003 National Survey of America's College Students and 2003 National Assessment of Adult Literacy.

Table C3. Estimates and standard errors for Table 2.2: Percentage of U.S. adults in college and the nation in each prose literacy level, by selected characteristics

	Below Basic			*Basic*			*Intermediate*			*Proficient*		
Characteristic	2-year	4-year	All adults	2-year	4-year	All adults	2-year	4-year	All adults	2-year	4-year	All adults
GENDER												
Female	0 (0.5)	1 (0.6)	12 (0.6)	9 (2.8)	6 (1.9)	29 (0.6)	69 (5.6)	56 (4.9)	46 (0.8)	22 (5.4)	37 (5.1)	14 (0.6)
Male	2 (1.0)	0 (0.5)	15 (0.6)	14 (2.8)	7 (2.3)	29 (0.7)	61 (4.8)	55 (6.4)	43 (0.7)	24 (4.7)	38 (6.6)	13 (0.6)
RACE/ETHNICITY												
White	0 (0.3)	0 (0.5)	7 (0.5)	6 (2.3)	3 (2.1)	25 (0.8)	67 (6.2)	55 (8.2)	51 (0.9)	27 (6.1)	42 (8.5)	17 (0.9)
Black	0 (1.8)	4 (2.9)	24 (1.4)	18 (13.2)	20 (6.0)	43 (1.2)	71 (16.5)	61 (8.3)	31 (1.4)	11 (12.5)	16 (7.1)	2 (0.4)
Hispanic	2 (2.5)	2 (2.1)	44 (1.8)	12 (5.7)	4 (5.5)	30 (1.0)	63 (9.3)	55 (9.6)	23 (1.1)	22 (9.2)	29 (9.5)	4 (0.4)
Asian/Pacific Islander	5 (3.4)	1 (1.6)	14 (2.0)	39 (9.6)	17 (5.2)	32 (2.2)	49 (10.8)	59 (7.7)	42 (2.5)	7 (6.5)	23 (7.5)	12 (1.8)
LANGUAGE SPOKEN BEFORE STARTING SCHOOL												
English only	1 (0.5)	0 (0.4)	9 (0.5)	8 (2.0)	5 (2.1)	27 (0.7)	66 (4.6)	56 (6.6)	49 (0.8)	26 (4.5)	39 (6.9)	15 (0.7)
English and other language	~	~	0 (0.8)	10 (1.2)	~	~	6 (8.2)	35 (1.8)	~	~	58 (20.8)	47 (2.0)
Non-English	2 (2.8)	4 (2.1)	48 (1.7)	26 (8.5)	19 (3.6)	28 (1.1)	62 (10.1)	54 (5.6)	21 (1.1)	9 (7.1)	24 (4.8)	4 (0.5)

~ Literacy score could not be estimated because of small sample size.

Note: Percentages may not add to 100 because of rounding. Standard errors are in parentheses.

Source: 2003 National Survey of America's College Students and 2003 National Assessment of Adult Literacy.

Table C4. Estimates and standard errors for Table 2.3: Percentage of U.S. adults in college and the nation in each document literacy level, by selected characteristics

	Below Basic			*Basic*			*Intermediate*			*Proficient*		
Characteristic	2-year	4-year	All adults	2-year	4-year	All adults	2-year	4-year	All adults	2-year	4-year	All adults
GENDER												
Female	1 (0.7)	1 (0.5)	11 (0.6)	8 (2.5)	4 (2.0)	22 (0.6)	68 (6.1)	58 (7.5)	54 (0.8)	24 (6.2)	38 (7.8)	13 (0.6)
Male	1 (1.3)	0 (0.4)	14 (0.6)	7 (4.1)	5 (1.4)	23 (0.5)	69 (11.1)	52 (5.3)	51 (0.8)	24 (11.4)	43 (5.5)	13 (0.6)
RACE/ETHNICITY												
White	0 (0.3)	0 (0.3)	8 (0.5)	3 (2.5)	3 (1.4)	19 (0.7)	68 (9.7)	52 (7.3)	58 (1.0)	28 (9.9)	45 (7.6)	15 (1.0)
Black	1 (3.6)	3 (2.5)	24 (1.7)	16 (12.4)	12 (6.1)	35 (1.4)	74 (16.6)	68 (11.0)	40 (1.9)	10 (13.0)	17 (10.4)	2 (0.5)
Hispanic	1 (2.3)	3 (2.7)	36 (1.6)	10 (7.5)	10 (4.0)	26 (0.8)	73 (13.0)	52 (9.9)	33 (1.2)	15 (11.9)	35 (10.2)	5 (0.5)
Asian/Pacific Islander	8 (3.5)	0 (1.2)	11 (2.2)	17 (4.9)	9 (6.3)	22 (2.1)	56 (7.8)	71 (12.6)	54 (3.0)	18 (6.9)	20 (11.9)	13 (2.3)
LANGUAGE SPOKEN BEFORE STARTING SCHOOL												
English only	0 (0.5)	0 (0.4)	9 (0.5)	5 (2.3)	4 (1.4)	21 (0.6)	68 (7.2)	53 (5.9)	56 (0.8)	27 (7.3)	42 (6.2)	13 (0.7)
English and other language	~	~	0 (1.3)	11 (1.6)	~	~	7 (6.0)	27 (1.8)	~	~	60 (16.4)	56 (2.4)
Non-English	4 (2.6)	1 (1.5)	37 (1.7)	17 (5.5)	9 (4.3)	25 (0.8)	69 (7.7)	63 (9.3)	32 (1.2)	10 (6.1)	26 (9.2)	6 (0.6)

