

### LONGITUDINAL STUDY OF AMERICAN YOUTH

## 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.

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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** 1991

#### 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 1990 term. A list of the LSAY students in each of your classes should also be enclosed. If any of the listed students were not enrolled with you in Fall 1990, 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

## 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 THE FOLLOWING QUESTIONS WILL REFER TO THIS SPECIFIC CLASS.						
Are students in your school grouped by ability or prior achievement (either as a result of student choice or school policy in the 10th grade science program? (Check one)  Yes Please answer the questions No Go to the next question block  I question block  How many different levels are there in the science program?  Levels						
At what level was the class covered by this questionnaire?  Please use "1"for the highest ability level.)						
How many students are enrolled in this class?  Males						
Approximately how many minutes per week does this class meet regularly (exclude lab periods)? (Write in number) minutes						
About how many minutes per week are devoted to labs? (Write in number) minutes						
Does this class have an additional lab period? (Check one)  No						
What text book/program do you use in this class? (Please Print)						
Fitle:						
Author(s):						
Publisher:						
Most recent copyright date:						
What percentage of the textbook do you cover in class? percent						

	NONE	30 MIN.	1 HR.	2 HR.	MORE THAN 3 HR.
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 machine or computer-assisted instruction	s 1	2	3	4	5

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 DO YOU SPEND IN EACH OF THE FOLLOWING: (Write percent on each line)

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

(Circle one response on each line)	EVERY Day	ALMOST EVERYDAY	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 and 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	6
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 in a science fair during the 1990-91 school year (include the summer of 1991)? (Write in numbers; write "0" if none)	students		
How would you describe the achievement level of the 10th graders in this class compared with student in this school? This class consists primarily of students with: (Circle one)  Higher achievement levels	the average 1	Oth grade	
A DOLLT WILLT DEDOCALTA OF OF CTUDENTS IN THIS CLASS			
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 ?			
During 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 do you assign for this class in a typical week?		hours/week	
What percentage of students usually complete their homework on time?		percent	
What percentage of homework assignments do you correct and return to students?		percent	
To what extent do you feel that you were successful in providing the kind of education you we students in this class? (Circle one)	ould like to pr	ovide for the	
Not very successful			

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.