

ADVANCED PLACEMENT

George Washington Students Excel

(First of a series)

By DOROTHY ECCLES
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Seven east Denver youths who went to college while still in high school did an about face during the recent holidays and returned to high school while still in college.

The seven visited their alma mater, George Washington High School, to share with each other and their former math teacher, Irwin Hoffman, the results of their participation in the school's Advanced Placement Program for exceptionally able and ambitious students.

The young men were Steve Paavola, 757 Niagara St., California Institute of Technology; Harley Feldman, 796 S. Glencoe St., Illinois Institute of Technology; Jeff Grove, 2231 Glenn Summer, Colorado Springs, Carnegie Tech; Fred Marcus, 115 S. Glencoe St., Massachusetts Institute of Technology; Jay Rothman, 250 S. Grape St., Reed College; James Rosenberg, 1960 Locust St., Pomona College; and Lynn Howard, 657 S. Grape St., Brigham Young University.

Of 13 GW students who took last spring's Advanced Placement math test, the seven and Danny Rose, 34 S. Dahlia St., a Wesleyan University student, all received a top grade of 5, to become the largest percentage to date of any single AP class in the area to earn the highest honors rank. Five of the eight scored a perfect 800 on the test.

Only 612 of the approximately 10,000 students who took AP exams last year received 5's. This is about .7 of 1 per cent, or one out of every 20 students. The average AP math examination grade is 2.7, Hoffman said. The GW median score was 4.2.

Each of these youths has been awarded advanced college placement, course credit or both for his high school achievement, as have other GW students who were enrolled last year in one of GW's five other college level courses: history, biology, chemistry, English and Spanish.

All will be able to save time either by completing their undergraduate work more quickly, or by acquiring a better education in the conventional time period. Some will have superior freshman courses.

Rothman has been given 20 semester hours of credit, the most ever allowed by Reed College. He has full sophomore standing.

A girl student, Penny Woodbury, now at Radcliff, took nearly the full quota of AP courses last year and brought considerable distinction to the sometimes questioned program when she pulled down examination grades of 3 in math and French and 5 in American history and English.

Miss Woodbury also entered college as a sophomore, further proving the capability of high school students to do college work satisfactorily — a premise too often refuted by educators, said Hoffman.

It depends on the college how much credit is given. Some colleges do not participate in the program at all.

"Surprisingly," said Hoffman, "the most selective schools are the most generous. But they are extremely anxious to get the most gifted students."

"There is still a great deal of controversy and polemics among faculties and the public about this program," Hoffman said. "Even my co-workers have said to me: 'Congratulations, but have you ever thought about the price they (the students) have paid?'"

"These kids are ready for this," Hoffman retorts. "The price they would have paid, had it not been for such an opportunity, is boredom, ennui and unrealized potential."

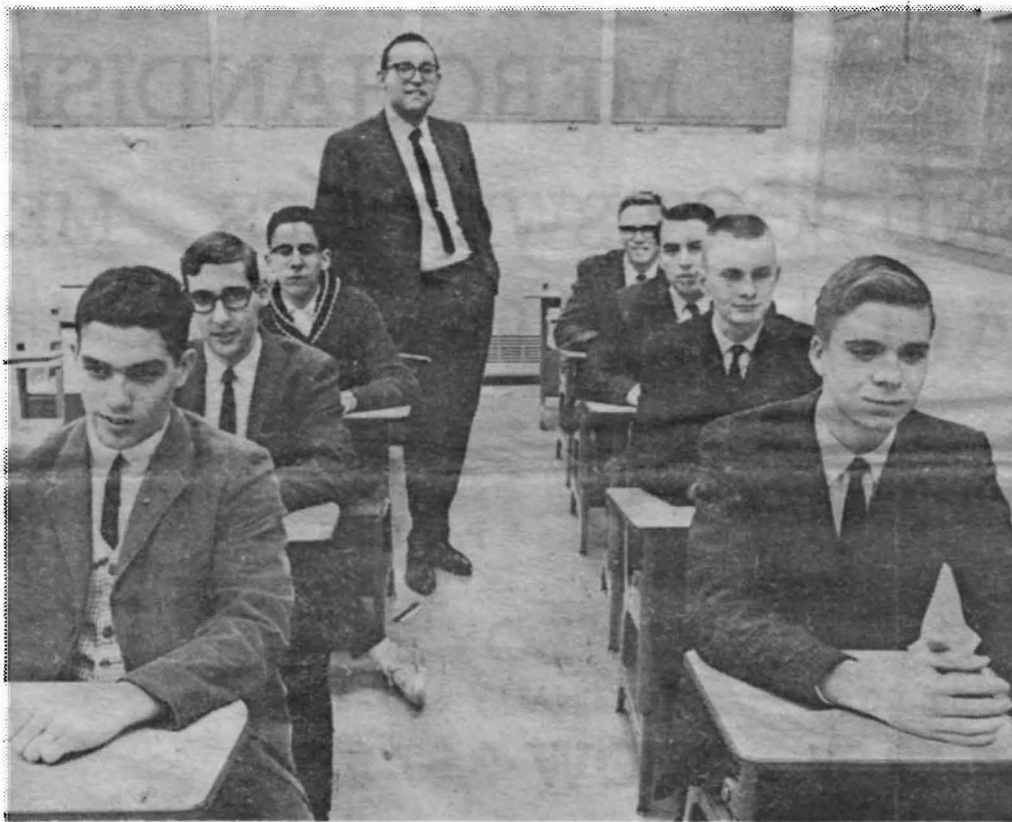
This, in turn, he believes, would be society's loss.