~ Literacy score could not be estimated because of small sample size.

Note: Percentages may not add to 100 because of rounding. Standard errors are in parentheses.

Source: 2003 National Survey of America's College Students and 2003 National Assessment of Adult Literacy.

Table C5. Estimates and standard errors for Table 2.4: Percentage of U.S. adults in college and the nation in each quantitative literacy level, by selected characteristics

	Below Basic			*Basic*			*Intermediate*			*Proficient*		
Characteristic	2-year	4-year	All adults	2-year	4-year	All adults	2-year	4-year	All adults	2-year	4-year	All adults
GENDER												
Female	5 (1.7)	1 (1.1)	22 (0.8)	31 (3.3)	20 (3.8)	35 (0.7)	47 (3.8)	49 (5.9)	32 (0.7)	16 (3.6)	30 (6.4)	11 (0.6)
Male	2 (2.2)	1 (0.9)	21 (0.6)	25 (6.4)	17 (3.2)	31 (0.5)	53 (8.3)	42 (5.0)	33 (0.5)	20 (8.2)	39 (5.8)	16 (0.6)
RACE/ETHNICITY												
White	1 (1.0)	1 (0.6)	13 (0.7)	22 (3.4)	15 (3.0)	32 (0.7)	53 (4.9)	45 (5.5)	39 (0.8)	24 (5.1)	40 (6.1)	17 (0.8)
Black	9 (4.4)	6 (9.9)	47 (1.8)	42 (7.1)	43 (18.1)	36 (1.3)	42 (7.3)	46 (18.7)	15 (1.1)	7 (4.5)	5 (9.7)	2 (0.4)
Hispanic	10 (5.3)	4 (3.7)	50 (1.7)	35 (7.8)	33 (8.6)	29 (0.9)	41 (8.5)	45 (9.5)	17 (0.9)	14 (7.2)	19 (10.3)	4 (0.5)
Asian/Pacific Islander	13 (13.4)	2 (3.9)	19 (3.0)	50 (18.5)	28 (11.5)	34 (2.9)	35 (18.0)	51 (14.1)	35 (2.8)	3 (6.9)	20 (14.5)	12 (2.5)
LANGUAGE SPOKEN BEFORE STARTING SCHOOL												
English only	2 (1.2)	1 (0.8)	18 (0.6)	25 (3.6)	17 (3.2)	33 (0.6)	52 (4.7)	46 (5.1)	35 (0.6)	21 (4.7)	36 (5.8)	15 (0.6)
English and other language	~ ~	2 (5.7)	21 (2.1)	~ ~	25 (20.1)	38 (1.9)	~ ~	53 (22.9)	31 (2.0)	~ ~	21 (23.1)	10 (1.6)
Non-English	8 (8.4)	4 (2.7)	49 (1.8)	49 (15.0)	27 (5.5)	28 (0.9)	40 (14.7)	41 (6.8)	18 (1.1)	3 (6.0)	27 (7.6)	6 (0.7)

~ Literacy score could not be estimated because of small sample size.

Note: Percentages may not add to 100 because of rounding. Standard errors are in parentheses.

Source: 2003 National Survey of America's College Students and 2003 National Assessment of Adult Literacy.

