

**ADVANCED PLACEMENT MATH**

# Teacher Uses Team Effort to Instruct

(Second of a Series)

By DOROTHY ECCLES  
Denver Post Zone Writer

When 8 out of 13 George Washington High School boys who took the advanced placement college mathematics test last spring scored a top rank of 5, there were many who naturally looked for the secret of such success.

Was it a coincidence or a logical result of preparation — or a bit of both?

Irwin Hoffman, who taught the students in their senior year, is quick to declare that "nobody could do anything with a bunch of bright students if they had not been ready for this type of course."

He said he built the students' previous training and credits and their exceptional record by cooperative team effort. The accelerated division is headed by math department chairman Wendell Wolf.

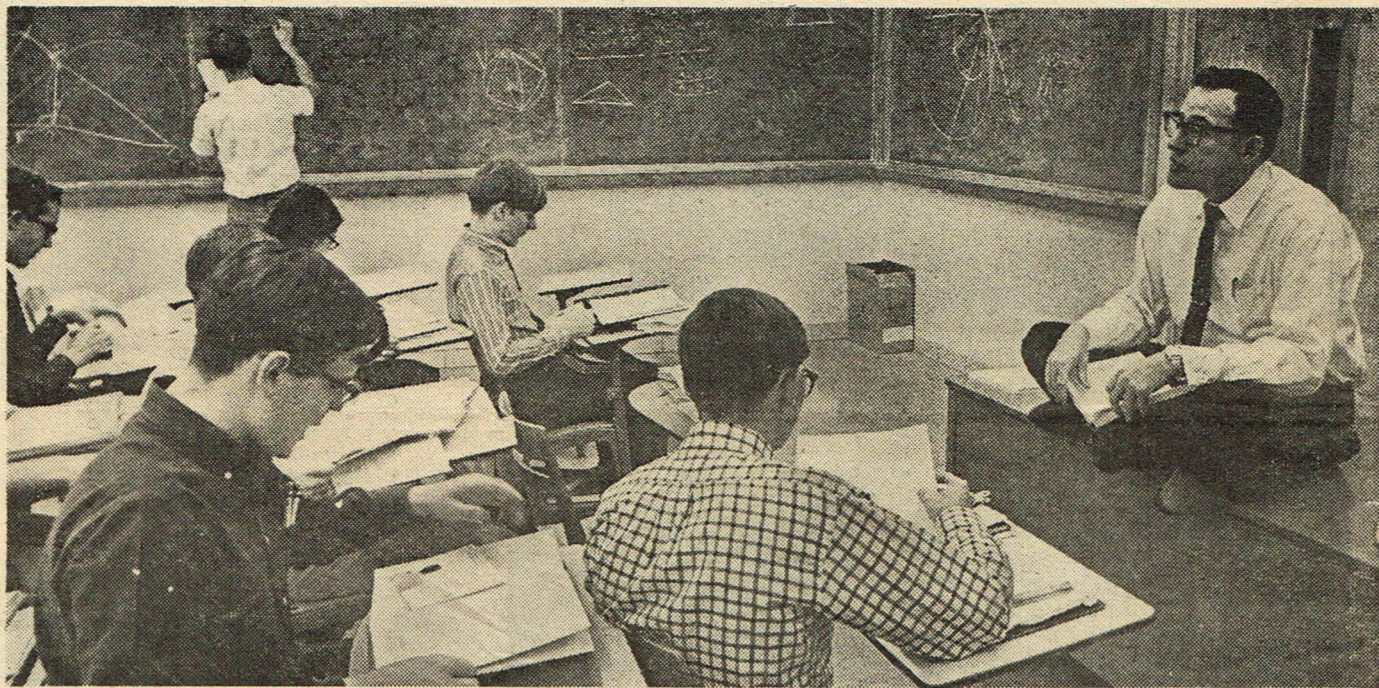
**2-YEAR TERM**

Person Jeffries previously taught the class Hoffman had last year, and Vaughn Aandahl last year had the students Hoffman has this year. Wolf has a policy of assigning his teachers to an accelerated course for only two years and also requires his powerful non-accelerated courses to be passed around.

But the students praised Hoffman. Their remarks: "I don't learn as much now" (in college) "The class here (GW) was a degree harder" (than at college);

Another student, comparing his present college math class with Hoffman's, said "I need the material, but it's not challenging because it's not taught the same way"

All the students said there is



**IRWIN HOFFMAN TEACHES ADVANCED PLACEMENT MATH COURSE TO STUDENTS AT GEORGE WASHINGTON HIGH**  
Former students claim their college work is not as challenging as the classes they attended while in high school. Denver Post Photo by David Mathias

less student participation in their classes now, whereas in Hoffman's class there was "about 80 per cent student participation," and all said their George Washington background was "better" than that of their fellow students at college.

