

# L.S.A.Y

**LONGITUDINAL  
STUDY OF  
AMERICAN YOUTH**

**Teacher Questionnaire:  
Science and Mathematics Classes**

815-753-0952

## **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 1992**

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## **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 1991 term. A list of the LSAY students in each of your classes should also be enclosed. If any of the listed student was not enrolled with you in Fall 1991, 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

## MATHEMATICS CLASS QUESTIONNAIRE

QUESTIONNAIRE FOR:

Written in below is one of the mathematics 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 11th grade mathematics program? (Check one)

Yes

Please answer the questions  
in this block

No

Go to the next  
question block

How many different levels are there in the mathematics program?

Levels

At what level was the class covered by this questionnaire?  
(Please use "1" for the highest ability level.)

Level

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 text book/program do you use in this class? (Please Print)

Title:

Author:

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 | 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 machines or computer-assisted instruction | 1    | 2       | 3     | 4     | 5               |

**THINKING ABOUT THIS MATHEMATICS CLASS, HOW MUCH EMPHASIS DOES EACH OF THE FOLLOWING OBJECTIVES RECEIVE? (Circle one response on each line)**

|                                                                                           | NONE | MINOR EMPHASIS | MODERATE EMPHASIS | HEAVY EMPHASIS |
|-------------------------------------------------------------------------------------------|------|----------------|-------------------|----------------|
| Increase students' interest in mathematics                                                | 1    | 2              | 3                 | 4              |
| Teach math facts and principles                                                           | 1    | 2              | 3                 | 4              |
| Prepare students for further study in math                                                | 1    | 2              | 3                 | 4              |
| Develop problem solving skills                                                            | 1    | 2              | 3                 | 4              |
| Develop skill in computational techniques                                                 | 1    | 2              | 3                 | 4              |
| Increase awareness of the importance of mathematics in daily life                         | 1    | 2              | 3                 | 4              |
| Teach applications of mathematics in science                                              | 1    | 2              | 3                 | 4              |
| Learning about applications of mathematics in business and industry                       | 1    | 2              | 3                 | 4              |
| Improving basic arithmetic skills                                                         | 1    | 2              | 3                 | 4              |
| Preparing students for calculus, trigonometry, or other advanced high school math courses | 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                                                                                         |         |

**HOW OFTEN DO YOU DO EACH OF THE FOLLOWING ACTIVITIES IN THIS CLASS?**

(Circle one response on each line)

|                                                                     | EVERY DAY | ALMOST EVERYDAY | ONCE A WEEK | ONCE A MONTH | VERY RARELY | NEVER |
|---------------------------------------------------------------------|-----------|-----------------|-------------|--------------|-------------|-------|
| Have students read supplementary material                           | 1         | 2               | 3           | 4            | 5           | 6     |
| Have students explain the reasoning they use to arrive at an answer | 1         | 2               | 3           | 4            | 5           | 6     |
| Have students use calculators                                       | 1         | 2               | 3           | 4            | 5           | 6     |
| Have students use computers                                         | 1         | 2               | 3           | 4            | 5           | 6     |
| Discuss current magazine articles or books related to mathematics   | 1         | 2               | 3           | 4            | 5           | 6     |
| Discuss television programs about math                              | 1         | 2               | 3           | 4            | 5           | 6     |
| Discuss career opportunities in scientific and technological fields | 1         | 2               | 3           | 4            | 5           | 6     |
| Hold contests or play mathematical games                            | 1         | 2               | 3           | 4            | 5           | 6     |

**Do your students have access to pocket or hand held calculators owned by the school for use in this class? (Circle one)**

YES                      NO  
1                              2

How would you describe the achievement level of the 11th graders in this class compared with the average 11th grade student in this school?

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

- Higher achievement levels.....1
- Average achievement levels.....2
- Lower achievement levels.....3
- Widely differing achievement levels.....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 mathematics?                                                                                                                           |         |       |
| Are likely to take more than the required number of mathematics 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 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 PROVIDING THIS INFORMATION FOR US!**

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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!