Table C6. Estimates and standard errors for Figures 2.3 and 2.4: Average prose, document, and quantitative literacy scores and percentage in each literacy level, for U.S. adults in college and the nation, by completion of postsecondary education

Literacy scale and population	Average	Percent *Below Basic*	Percent *Basic*	Percent *Intermediate*	Percent *Proficient*
PROSE					
Students, 2-year	311 (2.2)	1 (0.5)	11 (2.1)	65 (3.9)	23 (3.8)
Students, 4-year	326 (3.0)	1 (0.5)	6 (1.8)	56 (4.9)	38 (5.1)
Adults, 2-year	298 (2.4)	4 (0.7)	20 (1.5)	56 (2.0)	19 (2.0)
Adults, 4-year	314 (2.1)	3 (0.5)	14 (1.0)	53 (1.7)	31 (1.8)
DOCUMENT					
Students, 2-year	306 (2.9)	1 (0.6)	7 (2.3)	69 (5.9)	23 (5.9)
Students, 4-year	323 (3.1)	1 (0.4)	5 (1.3)	55 (5.2)	40 (5.4)
Adults, 2-year	291 (2.0)	3 (0.7)	15 (1.5)	66 (2.3)	16 (2.2)
Adults, 4-year	303 (2.2)	2 (0.6)	11 (1.2)	62 (2.5)	25 (2.7)
QUANTITATIVE					
Students, 2-year	310 (2.8)	4 (1.6)	29 (3.5)	49 (4.2)	18 (4.1)
Students, 4-year	330 (3.5)	1 (0.9)	19 (3.0)	46 (4.8)	34 (5.4)
Adults, 2-year	305 (2.1)	7 (1.1)	30 (1.9)	45 (2.1)	18 (2.1)
Adults, 4-year	323 (1.8)	4 (0.6)	22 (1.2)	43 (1.5)	31 (1.9)

Note: Percentages may not add to 100 because of rounding. Standard errors are in parentheses.
Source: 2003 National Survey of America's College Students and 2003 National Assessment of Adult Literacy.

Table C7. Estimates and standard errors for Figures 3.1 and 3.2: Average prose, document, and quantitative literacy scores and percentage in each literacy level, for U.S. adults in 2- and 4-year colleges

Literacy scale and population	Average	Percent *Below Basic*	Percent *Basic*	Percent *Intermediate*	Percent *Proficient*
PROSE					
2-year colleges	311 (2.2)	1 (0.5)	11 (2.1)	65 (3.9)	23 (3.8)
4-year colleges	326 (3.0)	1 (0.5)	6 (1.8)	56 (4.9)	38 (5.1)
DOCUMENT					
2-year colleges	306 (2.9)	1 (0.6)	7 (2.3)	69 (5.9)	23 (5.9)
4-year colleges	323 (3.1)	1 (0.4)	5 (1.3)	55 (5.2)	40 (5.4)
QUANTITATIVE					
2-year colleges	310 (2.8)	4 (1.6)	29 (3.5)	49 (4.2)	18 (4.1)
4-year colleges	330 (3.5)	1 (0.9)	19 (3.0)	46 (4.8)	34 (5.4)

Note: Percentages may not add to 100 because of rounding. Standard errors are in parentheses.
Source: 2003 National Survey of America's College Students.

Table C8. Estimates and standard errors for Figures 3.3, 3.4, 3.5: Average prose, document, and quantitative literacy scores for U.S. adults in 2- and 4-year colleges, by institutional characteristics

Institutional characteristic	Prose	Document	Quantitative
Public 4-year college	328 (2.9)	326 (3.1)	334 (3.5)
Private 4-year college	319 (9.3)	314 (9.1)	317 (8.5)
Selective 4-year college	328 (2.9)	325 (3.2)	331 (3.7)
Nonselective 4-year college	306 (9.1)	310 (8.8)	320 (7.8)
Academic emphasis of 2-year college	310 (2.5)	305 (3.4)	308 (3.2)
Technical emphasis of 2-year college	314 (3.8)	311 (2.9)	318 (4.5)

Note: Standard errors are in parentheses.
Source: 2003 National Survey of America's College Students.

