

Books Tell The SMPY Story

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The staff of the Study of Mathematically Precocious Youth at The Johns Hopkins University has striven for several years to make available to interested mathematically precocious students and their parents and teachers, and especially to specialists in the education of the gifted and in mathematics education, systematic reports on its activities and findings. Thus far, The Johns Hopkins University Press has published two such books in both paperbound and hardcover editions. The paperbound version is priced to be within the financial reach of a large group of potential users.

The first such book, which covered the initial year of SMPY's activities (1971-72) and its first talent search, appeared in 1974. Containing 232 pages, it was edited by Julian C. Stanley, Daniel P. Keating, and Lynn H. Fox and entitled *Mathematical Talent: Discovery, Description, and Development*. The book retails for \$2.95 paperbound and \$10.00 hardcover (Maryland residents add 5% state sales tax). The titles of its nine chapters are as follows: Intellectual Precocity, The Study of Mathematically Precocious Youth, Facilitating Educational Development of Mathematically Precocious Youth, Sex Differences in Mathematical and Scientific Precocity, Commentary of the Precocity Project (By Anne Anastasi), A Mathematics Program for Fostering Precocious Achievement, Personality Characteristics of Mathematically Precocious Boys, Values and Career Interests of Mathematically and Scientifically Precocious Youth, and Behavior of Mathematically Precocious Boys in a College Classroom.

The second book which covers the second and third years of SMPY's work and its second and third talent searches, appeared in 1976. It contains 364 pages devoted to the same themes as the first volume but involving large new samples of mathematically precocious youths. This book retails for \$3.95 paperbound and \$16.95 hardcover. It is entitled *Intellectual Talent: Research and Development* and edited by Professor Daniel P. Keating of the University of Minnesota. Dr. Keating was formerly the acting director of SMPY.

To be published by the JHU Press this November is a 304-page volume entitled *The Gifted and the Creative: A Fifty-Year Perspective*. The editors of this third in SMPY's Studies of Intellectual Precocity series are Julian C. Stanley, William C. George (Associate Director of SMPY), and Cecilia H. Solano (formerly Assistant Director of SMPY, and now an assistant professor of psychology at Wake Forest University). The list prices are \$4.95 paperbound and \$17.50 hardcover.

The Gifted and the Creative is SMPY's most general volume yet. Only one of its eight articles concerns SMPY directly; written by Dr. Stanley, that chapter provides in great detail the rationale underlying the efforts of the staff of SMPY. Another chapter is by Dr. Lynn H. Fox, who heads the Intellectually Gifted Child Study Group in the Evening College and Summer Session of Johns Hopkins. Its title is "Sex differences: Implication for program planning for the academically gifted."

Two of the chapters contain follow-up reports about the original participants in Lewis Terman's Genetic Studies of Genius, which began in 1921. One of these, entitled, "Career and life satisfactions among Terman's gifted women," is by Professor Pauline S. Sears and Ann H. Barbee of Stanford University. The other entitled, "A musically and artistically talented family nearly half a century later," is by Phyllis B. Ohanian, who herself was one of the members of the Terman group.

The history of the gifted-child movement over a century of development is covered by Professor John C. Gowan, who is the Executive Director of the National Association for Gifted Children and the Editor of the GIFTED CHILD QUARTERLY.

Three important approaches to the measurement and facilitation of creativity are contained in the following chapters: "Cognitive and affective components of creativity in mathematics and the physical sciences," by Professor William B. Michael of the University of Southern California; "Creatively gifted and disadvantaged gifted students," by Professor E. Paul Torrance of the University of Georgia; and "Personality correlates of intelligence and creativity in gifted adolescents," by Professor George S. Welsh of the University of North Carolina.

The volume concludes with the transcript of a three-hour

discussion that 30 outstanding persons representing all aspects of interest in giftedness conducted immediately after the symposium ended. This has been edited ably by Professor J.W. Getzels of the University of Chicago, whom a number of readers of ITYB will identify as the senior author (with Philip R. Jackson) of a widely discussed book on creativity in the early 1960's.

It seems likely that *The Gifted and the Creative: A Fifty-Year Perspective* will become essential reading for most persons interested in gifted children.

The manuscripts for volumes 4 and 5 in SMPY's Studies of Intellectual Precocity series are being prepared. One of them is called *Women and the Mathematical Mystique*. Its editor is Dr. Fox. The other, based on a large symposium held at the annual meeting of the American Educational Research Association in New York City in February of 1977, will be entitled *Acceleration and Enrichment: Strategies for Educating the Gifted*. Its editors are William C. George, Sanford J. Cohn (Assistant Director of SMPY and Editor of ITYB), and Julian C. Stanley. Besides material from the symposium, it will also contain reprinted classics from the professional literature on acceleration and enrichment and a thorough review of the important studies about those topics.

It is not yet known whether or not these two books will be published by The Johns Hopkins University Press. For further information, write or telephone Editor Cohn around November or December.

Mathematical Talent, Intellectual Talent, and The Gifted and the Creative may be ordered directly from The Johns Hopkins University Press, Baltimore, Maryland 21218.

(We reproduce the following letter from The Intellectually Talented Youth Bulletin 3:10 July 1977 by special permission.

It was written by the editors of that journal to a frustrated mother who reported that the school mathematics program was inadequate for her gifted daughter.)

Dear Frustrated Mother:

Thank you for your letter regarding your very bright six-year-old daughter. It has been the experience of SMPY with several

prodigious youngsters that schools alone can meet few if any of their unique needs. Your daughter would benefit from very high-level tutorial work. For example, one young lady is currently being tutored in mathematics and Latin. A bright high school student skilled in a given area, an interested faculty member, or a professional expert in a certain field might be an appropriate tutor for a particular subject. In using this tutorial approach mastery tests should be given at each level of achievement to guarantee that your daughter has understood all of the subject matter covered.

If your daughter is eager and motivated to learn, this Ox-Bridge tutorial approach seems ideal. Since you are interested in individualizing her educational process in mathematics and science, you need to search for a highly able and well trained person. To start it might be preferable to employ the services of an appropriate high school student to serve as a tutor. The CEMREL, *Elements of Mathematics Program* (Cemrel, Inc., 3120 59th Street, St. Louis, Missouri 63139) provides an interesting and high-level course of study for mathematically able youngsters. It is important that the course materials you use be challenging and abstract enough to capture your daughter's interest. That she has totally developed conceptualization skills at age 6 is unlikely, however.

Since women are not encouraged to develop their talents in mathematics or science, you would do well to provide your daughter with some role models by having her meet and talk with several successful women mathematicians and scientists. As her level of achievement progresses you may wish to seek out college faculty members or professionals to serve as mentors in specific subjects, rather than bright students.

Remember, it is important for you to seek appropriate forms of educational stimulation for your daughter. Be sure to read over the two books which describe SMPY's work. The books published by The Johns Hopkins University Press are *Intellectual Talent* edited by D.P. Keating and *Mathematical Talent* edited by J.C. Stanley, D. P. Keating, and L. H. Fox. Chapter 3 in each volume is especially relevant to your situation.

S. J. Cohn and W. C. George
