Tribute to Halbert B. Robinson (1925-1981)



By Julian C. Stanley

e are together today to rededicate the result of a most innovative idea that Hal and Nancy Robinson had in the early 1970s. My Study of Precocious Youth Mathematically (SMPY) was in its infancy then. Hal and Nancy dared to be more radical educationally than even we of SMPY. That both approaches, theirs and mine, have persisted for almost 2 decades and inspired numerous related projects across the nation is testimony to the great educational needs that intellectually talented boys and girls and their parents felt then and still feel.

Hal was my good friend, professional and personal. I grieved when he died tragically in a scuba-diving accident in Yucatan. The field of giftedness and I have felt his loss keenly. Fortunately, his exceedingly capable wife, Nancy, also my close friend, has kept the flame of educational excellence brightly lit. She has moved from being one of the foremost workers in the area of mental retardation to becoming one of the most outstanding advocates for highability youths. In this she follows the path of one of the two principal founders of the gifted-child movement, Professor Leta S. Hollingworth of Columbia University. Like Hal, Leta died prematurely, she at age 53. Her intensive work at Columbia from 1914 until her death in 1939 laid, along with that of Lewis M. Terman in California, firm foundations for attention to the gifted. Similarly, her spouse lessened some of his sorrow by loving attention to the completion of her unfinished work and to the preparation of her biography (L. Hollingworth, 1942; H. Hollingworth, 1943).*

Nancy and Hal, I salute you for your steadfastness to the cause of talent, to the prevention of what the poet

Thomas Gray called the "mute, inglorious Miltons" buried in the village graveyard. (This reminds me of the story about a man who had lived an exceptionally good life, died, and gone to heaven. St. Peter met him and, as a reward for the man's virtue, offered to introduce him to anyone in heaven whom he especially admired. The man thought for a moment and then asked to see the greatest general who had ever lived. St. Peter brought a wizened little fellow. The new initiate to heaven was astounded and protested, "I knew this man well. He was only a humble cobbler in my home town."""Yes," said St. Peter, "but if he had been a general, he would have been the best the world has ever known.")

Nearly 2½ centuries ago, in his exquisite "Elegy Written in a Country Churchyard," Gray succinctly summarized the essence of my work and that of the Robinsons:

- Full many a gem of purest ray serene The dark unfathom'd caves of ocean bear:
- Full many a flower is born to blush unseen,
- And waste its sweetness on the desert air.

During World War II, I saw many personnel records, and informally compared Army General Classification Test (AGCT) scores, an approximate measure of intelligence, with soldiers' educational and occupational backgrounds. It became obvious to me that some of the top scorers had missed the educational and vocational boats badly. For example, the highest-scoring enlisted man in our bomber command headquarters, located on Corsica, was 30-year-old, high-school-graduate, а Connecticut resident who in civilian life had been a postal clerk. On the AGCT he scored far above a Yale University PhD degree recipient in the humanities and a New York lawyer in the group. It occurred to me vaguely even then, in 1944, that, to update Gray's immortal words, "Many brilliant persons will not have their intellectual potentialities recognized and nurtured properly.' What if these individuals' high scores had been known earlier and formed a basis for maximizing the effective utilization of their abilities? I resolved --rather dimly at the time in the wilds of

^{*}A 1990 reprint edition of Leta Hollingsworth's biography, with a foreword by Ludy T. Benjamin, Jr. and Stephanie A. Shields and a bibliography of publications about her, is available from the Anker Publishing Co., P.O. Box 249, Bolton, MA 01740.

Corsica — to do something about this presumed wastage of talent.

The poet Robert Browning gave us a clue as to how this could be accomplished, although he couched it in the male-chauvinistic idiom of his era: "Ah, but a man's reach should exceed his grasp, or what's a heaven for?"

In his *Ulysses*, Tennyson stated it a bit differently: ". . . to strive, to seek, to find, and not to yield." Ability plus appropriate-level opportunity plus motivation can lead to great accomplishments, where otherwise there might be mediocre achievement.

Keats added the esthetic component:

- Beauty is truth, truth beauty, that is all
- Ye know on earth, and all ye need to know.

Great theoretical orientation without a keen sense of form, beauty, and harmony is not likely to result in creative research that meets the criterion of elegance. An elegant approach to a mathematical problem employs the most suitable techniques to achieve a solution so parsimonious as to leave the mathematician glowing with fulfillment and a feeling of "justrightness." Analogously, a researcher in the sciences can use empiricism in wondrously effective ways, to find Nature's keys to some of her most important mysteries.