Table C9. Estimates and standard errors for Figures 4.1 and 4.2: Average prose, document, and quantitative literacy scores and percentage with *Proficient* literacy for U.S. adults in 2- and 4-year colleges, by country of birth

	Prose				Document				Quantitative			
	Average		Percent *Proficient*		Average		Percent *Proficient*		Average		Percent *Proficient*	
Country of birth	2-year	4-year	2-year	4-year	2-year	4-year	2-year	4-year	2-year	4-year	2-year	4-year
U.S.-born	315 (2.0)	330 (3.3)	24 (4.8)	40 (7.6)	310 (2.8)	327 (3.4)	25 (8.8)	43 (6.6)	315 (2.6)	333 (3.6)	20 (4.7)	36 (6.1)
Foreign-born	293 (6.2)	297 (6.2)	16 (5.6)	17 (5.7)	285 (5.2)	300 (4.5)	13 (4.8)	20 (7.8)	290 (5.8)	315 (8.4)	6 (6.7)	23 (10.0)

Note: Standard errors are in parentheses.
Source: 2003 National Survey of America's College Students.

Table C10. Estimates and standard errors for Figures 4.3, 4.4, and 4.5 and Tables 4.1 and 4.2: Average prose, document, and quantitative literacy scores for U.S. adults in 2- and 4-year colleges, by student characteristics

	Prose		Document		Quantitative	
Student characteristic	2-year	4-year	2-year	4-year	2-year	4-year
DEPENDENT STATUS						
Financially dependent on someone else	309 (3.6)	330 (3.5)	306 (3.9)	325 (4.1)	311 (3.8)	333 (4.5)
Financially independent	312 (2.6)	322 (4.4)	306 (3.5)	321 (4.2)	310 (3.1)	327 (3.9)
PERSONAL/PARENTS' INCOME						
$0–$9,999	314 (6.5)	313 (7.0)	299 (9.7)	312 (8.5)	305 (12.8)	321 (8.0)
$10,000–$19,999	310 (3.7)	329 (7.5)	302 (6.3)	325 (7.3)	306 (4.9)	330 (6.0)
$20,000–$29,999	307 (7.7)	328 (13.3)	299 (7.5)	318 (7.6)	302 (5.5)	342 (9.9)
$30,000–$39,999	316 (6.5)	322 (7.4)	307 (5.3)	329 (8.5)	310 (7.8)	343 (9.1)
$40,000–$49,999	324 (5.8)	325 (7.1)	304 (6.6)	333 (7.8)	318 (5.3)	327 (6.2)
$50,000–$59,999	321 (5.3)	339 (6.5)	306 (4.5)	317 (7.7)	323 (5.2)	345 (7.7)
$60,000–$74,999	311 (7.4)	334 (5.1)	329 (10.2)	320 (6.6)	317 (7.0)	328 (5.9)
$75,000–$99,999	322 (5.0)	326 (4.5)	328 (8.7)	324 (5.8)	328 (5.9)	336 (7.3)
$100,000+	308 (7.5)	336 (6.0)	306 (7.7)	338 (6.3)	323 (6.7)	333 (6.1)
PARENTS' EDUCATION						
Less than/some high school	290 (7.9)	~ ~	279 (7.2)	~ ~	288 (7.8)	~ ~
High school graduate/GED	306 (4.1)	315 (5.1)	303 (4.8)	306 (5.7)	305 (3.8)	318 (5.1)
Vocational/trade/business school	317 (5.2)	330 (6.7)	306 (6.0)	337 (10.2)	313 (5.3)	337 (8.6)
Some college	312 (4.8)	317 (6.6)	305 (5.5)	321 (7.0)	321 (6.5)	321 (6.1)
Associate's/2-year degree	313 (4.9)	324 (6.9)	316 (6.5)	330 (8.4)	311 (6.3)	331 (6.1)
College graduate	320 (5.9)	328 (4.1)	319 (5.6)	323 (4.2)	314 (4.5)	335 (4.3)
Graduate studies/degree	323 (5.7)	340 (3.9)	312 (6.0)	330 (5.6)	321 (6.0)	339 (5.7)
YEARS SINCE HIGH SCHOOL GRADUATION						
Less than 5 years	307 (3.0)	328 (3.2)	307 (4.4)	325 (3.8)	306 (3.9)	334 (4.4)
6–10 years	311 (5.6)	324 (5.7)	311 (5.1)	319 (5.3)	314 (4.4)	321 (5.0)
More than 10 years	315 (3.5)	327 (6.5)	303 (3.9)	318 (5.2)	313 (3.4)	334 (5.0)
COUNTRY OF HIGH SCHOOL DIPLOMA						
U.S. high school	312 (1.8)	328 (3.4)	308 (2.8)	324 (3.3)	311 (2.6)	331 (3.7)
Foreign high school	289 (8.6)	310 (7.3)	279 (7.3)	306 (7.1)	295 (7.3)	320 (8.1)

~ Literacy score could not be estimated because of small sample size.

