

L.S.A.Y.

LONGITUDINAL
STUDY OF
AMERICAN YOUTH

Science and Mathematics Teacher Questionnaire

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 1993

This questionnaire is part of a major longitudinal study designed to provide trend data about critical transitions experienced by young people as they develop, attend school, and embark on their careers. Some of the students who were selected as part of a nationwide random sample when they were in seventh grade are now attending your school. Mathematics and science teachers of these students are being asked to complete two forms: One asking about your school and background, and another asking about the particular classes in which a sampled student was enrolled this year. Teachers who have not had a sampled student in their classes are being asked to complete only the school and background form. If you have had an LSAY student in your class this year, please look through the directions below before completing the form.

Thank you very much for your time and effort. Having this detailed information 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.

DIRECTIONS FOR THE CLASS QUESTIONNAIRE (only for teachers of LSAY students)

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 1992 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 1992, 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.

LONGITUDINAL STUDY OF AMERICAN YOUTH

MATHEMATICS CLASS QUESTIONNAIRE

QUESTIONNAIRE FOR:

Written in below is one of the math 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.

Which of the following best describes the "track" this class is considered to be? (Circle one)

- Remedial 1
- General 2
- Voc/Tech/Business 3
- College Prep/Honors 4
- AP (prepares students for an AP exam) 5

How many students are enrolled in this class?

Females

Males

Approximately how many minutes per week does this class meet regularly? (Write in number)

minutes

What textbook/program do you use in this class? (Please Print)

Title: _____

Author(s): _____

Publisher: _____

Most recent copyright date: _____

What percentage of the textbook do you cover in class?

percent

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	< 1 HR.	1-2 HRS.	2-3 HRS.	MORE THAN 3 HRS.
Lecturing to the class	1	2	3	4	5
Leading whole-group discussions	1	2	3	4	5
Having students respond orally to questions on subject matter	1	2	3	4	5
Having students work in cooperative groups	1	2	3	4	5
Having students complete individual written assignments or worksheets in class	1	2	3	4	5
Providing individualized instruction	1	2	3	4	5

IN THIS MATHEMATICS CLASS, HOW MUCH EMPHASIS DO YOU GIVE TO THE FOLLOWING OBJECTIVES? (Circle one response on each line)

	NONE	MINOR EMPHASIS	MODERATE EMPHASIS	MAJOR EMPHASIS
Increasing students' interest in mathematics	1	2	3	4
Memorizing facts, rules, and steps	1	2	3	4
Preparing students for further study in math	1	2	3	4
Understanding the nature of proofs	1	2	3	4
Showing the importance of mathematics in daily life	1	2	3	4
Showing applications of mathematics in science	1	2	3	4
Showing applications of mathematics in business and industry	1	2	3	4
Learning to represent problem structures in multiple ways (e.g., graphically, algebraically, numerically, etc.)	1	2	3	4
Integrating different branches of mathematics (e.g., geometry, algebra) into a unified framework	1	2	3	4
Conceiving and analyzing effectiveness of multiple approaches to problem solving	1	2	3	4
Performing calculations with speed and accuracy	1	2	3	4
Solving equations	1	2	3	4
Raising questions and formulating conjectures	1	2	3	4
Improving basic arithmetic skills	1	2	3	4

ABOUT WHAT PERCENT OF CLASS TIME IS SPENT IN A TYPICAL WEEK DOING EACH OF THE FOLLOWING WITH THIS CLASS? (Write percent on each line)	
Daily routines (such as 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 response on each line)						
	EVERY DAY	ALMOST EVERY DAY	1-2 TIMES A WEEK	1-2 TIMES A MONTH	VERY RARELY	NEVER
Have students explain the reasoning they use to arrive at an answer	1	2	3	4	5	6
Have students use graphing calculators	1	2	3	4	5	6
Have students use non-graphing calculators	1	2	3	4	5	6
Have students use computers	1	2	3	4	5	6
Discuss career opportunities in scientific and technological fields	1	2	3	4	5	6

DO YOU TEACH OR REVIEW THE FOLLOWING TOPICS THIS SCHOOL YEAR IN THIS CLASS? (Circle one response on each line) If you review <i>and</i> teach an item as new content, circle #3 only.				
	No, but it was taught previously	Yes, but I reviewed it only	Yes, I taught it as new content	No, topic is beyond the scope of this course
Integers	1	2	3	4
Patterns and functions	1	2	3	4
Linear Equations	1	2	3	4
Polynomials	1	2	3	4
Properties of geometric figures	1	2	3	4
Coordinate Geometry	1	2	3	4
Proofs	1	2	3	4
Trigonometry	1	2	3	4
Statistics	1	2	3	4
Probability	1	2	3	4
Calculus	1	2	3	4

Do your students have access to calculators *owned by the school* for use in this class? (Circle one) YES NO

How would you describe the achievement level of the 12th graders in this class compared with the average 12th grade student in this school?

This class consists primarily of students with: (Circle one)

Higher achievement levels 1 Lower achievement levels 3
 Average achievement levels ... 2 Widely differing achievement levels 4

ABOUT WHAT PERCENTAGE OF STUDENTS IN THIS CLASS . . .

(Write percent in each column)

MALES FEMALES

	MALES	FEMALES
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 math?		
Usually complete their homework on time?		
Attend class (average daily attendance)?		
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?		

Approximately how many hours of homework do you assign for this class in a typical week?

	hours/week
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How often do you do each of the following with homework assignments?

(Circle one on each line)

	NEVER	SOME OF THE TIME	MOST OF THE TIME	ALL OF THE TIME
Keep records of who turned in an assignment	1	2	3	4
Return assignments with grades or corrections	1	2	3	4
Discuss the completed assignment in class	1	2	3	4

To what extent do you feel that you were successful in providing the kind of education you would like to provide for the students in this class? (Circle one)

Not very successful 1
 Somewhat successful 2
 Mostly successful 3
 Very successful 4

THANK YOU FOR YOUR COOPERATION

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!