

**AMERICAN YOUTH** 

# Teacher Questionnaire: Science and Mathematics Classes

1-800-527-9872

#### USIDS OF THE DAY.

The data from this survey will be used by educators and policy makers to address important issues facing the nation's schools: educational standards, curriculum tracking, incentives for attracting students to the study of science and mathematics, and the features of effective schools.

## CONFIDENTIALITY

Your answers to all of the questions will be held in strict confidence. You may skip any questions you do not wish to answer. Your responses will be merged with those of respondents from across the country, and the answers you give will never be identified as yours.

SPRING 1989

### **DIRECTIONS**

Enclosed you will find a questionnaire labeled for each of your classes in which one or more of the LSAY participants was enrolled during the Fall 1989 term. A list of the LSAY students in each of your classes should also be enclosed. If any of the listed students was not enrolled with you in Fall 1988, please note the errors, and return the corrected list with the completed questionnaires.

We ask that you group your courses into sets of similar classes and complete ONLY ONE FORM FOR EACH SET. For two or more courses to be treated as "similar", we ask that the following criteria be met:

- 1. The same text and materials are used in each class.
- 2. The topics covered are essentially the same.
- 3. The ability level and mix of the students are approximately equivalent.

If these criteria are not met, we would appreciate it if you would take the extra time to complete separate questionnaires for each class.

COMPLETING A SINGLE QUESTIONNAIRE FOR MORE THAN ONE CLASS. Please write in the class size on the first page of each questionnaire in the space provided, and write "SAME AS HOUR \_\_" on the top of the extra forms, where the hour written in is the hour from the form you completed. We are asking, then, that you send all of the questionnaires back to us, not just the ones you have filled out completely.

ESTIMATING COUNTS AND PERCENTAGES. We do not ask that you provide exact totals. While we encourage you to consider the questions carefully, we are asking for your estimates. The aim here is to describe the range of emphases and activities students experience in different classes and your general impressions of the students' interests and expectations.

Thank you very much for your time and effort. Having this detailed information about the students' science and math classes will greatly enhance the value of our study. We realize that you are very busy; however, we ask that you complete the questionnaire and return it in the postage-paid envelope within the next two weeks. Please call us at (800) 527-9872 if you have any questions about the questionnaire or the larger study.

# LONGITUDINAL STUDY OF AMERICAN YOUTH 11th Grade Science Class Questionnaire

Questionnaire for:					
Written in below is one of the science classes you taught last year. If the description of this course is incorrect, please make the appropriate changes.					
PERIOD:	COURSE TITLE:				
ALL OF THE	FOLLOWING QUESTIONS WILL R	EFER TO THIS	SPECIFI	C CLASS.	
How many students were	enrolled in this class?	Females		Males	
Approximately how man	y minutes per week did t	nis class m	eet reg	ularly (exc)	lude lab
periods)? (WRITE IN N	UMBER)	M	inutes		
Did this class have an	additional lab period? (Ch	TECK ONE)	YES	NO	
If so, about how many	minutes per week were devot	ed to labs?	(WRITE	IN NUMBER)	
-	Minute				
What textbook/program	did you use in this class?	(PLEASE PR	INT)		
Title:					
Author(s):					
Publisher:					
Most recent copyr	ight date:				
What percentage of the	textbook did you cover in	this class?			percent
Is this class appropria another class? (CIRCLE	te for college-bound student ONE)	s, or should	college	-bound stude	nts take
Appropriate Not appropri	for college-boundiate for college-bound	• • • • • • • • • • • • • • • • • • • •	1 2		

About how much classroom time did you spend on each of the following with this class during a typical week?					
(CIRCLE ONE RESPONSE ON EACH LINE)	None	30 min.	1 hr.	2 hrs.	More than 3 hrs.
Lecturing to the class	1	2	3	4	5
Leading discussions	1	2	3	4	5
Student work in small groups or laboratory	1	2	3	4	5
Having students do seatwork on homework, workbook, or text assignments	1	2	3	4	5
Providing individualized instruction	1	2	3	4	5
Having students use teaching machines or computer-assisted instruction	1	2	3	4	5