Note: Standard errors are in parentheses.

Source: 2003 National Survey of America's College Students.

Table C11. Estimates and standard errors for Figures 5.1, 5.2, and 5.3: Average prose, document, and quantitative literacy scores for U.S. adults in 2- and 4-year colleges, by measures of college experiences

College experience	Prose		Document		Quantitative	
	2-year	4-year	2-year	4-year	2-year	4-year
LENGTH OF TIME IN COLLEGE						
Less than 5 years	309 (2.7)	327 (3.4)	306 (4.0)	326 (3.8)	308 (3.8)	333 (4.5)
6-10 years	307 (5.7)	325 (4.7)	305 (5.1)	321 (4.6)	308 (4.7)	322 (4.3)
More than 10 years	320 (4.4)	327 (8.1)	309 (4.3)	315 (8.0)	316 (4.0)	333 (5.7)
ENROLLMENT STATUS						
Full time	311 (2.5)	327 (2.9)	307 (3.4)	323 (3.2)	310 (2.8)	331 (3.7)
Part time	312 (3.5)	321 (9.7)	303 (4.8)	325 (9.2)	312 (4.9)	328 (6.5)
TOTAL POSTSECONDARY INSTITUTIONS ATTENDED						
1 institution	308 (3.0)	324 (4.8)	303 (3.9)	324 (5.0)	307 (3.7)	331 (4.7)
2 institutions	317 (3.6)	329 (4.0)	310 (4.1)	325 (4.8)	316 (4.7)	331 (4.2)
3 or more institutions	315 (4.6)	328 (4.1)	314 (5.9)	320 (3.9)	315 (5.4)	331 (4.6)

Note: Standard errors are in parentheses.
Source: 2003 National Survey of America's College Students.

Table C12. Estimates and standard errors for Figure 5.4: Average prose, document, and quantitative literacy scores for U.S. adults in 2- and 4-year colleges, by enrollment in remedial math or English

Enrollment in remedial math or English	Prose		Document		Quantitative	
	2-year	4-year	2-year	4-year	2-year	4-year
Took remedial English	291 (5.8)	305 (5.9)	289 (5.8)	309 (7.5)	302 (7.2)	307 (5.7)
Took remedial math	316 (4.4)	316 (5.5)	314 (5.6)	314 (7.8)	307 (4.2)	311 (5.4)
Took remedial English and math	294 (4.0)	304 (6.8)	288 (3.9)	311 (8.1)	285 (4.3)	310 (6.5)
Took no remedial classes	320 (2.6)	334 (3.0)	315 (3.9)	329 (3.3)	325 (3.1)	339 (3.7)

Note: Standard errors are in parentheses.
Source: 2003 National Survey of America's College Students.

Table C13. Estimates and standard errors for Table 5.1: Average prose, document, and quantitative literacy scores for U.S. adults in 2- and 4-year colleges, by academic major

	Prose		Document		Quantitative	
Academic major	2-year	4-year	2-year	4-year	2-year	4-year
Business management	307 (4.8)	321 (5.0)	302 (4.8)	316 (6.5)	312 (4.3)	328 (4.6)
Math, science, engineering	315 (5.1)	335 (4.3)	310 (6.1)	337 (5.0)	313 (6.2)	347 (5.1)
Education	307 (3.5)	320 (6.9)	311 (6.2)	309 (7.0)	306 (5.0)	322 (8.0)
Fine arts and humanities	319 (5.4)	331 (3.8)	306 (6.9)	329 (5.5)	311 (6.6)	321 (3.9)
Health	315 (4.0)	316 (8.3)	315 (5.8)	321 (9.4)	316 (4.0)	326 (9.4)
Social sciences	304 (4.3)	327 (7.6)	296 (8.1)	318 (7.3)	301 (7.1)	332 (7.8)
Vocational/technical/other	314 (7.7)	~ ~	294 (8.8)	~ ~	305 (6.3)	~ ~

~ Literacy score could not be estimated because of small sample size.
Note: Standard errors are in parentheses.
Source: 2003 National Survey of America's College Students.