Yet another poet has contributed wisdom to the pursuit of excellence. In his famous lines from "The Ballad of East and West," which are usually quoted only in part and therefore misleadingly, Rudyard Kipling wrote as follows:

- Oh, East is East, and West is West, and never the twain shall meet,
- Till Earth and Sky stand presently at God's great Judgment Seat.
- But there is neither East nor West, Border, nor Breed, nor Birth,
- When two strong men stand face to face, though they come from the ends of the Earth!

Read Kipling's "two strong men" as "intellectually highly talented youths" and you have a summing up of the rationale for the work of the Robinsons, me, and others who also cherish great academic potential. We believe that such talent transcends sex, circumstance, and nationality and mandates special educational treatment of intellectual prodigies with respect to their area(s) of great talent. We consider accelerative procedures crucial because — to paraphrase Browning — "an intellectually precocious youth's reach should exceed his or her grasp, or what's an educational system for?" Acceleration in the company of one's real intellectual peers, who may not be one's agemates, can result in stimulating role modeling that forges strong bonds between highly talented youths. and Kipling's strong young men and women. The Robinsons have extended both the reach and the grasp of their proteges with all these facets of human growth and development firmly in mind.

Correlates

The last paper Hal ever published, entitled "A Case for Radical Acceleration: Programs of the Johns Hopkins University and the University of Washington," appeared in 1983 in a volume that Camilla Benbow, now at Iowa State University, and I edited. It was based on his presentation at a symposium held in Baltimore only a few months before Hal's untimely death, the last time I ever saw him (Robinson, 1983). We are guite fortunate to have Hal's analysis and comparison of those two programs and cogent arguments favoring extreme educational acceleration of certain unusually able boys and girls. SMPY, begun in 1971, was followed 2 years later by the establishment of the Robinson's Child Development Research Group at the University of Washington. In 1977, the Radical Acceleration Group of the Early Entrance Program started there with two students. It has grown considerably since then. Even by 1981 there were 20 students in the program. As Hal stated, "To qualify for admission to the EEP a student must be 14 years old or vounger and/or not yet in the 10th grade, have demonstrated high academic achievement, and have attained scores on the Washington Precollege Test . . . that compare favorably with those of high school juniors who subsequently enter 4-year colleges." Thus he defined "radical accelerant" as a student who has been moved forward quite a few school grades beyond most of his or her agemates. SMPY started out with a similar frame of reference but gradually changed from grade acceleration to specific subject-matter acceleration as we managed to devise various ways for high-ability students to move ahead faster and better in mathematics and related subjects but increase the breadth of their learning in other areas. Some youths benefit more from the Robinson approach, some more from the SMPY one. Both approaches, and many others, are needed.

The Robinsons' systematic attention to educational acceleration was in a half-century tradition, starting with Terman at Stanford University around 1921 and Hollingworth at Columbia University about the same time and culminating in the 1920s and 1930s at the University of Chicago under its innovative president, Robert Maynard Hutchins. Long before that, however, there were sporadic instances of extremely early entrance to college. Increase Mather, a famous preacher and the father of Cotton Mather, had graduated from Harvard College in 1659 at age 16. James Fenimore Cooper, renowned author, entered Yale College by examination at age 13 but was dismissed 2 years later because of a "boyish prank." The celebrated cyberneticist (he coined the term) Norbert Wiener had graduated from Tufts College before World War I, Phi Beta Kappa, at age 14, and received his PhD degree from Harvard at age 18. Soon thereafter the later-ill-fated Williams James Sidis graduated from Harvard at age 15. Charles Homer Haskins graduated from Johns Hopkins University in 1887 at age 16, received his PhD degree there at age 19, and went on to become an eminent medieval historian and dean of the graduate school at Harvard. Over the years the small graduating classes at Johns Hopkins have contained a total of 49 persons who completed all requirements for the bachelor's degree before their 19th birthday.

The country's youngest college graduates seem to be Adragon DiMello at age 11, but under perhaps doubtful circumstances; Jay Luo, at age 12 years, 45 days; Sam Ho, a graduate of the Robinson's Early Entrance Program, at age 13, years 11 months; and Merrill Kenneth Wolf, from Yale University under composer Paul Hindemith in 1945, the month "Kenny" became 14 years old. What became of these?