The students said the secret of Hoffman's success was that he taught there is no central authority and that "the most elegant proof was the proof itself."

Certain authors were promulgated simply as being exceptional in the field. Five official texts were prescribed for the class, but the students' work was accepted as equally valid.

"Each individual was encouraged to express what he

knew, and my job was to make sure they did not get too far afield," said Hoffman.

Very often the students would do the lecturing, bringing outside work to class to explain to the others.

Hoffman said he prepared lectures for the first two months but generally was able to give only the first five minutes of what he had prepared. "All I did was read as much as I could after that," he said.

**EGO DAMAGE**

"I had to decide that my ego could be damaged down to the lowest extreme. I could not prepare for everything I was going to give them in class."

Hoffman, who holds bachelors and masters degrees in mathematics, said his teacher at Wesleyan University, where he took a refresher course in advance of teaching the advanced placement class, taught by the non-authoritative method. "The very bright really learned from him, although it was not good for me," he said.

"But it occurred to me that it might be better for my students this way than if I structured the course to meet my limitations."

He said his father, who teaches at East High School, told him "You can't teach this way — it's chaos."

Hoffman, however, believes "every instructor can limit the field of knowledge of his students if he outlines his course too distinctly, for then your shortcomings are imparted to the students."

Asked to pinpoint the secret of his success, Hoffman labeled his practice of giving essay exams, allowing the students to grade homework papers not affecting grades, and an atmosphere of freedom to question. His students rarely took a test in class, he said. Most of his exams were four-hour take-home tests from 17 to 30 pages long.

"That's the secret," he said. "There was so much trauma, they learned something."

Commenting on his own trauma, he said grading is one of the things that "kills the teacher."

"I had a terrible time grading homework, so I let the kids grade their own homework. They took turns and it served a purpose. They saw how the other kids work problems."

**DOUBLE COURSE**

He also said he tried to give a double course in mathematical theory and applied math to satisfy both the engineering schools and the regular schools. The advanced placement exam included both types of problems, he said.

Hoffman was reserved in measuring his long-range achievement. "The ultimate evaluation is what the kids do with it," he suggested.

Several of Hoffman's top students expressed a desire to teach, although not all will stay in the mathematics field.

Perhaps, herein, lies his personal success.

(Next week: The advanced placement program nationwide.)

**COMMERCE CITY**

## Outdoor Exercises OKd in Adams City

By CHARLOTTE SMITH  
Denver Post Zone Writer

THE BOARD of Education in the Adams City School District supported a recommendation from Supt. Dr. John Stuart, and Principal Lester Arnold, to schedule 1966 graduation exercises on May 29 in an outdoor ceremony in Krogh Football stadium.

The move to the stadium is necessary to accommodate the large number of parents, relatives and guests expected to attend.

Baccalaureate services will be May 22 as previously announced.

A FILM on alcoholism, entitled "Kid Brother," will be shown at the Jan. 25 meeting of the Adams City High School PTA. The meeting will start at 7:30 p.m.

Mrs. Alice Hanson, PTA president, announced that members of the nominating committee will be elected at the Feb. 22 meeting.

REGISTRATION for Adult Education Classes, sponsored by the Adams City School District, will be this Wednesday from 7 to 9 p.m. at Adams City High School, Room 107.

Classes are scheduled 10 weeks. They will meet once each week for two hours. An enrollment fee of \$6, plus materials, will be charged for all classes.

Subjects to be offered include typing, beginning and advanced shorthand, business machines, sewing, oil painting and a course in clerical and Civil Service training.

AN ALL-SCHOOL talent show is scheduled at Adams City Junior High School, 4451 E. 72nd Ave. Thursday night at 7:30 p.m.

## Get a GNM\* Loan



**\*GNM**

## is Good Neighbor Money

Among other things, a neighbor is someone you can borrow from. When you want to borrow "Good Neighbor Money." Ask us for a GNM\* loan anytime. You'll be surprised how good and neighborly we'll be about the whole thing.

your convenient neighborhood  
"FULL SERVICE" bank

OPEN DAILY  
7:30 TO 6:00  
Member: F. D. I. C.



5901 East Colfax at Ivy • Phone 388-5957