Table C14. Estimates and standard errors for Figures 5.5 and 5.6: Average prose, document, and quantitative literacy scores and percentage with *Proficient* literacy for U.S. adults in 2- and 4-year colleges, by grade point average

	Prose				Document				Quantitative			
	Average		Percent *Proficient*		Average		Percent *Proficient*		Average		Percent *Proficient*	
Grade point average	2-year	4-year	2-year	4-year	2-year	4-year	2-year	4-year	2-year	4-year	2-year	4-year
Mostly As	329 (4.1)	344 (5.9)	39 (10.9)	55 (11.8)	313 (6.0)	337 (6.0)	30 (11.9)	53 (9.6)	329 (5.0)	351 (6.4)	34 (6.6)	51 (7.7)
As and Bs	315 (3.4)	333 (3.6)	25 (7.5)	44 (5.9)	314 (4.1)	329 (4.2)	32 (6.8)	45 (6.5)	315 (3.1)	337 (4.7)	19 (6.3)	39 (7.5)
Mostly Bs	309 (3.2)	319 (4.0)	20 (6.5)	29 (10.3)	308 (5.2)	318 (4.4)	25 (11.7)	34 (10.0)	306 (4.4)	324 (4.7)	14 (7.4)	29 (7.1)
Bs and Cs	295 (4.3)	312 (4.9)	11 (6.6)	24 (8.0)	287 (3.9)	311 (5.5)	7 (10.2)	27 (16.3)	293 (4.3)	315 (4.5)	10 (4.5)	19 (9.9)

Note: Standard errors are in parentheses.
Source: 2003 National Survey of America's College Students.

Table C15. Estimates and standard errors for Table 5.2: Average prose, document, and quantitative literacy scores for U.S. adults in 2- and 4-year colleges, by expectations for postsecondary education

	Prose		Document		Quantitative	
Expectations for postsecondary education	2-year	4-year	2-year	4-year	2-year	4-year
Associate's degree	297 (4.4)	–	287 (4.6)	–	299 (4.9)	–
Bachelor's degree	311 (3.3)	325 (3.5)	305 (4.3)	319 (4.5)	313 (4.5)	329 (4.4)
Master's degree or equivalent	318 (3.4)	326 (3.6)	314 (3.7)	323 (3.7)	314 (3.4)	329 (3.7)
Doctoral degree	309 (4.4)	325 (6.5)	312 (9.3)	319 (6.6)	305 (5.6)	326 (7.9)
First professional degree	325 (7.8)	343 (6.5)	315 (7.4)	342 (9.0)	315 (7.5)	361 (8.8)

– Not applicable
Note: Standard errors are in parentheses.
Source: 2003 National Survey of America's College Students.

Table C16. Estimates and standard errors for Figure 5.7: Average prose, document, and quantitative literacy scores for U.S. adults in 2- and 4-year colleges, by emphasis on analytic coursework

	Prose		Document		Quantitative	
Emphasis on analytic coursework	2-year	4-year	2-year	4-year	2-year	4-year
Low	297 (4.9)	310 (6.5)	293 (4.8)	308 (6.8)	300 (5.3)	319 (5.8)
Medium	316 (2.8)	329 (3.0)	310 (3.1)	325 (3.2)	313 (2.9)	334 (3.7)
High	314 (3.7)	327 (4.3)	310 (5.0)	328 (6.3)	313 (4.4)	325 (5.1)

Note: Standard errors are in parentheses.
Source: 2003 National Survey of America's College Students.

Table C17. Estimates and standard errors for Figure 5.8: Average prose, document, and quantitative literacy scores for U.S. adults in 2- and 4-year colleges, by frequency of faculty interactions outside of class

	Prose		Document		Quantitative	
Faculty interactions outside of class	2-year	4-year	2-year	4-year	2-year	4-year
Infrequent	313 (6.1)	337 (5.5)	308 (6.6)	326 (6.9)	314 (6.6)	340 (5.4)
Somewhat frequent	311 (2.6)	326 (3.5)	307 (3.1)	324 (3.3)	312 (2.8)	330 (3.7)
Frequent	310 (4.3)	321 (5.3)	301 (6.7)	318 (5.5)	298 (4.6)	323 (6.0)

Note: Standard errors are in parentheses.
Source: 2003 National Survey of America's College Students.