Adragon received his baccalaureate from the University of California at Santa Cruz and then became a full-time junior-high-school student! Jay Luo completed almost a graduate academic year in mathematics at Stanford University before his 13th birthday. He continued on to earn a master's degree in mathematics and a master's degree in computer science before going into the work world for awhile, at least. Sam Ho has almost completed all requirements for his PhD degree in computer at the University of science Washington. Merrill Kenneth Wolf studied musical keyboard instruments (piano, harpsichord, organ, etc.) privately for 7 years before entering medical school only a year younger than the typical medical student. He is an outstanding professor of neuroanatomy in a state medical school and plays the piano beautifully as an avocation.

Of these four youngest, only Sam participated in a systematic acceleration program. There have not been many such programs. The most systematic and longest continued was Chicago's, followed for a number of years later by Shimer College in Mt. Carroll, Illinois, which now seems to be defunct. The only college devoted almost exclusively to admitting youngerthan-typical students is coeducational Simon's Rock College of Bard. Located in rural Massachusetts, it enrolls chiefly students 1 or 2 years accelerated; many of them lack high school diplomas. Johns Hopkins does not require its freshmen to have received a high school diploma, so historically right on down to the present it has had a number of entering students, 12% or so, a year or more accelerated. Mary Baldwin College in Virginia admits quite young girls to study along with regularage female students. It is not coeducational. That program seems to be the only one in the United States closely paralleling the Robinsons' Early Entrance Program with respect to the extreme youth of all the entrants.

During the 1970s The Clarkson School originated at Clarkson Institute of Technology (now Clarkson University) in New York State. Its students consist entirely of 12th graders. They live together on the campus and interact socially with each other, but take only college courses. At the end of the year the academically successful ones receive a high school diploma but have also completed a year of college work.

In 1988, at the University of North Texas, the Texas Academy of Mathematics and Science (TAMS) was created, to serve intellectually advanced 11th and 12th graders from all over Texas. Eighty-nine 10th-grade graduates entered that fall and produced the first graduating class last June. In 1989 there were 90 such students entering, and 190 in 1990. Plans call for admitting 200 each fall. TAMS differs from the Clarkson School in that it continues for 2 years instead of one, has mostly required courses (two semesters each of college biology, calculus, chemistry, and physics, and at least 24 semester hours of humanities and social sciences), and restricts its enrollment to Texans. Its successful students complete 4 years of schooling in 2, emerging as college juniors.

The TAMS model is auite different from the several state-supported residential high schools such as the 2-year North Carolina School of Science and Mathematics or the 3-year Illinois Mathematics and Science Academy (Stanley, in press). They have advanced courses for their ablest students, but these do not usually carry college credit. High achievement in such courses may lead to excellent scores on the relevant Advanced Placement Program examinations and thereby help the examinee gain some college credit. (See Brody & Stanley, in press.)

Summing Up

Intellectually talented boys and girls sorely need the option to choose among as many different special educational opportunities as can possibly be provided for them. Most of these programs should involve intensive and extensive association with their true *intellectual* peers who, preferably, are approximately their own age. The prerequisite for all this is early identification of persons who have great potential to move ahead faster in certain *academic* areas than most of their agemates can.

There are many so-called "enrichment" programs all over the United States, but far too few that help eliminate the boredom and frustration bright students feel in some of their regular classes. For example, even the best social studies discussion during a 2-hour pull-out program each week for gifted children does nothing to lessen the boredom a highly math-talented student feels almost every day in an algebra class that is, for him or her, snail-paced.

Conclusion

We see, then, that Hal's and Nancy's vision was inspired. They have gone considerably beyond anyone else in advocating and providing extreme grade-level acceleration to intellectually brilliant young students who crave the opportunity to break completely with the standard age-in-grade lock step and are able enough to do so. The subsequent records of many of their graduates attest to the validity and robustness of the model. Thus, in Hal's memory I say, as Horatio said when Hamlet died, ". . . good night, sweet prince; And flights of angels sing thee to thy rest!" Your legacy is secure. By bearing your name henceforth, this Center will herald to the world the beneficent influence of a great mind and an altruistic spirit. That is true immortality, beyond one's germ plasm, and even beyond the visions of most theologians and mystics.

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