Computer lab famous

GW may become model for nation

By Janet Bingham Denver Post Education Writer

Word spreads.
Carol Scheuer heard it from a friend, that Denver's George Washington High School has one of the best computer labs in the

country.

The friend was in a position to know. As a student there, Steve Cohen had written his own computer software program and was earning royalties from national sales.

So every morning Carol, a 16year-old senior who goes to a private school for most of the day, gets up before sunrise and bicycles over to George Washington for a 7 a.m. computer class — one of two computer courses she takes there.

Doors closed to most

The George Washington computer lab has attracted the interest of students like Carol for years, but for the most part its doors have been closed to those assigned to any of Denver's nine other public high schools. Only students who are or would be assigned to George Washington currently use the program.

Last week, however, the school district received \$3.9 million in federal funding to establish four citywide "magnet" programs, including a Computer Magnet Center that will expand George Washington's lab to serve 200 additional high school students from throughout the city, starting in

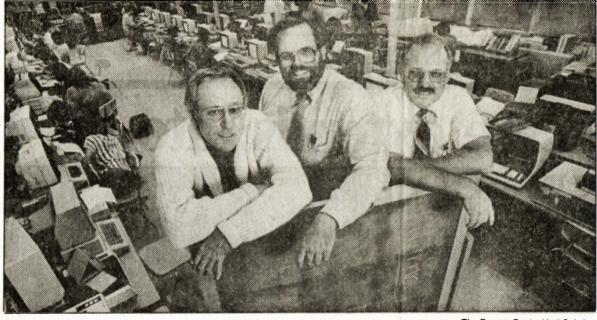
January.

Students who want to use the lab must have completed basic computer classes at their own schools and apply to George Washington's program.

Cited for excellence

The lab already has been cited for excellence in a National Science Foundation study, and its reputation even extends as far as China. Ministers of education from 29 Chinese provinces will make a special stop in Denver to visit it next week.

The lab's 12-member staff has



The Denver Post / Karl Gehring

George Washington High School teachers Irwin Hoffman, Ted Brucker and Ed Hoing with some of the 82 computers in school's lab.

garnered an impressive set of personal awards, and its energetic founder, Irwin Hoffman, expects the expanded program to become a model for the rest of the nation.

The grant money comes as a relief to Hoffman, who started pushing for computer education in Denver high schools back in 1961 when home computers didn't even exist. He has scrounged for equipment and written grant proposals until he had writer's cramp in order to win most of the 82 computers that fill two third-floor classrooms.

Under court order

In a school district under court order to desegregate and provide an equal education to all, the very excellence of the program he developed became a bit of an embarrassment.

George Washington is racially balanced (about 54 percent black, 37 percent Anglo), and nearly half of its 1,500 students last year took at least one of 14 computer education courses.

But officials wondered how the district could claim to offer "equal" education when most of the city's students didn't have access to its best computer lab.

That problem is solved now.

Teachers are proudest of the accomplishments made by the lab's students and are confident that list of successes will grow as the program is expanded.

Three years ago, 19 students designed and programmed a series of English lessons in four languages — Vietnamese, Laotian, Spanish and Hmong. The lessons are being distributed worldwide, and the computer lab gets a commission.

Recent graduate Chuck Tucker was 17 when he rewrote and simplified a software program designed to teach high school students the elements of the Pascal System, a computer language. Atari gave him a computer, a \$1,500 stipend, and hired him to act as chief consultant to their software engineers.

Last year Steve Kelley, then a senior, revised an educational software program and wrote an article that was published in a journal for mathematics teachers. He was also invited to speak at a national meeting of the Mathematics Association of America.

And the list goes on. Cohen, the friend who told Carol about the lab, is only one of numerous other

students to have produced and sold their own software programs.

Students in Hoffman's lab quickly find themselves teaching other students and adults.

Carol is currently teaching three elementary students how to use the Pascal and Logo computer languages. What they'll learn first, says Carol, is that "The computer doesn't teach us; we teach the computer."

Write own manual

Peter Bailey, 17, is creating a software program that will help students, businessmen and others who want to know exactly what steps are needed to get them from the beginning to the end of a group project. As part of his assignment, he must write his own computer manual and teach the program to others when he's finished.

"What you learn in here is that a computer doesn't do anything except what you tell it to do," says Bailey.

That is a key concept that Hoffman and his colleagues try to get across. In this lab, a computer is not used as a "substitute teacher." Students don't sit passively before it doing drills.