

## Teacher Questionnaire: Science and Mathematics Classes

1-800-527-9872

#### USES OF THE DATA

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 1990

#### 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 1989, 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 12th Grade Science Class Questionnaire

Questionnaire for:					
,					
Written in below is one of the science classes you taught last fall. If the description of this course is incorrect, please make the appropriate changes.					
PERIOD: COURSE TITLE:					
ALL OF THE FOLLOWING QUESTIONS WILL REFER TO THIS SPECIFIC CLASS.					
How many students were enrolled in this class? Females Males					
Approximately how many minutes per week did this class meet regularly (exclude lab periods)? (WRITE IN NUMBER)  Minutes					
rinuces					
About how many minutes per week are devoted to labs? (WRITE IN NUMBER)  Minutes  Does this class have an additional lab period? (CHECK ONE)  YES  NO					
What textbook/program do you use in this class? (PIEASE PRINT)					
Title:					
Author(s):					
Publisher:					
Most recent copyright date:					
What percentage of the textbook do you cover in this class? percent					
Is this class appropriate for college-bound students, or should college-bound students take another class? (CIRCLE ONE)					
Appropriate for college-bound					

About how much classroom time do 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 do 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 the 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 spent in each of the (WRITE PERCENT ON EACH LINE)	ne 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 do 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	Never
Show films, filmstrips, or videotapes	1	2	3	4	5	6
Have students do an experiment or systematic observation in class	1	2	3	4	5	6
Demonstrate an experiment or lead students in systematic observations	1	2	3	4	5	6
Require students to turn in written reports on experiments or systematic observations	1	2	3	4	5	6
Discuss current issues & events in science	1	2	3	4	5	6
Have students read supplementary materials	1	2	3	4	5	6
Have students explain the reasoning they followed to arrive at an answer	1	2	3	4	5	6
Have students give oral reports	1	2	3	4	5	6
Use computers	1	2	3	4	5	6
Discuss current magazine articles or books related to science	1	2	3	4	5	6
Discuss television programs about science	1	2	3	4	5	6
Have students independently design and conduct their own science projects	1	2	3	4	5	6
Require written reports on outside readings	1	2	3	4	5	б
Discuss career opportunities in scientific and technological fields	1	2	3	4	5	6
Discuss political debates over new inventions and technologies	1	2	3	4	5	6

How many students in this class entered or will enter a project the 1988-89 school year (include the summer of 1989)?	t in a science	e fair during	
(WRITE IN NUMBER; WRITE "O" IF NONE)	·	Students	
How would you rate the average academic ability of the students all seniors in your high school? (CIRCLE ONE)	s in this class	s compared to	
Ability in this class is much higher than average  Ability in this class is somewhat higher  Ability in this class is about average  Ability in this class is somewhat lower  Ability in this class is much lower than average	2 3 4		
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?			
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 child's classroom performance?			
How many hours of homework did you assign for this class in a	typical week?		
	hours/week		
What percentage of students usually complete their homework or	n time?		
	percent		
What percentage of the homework assignments do you correct and	d return to st	udents?	
	percent		
To what extent do you feel successful in providing the kind of to provide for the students in this class? (CIRCLE ONE)	of education y	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.

Thank you for your help!