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THE STUDY OF MATHEMATICALLY PRECOCIOUS YOUTH

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The Study of Mathematically Precocious Youth (SMPY) began offically at The Johns Hopkins University, Baltimore, Maryland 21218, in September of 1971, and unofficially two years earlier. It was started by Professor Julian C. Stanley. The variety of activities carried on by SMPY is best described in Volumes 1, 2, and 3 of SMPY's *Studies of Intellectual Precocity* (SIP) series which are as follows:

1. Stanley, J.C.: Keating, D.P.; and Fox, L.H. (eds.). 1974. *Mathematical talent: Discovery, description, and development.* Baltimore: The Johns Hopkins University Press;
2. Keating, D.P. (ed.). 1976 *Intellectual talent: Research and Development.* Baltimore: The Johns Hopkins University Press; and
3. Stanley, J.C.; George, W.C.; and Solano, C.H. (Eds.). 1977. *The gifted and the creative: A fifty-year perspective.* Baltimore: The Johns Hopkins University Press.

A supplemental volume to *The gifted and the creative: A fifty-year perspective* called *Educational programs and intellectual prodigies* was published in 1978.

SMPY is doing many different things for large numbers of mathematically apt students--and for some verbally apt ones, also. Each aspect of the D3 model is set forth in SMPY's first book (Mathematical talent: Discovery, description, and development) has been, and is still being, explored in both depth and breadth. Large numbers of youngsters (4700 youths in five talent searches) who reason well mathematically (better than the average male twelfth grader does) and/or verbally are being "discovered" via an appropriately difficult test (the Scholastic Aptitude Test). The ablest of these youths (primarily seventh graders) are being studied further in order to "describe" their characteristics better and provide information on which to base special educational efforts on their behalf. This special educational facilitation helps the "development" of the youths who are eager to move ahead faster and better than is permitted in most curricula of public and private schools.

Individually prescribed programs for aiding these students are set up. These opportunities include diagnostic testing followed by prescriptive instruction, association with talented young college students, seminars, special fast-math courses, AP study, early entrance to college, and college courses on a part-time basis for credit during evenings, summers, the regular school year, and via correspondence.

To these three D's SMPY has added a fourth, Dissemination, as SMPY's principles, procedures, and programs have been spread across this country. For example, the state of Illinois is presently conducting a statewide talent search based on SMPY's model. Because of the direct link between SMPY and the individual talented and/or his parents or teachers, the amount of change effected in many school districts is unbelievably large. Already, programs exist in Delaware, Illinois, Maryland, Minnesota, Nebraska, and Pennsylvania. In effect, SMPY is a catalyst for change that will help the talented individual directly rather than waiting for a school system to eventually develop a program. SMPY's main activities remain educationally accelerative. This study has not found "so-called" educational enrichment suitable for math-talented youths over the school years unless it leads to subject-matter and/or grade acceleration. SMPY's activities are funded by grants from the Spencer Foundation, the Camille and Henry Dreyfus Foundation, the Geraldine R. Dodge Foundation, and the Educational Foundation of America.

From time to time SMPY conducts special mathematics classes for high scorers in its talent searches. Unfortunately it is not sufficiently staffed to provide counseling or testing services to persons not coming through its annual contest. Dr. Stanley recommends that parents who believe their child(ren) to be intellectually quite superior read *Mathematical talent, Intellectual talent, The gifted and the creative, Educational programs and intellectual prodigies,* and general books about the gifted while seeking help from their local school system. After they *exhaust* all such resources, SMPY staff members will be glad to try to answer their *specific* questions about how to help their mathematically highly talented youths forge ahead educationally.

SMPY has prepared three dissemination "packages" that are meant for use primarily by the administrative staff of city, county, and state school systems. They may also be applicable to single

schools that have a staff member reasonably well trained in educational testing. The three packages are as follows: *The First D: Discovery of Talent* (finding intellectually talented youths, especially those who reason extremely well mathematically): *The Second D: Description of Talent* (further study of the intellectually talented youths); and, *A Component of the Third D: Development of Talent* (setting up special classes in which mathematics is taught much faster and rigorously than is usual). These dissemination packages were planned and prepared by SMPY under a grant from the Robert Sterling Clark Foundation. Requests for them and comments about them should be addressed to Mr. William C. George, Associate Director, SMPY, Department of Psychology, The Johns Hopkins University, Baltimore, Maryland 21218. These packages will appear in a book scheduled to appear in 1979 titled *Counseling the Gifted Today* and edited by Nicholas Colangelo and Ronald T. Zaffrann (Dubuque, Iowa: William C. Brown).

EXEMPLARY PROGRAMS FOR GIFTED AND TALENTED

Project Name: *The Study of Mathematically Precocious Youth.*

Address: *c/o Department of Psychology, The Johns Hopkins University, Baltimore, Maryland 21218. Director: Dr. Julian C. Stanley.*

Phone Number: [*301*]*338-7087, -8144, or 7086.*

Brief description of project: *Discovery and description of highly able mathematical reasoners and the development of appropriate educational alternatives for these youths.*

Area of giftedness emphasized: *Mathematics and the physical sciences*

Age/grade levels involved: *Identification at 7-8 grade level*

Facilitation: *Secondary school*

Identification measures used: *Scholastic Aptitude Test*

Evaluation measures used: *Standardized achievement test and Advanced Placement* [*AP*] *examinations in appropriate areas are two examples.*

Brief summary of evaluation results: *One finding is that in five talent searches SMPY has identified 4700 youths who reason better than male twelfth graders who take the SAT.*

List of materials availabe: [*See attached*]

Are visitors welcome? *N/A a good portion of the time.*

If only at scheduled times, please give details: --