Thinking about this science class, how much emphasis did each of the following objectives receive?					
(CIRCLE ONE RESPONSE ON EACH LINE)	None	Minor emphasis	Moderate emphasis	Heavy emphasis	
Increase students' interest in science	1	2	3	4	
Teach science facts and principles	1	2	3	4	
Teach experimental logic and design	1	2	3	4	
Prepare students for further study in science	1	2	3	4	
Develop problem solving/inquiry skills	1	2	3	4	
Develop skill in lab techniques	1	2	3	4	
Increase awareness of importance of science in daily life	1	2	3	4	
Develop systematic observation skills	1	2	3	4	
Teach applications of mathematics in science	1	2	3	4	
Learning biographies of scientists	1	2	3	4	
Learning about women in science	1	2	3	4	
Learning about applications of science to environmental issues	1	2	3	4	
Develop scientific writing skills	1	2	3	4	

Overall, what percentage of your classroom time is spend in each of the (WRITE PERCENT ON EACH LINE)	e followin	g:
Daily routines (such as set up, clean up, passing out materials, taking attendance, announcements, breaks)		percent
Getting students to behave		percent
Presenting new material		percent
Review or student practice of skills		percent
Testing or other forms of evaluation		percent
TOTAL	100%	percent

How often did you do each of the following activities in this class? (CIRCLE ONE ON EACH LINE)	Every Day	Almost Every Day	Once a Week	Once a Month	Very Rarely
Go on field trips		2	3	4	5
Show films, filmstrips, or videotapes	1	2	3	4	5
Have students do an experiment or lead students in systematic observations	1	2	3	4	5
Demonstrate an experiment or lead students in systematic observations	1	2	3	4	5
Require students to turn in written reports on experiments or systematic observations	1	2	3	4	5
Discuss current issues & events in science	1	2	3	4	5
Have students read supplementary materials	1	2	3	4	5
Have students give oral reports	1	2	3	4	5
Use computers		2	3	4	5
Discuss current magazine articles or books related to science	1	2	3	4	5
Discuss television programs about science	1	2	3	4	5
Have students independently design and conduct their own science projects	1	2	3	4	5
Require written reports on outside readings	1	2	3	4	5
Discuss career opportunities in scientific and technological fields	1	2	3	4	5
Discuss political debates over new inventions and technologies	1	2	3	4	5

How many students in this class entered or will enter a project	ct in a science	e fair during	
the 1988-89 school year (include the summer of 1989)?			
(WRITE IN NUMBER; WRITE "O" IF NONE)		Students	
How would you rate the average academic ability of the student all juniors in your high school? (CIRCLE ONE)  Ability in this class is much higher than average Ability in this class is somewhat higher	s in this class  1 2 3 4 5	s compared to	
ADITICY IN Much lower unan average	5		
About what percentage of students in this class (WRITE PERCENTAGES IN EACH COLUMN)	Females	Males	
do you expect to stay in high school and graduate?			
do you expect will graduate from college with a baccalaureate	?		
are content to do less than they are capable of doing?			
are keenly interested in science?			
are likely to take more than the required number of science courses in high school?			
have you talked with individually regarding their college or career plans?			
Since the beginning of the school year, what percentage of the parents of the students in this class have you talked to individually about their student's classroom performance?	е		
How many hours of homework did you assign for this class in a	typical week?		
	hours/week		
What percentage of students usually completed their homework	on time?		
	percent		
What percentage of the homework assignments did you correct a	nd return to s	tudents?	
	pe	rcent	
To what extent do you feel successful in providing the kind of to provide for the students in this class? (CIRCLE ONE)	of education yo	ou would like	
Not very successful	1 2 3 4		
Thank you for providing this information	for us!		

Please indicate any additional information about the composition, curriculum, or your plans for your courses that you think would be helpful to the LSAY in understanding the influence of your courses on your students' development. Please identify the hour of the class on which you are commenting if your comments are specific to one or another class.