Table C18. Estimates and standard errors for Figure 5.9: Average prose, document, and quantitative literacy scores for U.S. adults in 2- and 4-year colleges, by institutional support

	Prose		Document		Quantitative	
Institutional support	2-year	4-year	2-year	4-year	2-year	4-year
Low	303 (4.9)	322 (5.3)	301 (5.3)	319 (5.5)	305 (4.7)	328 (5.1)
Medium	313 (2.4)	328 (3.3)	308 (3.0)	323 (3.3)	312 (3.1)	332 (3.7)
High	306 (5.2)	326 (6.0)	301 (6.8)	329 (6.6)	302 (5.5)	324 (8.0)

Note: Standard errors are in parentheses
Source: 2003 National Survey of America's College Students.

Table C19. Estimates and standard errors for Table 5.3: Average prose, document, and quantitative literacy scores for U.S. adults in 2- and 4-year colleges, by quality of relationships with faculty and students

Literacy scale and quality of relationships with faculty and students	2-year			4-year		
	Unfriendly	Somewhat friendly	Friendly	Unfriendly	Somewhat friendly	Friendly
PROSE						
Quality of relationships with faculty	~ ~	292 (7.7)	314 (2.0)	322 (9.5)	320 (5.2)	328 (3.2)
Quality of relationships with other students	~ ~	309 (6.6)	311 (2.1)	~ ~	325 (6.7)	328 (3.2)
DOCUMENT						
Quality of relationships with faculty	~ ~	296 (6.5)	309 (3.2)	321 (8.2)	323 (7.6)	324 (3.2)
Quality of relationships with other students	~ ~	314 (6.2)	306 (3.2)	~ ~	321 (8.6)	324 (3.1)
QUANTITATIVE						
Quality of relationships with faculty	~ ~	294 (6.6)	312 (2.8)	334 (10.0)	323 (6.2)	332 (3.7)
Quality of relationships with other students	~ ~	319 (8.6)	309 (2.8)	~ ~	320 (7.2)	332 (3.4)

~ Literacy score could not be estimated because of small sample size.

Note: Standard errors are in parentheses.

Source: 2003 National Survey of America's College Students.

q r s t u v w x y z a b c d e f g h
a b c d e f g h i j k l m n o p q r s
l m n o p q r s t u v w x y z a b
k l m n o p q r s t u v w x y z a
a b c d e f g h i j k l m n o p q r s
l m n o p q r s t u v w x y z a b c
v w x y z a b c d e f g h i j k l m
x y z a b c d e f g h i j k l n o p c
l m n o p q r s t u v w x y z a b c
v w x y z a b c d e f g h i j k l m
e f g h i j k l m n o p q r s t u v
o p q r s t u v w x y z a b c d e f
y z a b c d e f g h i j k l m n o p
i j k l m n o p q r s t u v w x y z
s t u v w x y z a b c d e f g h i j k
c d e f g h i j k l m n o p q r s t u

APPENDIX D

glossary

Academic and social engagement

Student academic and social engagement in postsecondary institutions was measured using three scales:

- Emphasis on Analytic Coursework
- Faculty Interactions Outside of Class
- Institutional Support

The scales were derived from selected questions from the NSSE and CCSSE surveys of student engagement included on the NSACS background questionnaire.[1] The first step in creating the scales was to use factor analysis to examine the engagement questions. The factor rotations supported classifying nine of the original nineteen engagement questions in the following three groups:

Emphasis on Analytic Coursework

1. Coursework that emphasizes synthesizing and organizing ideas, information, or experiences into new, more-complex interpretations and relationships
2. Coursework that emphasizes making judgments about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions
3. Coursework that emphasizes applying theories or concepts to practical problems or in new situations

Faculty Interactions Outside of Class

1. Frequency of discussing grades or assignments with an instructor
2. Frequency of talking about career plans with an instructor
3. Frequency of discussing ideas from class reading with faculty outside of class

[1]Additional information about NSSE and CCSSE can be found at www.indiana.edu/~nsse/ and www.ccsse.org.

Institutional Support

1. Extent to which the institution provides support necessary for students to succeed academically
2. Extent to which the institution helps students cope with nonacademic responsibilities (work, family, etc.)
3. Extent to which the institution provides support to help students thrive socially

To create the scales, each item was standardized to a z-score with a mean of 0 and a standard deviation of 1. Next, the reliability of the proposed scales was assessed using Cronbach's alpha. The alphas for the scales ranged from .73 to .81.

The items within the groups (three items per group) were then summed and the scales were recoded as categorical variables with three response categories: low, medium, and high. The scale values were set on the basis of the mean and standard deviation for each scale. Values greater than one standard deviation below the mean were classified low, values within one standard deviation above or below the mean were classified medium, and values greater than one standard deviation above the mean were classified high.