"The public ought to know that the advanced placement program is valuable in itself," Hoffman declared.

He admitted it's more expensive than the average class because of a lower pupil-teacher ratio, "but so are remedial courses at the opposite edge of the spectrum," he said.

"These kids really worked hard . . . but they were so happy, there was so much laughter, there really was very little pressure . . . If we see that the pressure is too much, we get them out of there . . . But we lost only 2 out of 21 in the first six weeks."

And indeed, none of the students interviewed said he felt



IRWIN HOFFMAN (STANDING) TAUGHT ADVANCED PLACEMENT MATH TO SEVEN BOYS

Left to right are Harley Feldman, Fred Marcus, James Rosenberg, Lynn Howard, Jay Rothman, Steve Paavola and Jeff Grove. They, along with Danny Rose, absent from picture, received a top grade of 5 in last spring's testing at George Washington.

pressured, even though, according to Hoffman's estimates, "the average kid spent between three and five hours a night doing homework."

The group also met voluntarily every other Saturday afternoon for two to three hours to cover what could not be covered in class. At these sessions, lectures on extra-curricular subject matter often were given by the students.

After graduation, some of the group voted to continue the outside meetings through the summer months, switching to every Wednesday night from 7 p.m. to midnight.

For these sessions, past graduates and specialists in the mathematics field were invited to lecture.

"You couldn't do this," said Hoffman, "if the kids did not want to."

"The student with average capacity can't be motivated. I preyed upon their motivations."

Hoffman said the "hard thing

to do was to make them work as a team all together instead of competing." It gave him great satisfaction, he said, to observe at the end of the year that "everybody wanted everybody to get an A, not just himself."

In fact, said Hoffman — who has both bachelor's and master's degrees in mathematics from DU — teaching the class at all was a real challenge.

With all knowledge about mathematics and science doubling about every 10 years, those who work in these fields have to constantly go back to school.

Thus, after attending a briefing conference at Wesleyan University in Connecticut to prepare for the task, he spent at least two to three more hours per night in further preparation.

His total teaching load was five classes. He received no extra pay for the AP teaching, but he said he could not complain about his "biggest charity" because he "learned quite a bit from the students."

"We did all sorts of things I would never have done on my

own," he confessed, "if the kids had not been encouraged to bring a more sophisticated solution and proof than the previous kid."

(Next week: The secret of Hoffman's success.)

Student 'Dreams' Solution When Computer Fails Test

Irwin Hoffman, advanced placement math teacher at George Washington High School, said a high point of true drama "occurred in his class last year.

The students were overjoyed, he said, when a previously shy classmate, Steve Paavola, decided to "humanize mathematics" by programming a computer questionnaire pairing 800 students for a school dance.

At the last minute, the program would not work, however.

Engineering consultants from the University of Denver were prevailed upon to analyze the situation, but catastrophe remained imminent.

Hoffman went home at midnight on the eve of the dance and took a tranquilizer.

Paavola calmly went home to bed.

At 6:30 a.m., the youth phoned Hoffmann and told his teacher not to worry—he had dreamed the solution!

The "vision" worked. The dance was a success. Paavola was an overnight celebrity. Hoffmann aged.