Curricular emphasis (2-year institutions only)

Institutions that awarded 40% or more of their degrees in the following fields (as measured by IPEDS Database 1999–2000)[2] were coded as having a technical emphasis:

- Computer and Information Sciences
- Engineering
- Engineering-Related Technologies
- Science and Technology/Technician
- Construction Trades
- Mechanics and Repairers
- Transportation and Materials Moving
- Health Professions and Related Sciences

All others were coded as having an academic emphasis.

[2]U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Completions" survey 1999-2000.

Dependent status

Respondent was considered a dependent if someone could claim him or her as a dependent on his or her 2002 taxes.

Four-year institution[3]

An institution legally authorized to offer and offering at least a 4-year program of college-level studies wholly or principally creditable toward a baccalaureate degree.

Grade point average

The following grade point averages are associated with the letter grade categories:

- Mostly As (3.75–4.0)
- As and Bs (3.25–3.74)
- Mostly Bs (2.75–3.24)
- Bs and Cs (2.25–2.74)
- Mostly Cs and Ds/Other (1.25–2.24)

Institutional selectivity (4-year institutions only)

Institutional selectivity was measured by Barron's Guide 2000.[4] Institutions with a Barron score of 1.00 (noncompetitive) were coded as nonselective, and all others were coded as selective.

[3]Definition taken from U.S. Department of Education, National Center for Education Statistics. (2000). *Digest of Education Statistics, 1999* (NCES 2000-031). Washington, DC: U.S. Government Printing Office.

[4]Barron's Educational Series. (Eds.). (2000). *Barron's Guide to the Most Competitive Colleges*. Hauppage, NY: Barron's Educational Series.

Major field of study

The following table was used to categorize reported academic majors:

Category	Majors
Business management	Business (accounting, business administration, marketing, management, etc.)
	Parks, recreation, leisure studies, sports management
	Public administration (city management, law enforcement, etc.)
Mathematics, science, and engineering	Computer and information sciences
	Engineering
	Mathematics
	Biological/life sciences (biology, biochemistry, botany, zoology, etc.)
	Physical sciences (physics, chemistry, astronomy, earth sciences, etc.)
Education	Education
Fine arts and humanities	Communications (speech, journalism, television/radio, etc.)
	Visual and performing arts (art, music, theater, etc.)
	Liberal/general studies
	Foreign languages and literature (French, Spanish, etc.)
	Ethnic, cultural studies, and area studies
	Humanities (English, literature, philosophy, religion, etc.)
Health	Health-related fields (nursing, physical therapy, health technology, etc.)
Social sciences	Social sciences (anthropology, economics, history, political science, psychology, sociology, etc.)
Vocational/technical	Cosmetology, law enforcement, chiropractic, etc.
Other	Agriculture
	Multidisciplinary/interdisciplinary studies (international relations, ecology, environmental studies, etc.)
	Undecided

Parent education

Parents' education was coded as the highest educational attainment of either the respondent's mother or father.

Public institution[3]

A school or institution controlled and operated by publicly elected or appointed officials and deriving its primary support from public funds.

Private institution[3]

A school or institution which is controlled by an individual or agency other than a state, a subdivision of a state, or the federal government, which is usually supported primarily by other than public funds, and the operation of whose program rests with other than publicly elected or appointed officials. Proprietary institutions were not included in this study.

Race/ethnicity

All respondents were asked two questions about their race and ethnicity. The first question asked them to indicate whether they were Hispanic or Latino. The second question asked them to choose one or more of the following groups to describe themselves:

- White
- Black or African American
- Asian
- American Indian or Alaskan Native
- Native Hawaiian or other Pacific Islander

Individuals who responded "yes" to the first question were coded as Hispanic, regardless of their answer to the second question.

If the respondent was non-Hispanic and indicated only one race, then he or she was grouped as the race indicated. If the respondent was non-Hispanic and indicated multiple races, then he or she was coded as "other/multiracial." For reporting purposes, "Asian" and "Native Hawaiian or other Pacific Islander" were collapsed into one category. There were too few cases in the "other/multiracial" category to reliably estimate their literacy proficiencies.

Two-year institution[3]

An institution legally authorized to offer and offering at least a 2-year program of college-level studies which terminates in an associate degree or is principally creditable toward a baccalaureate degree.

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