



I **PROGRAMMED FOR** ndependence

By KAREN WORLEY

It's difficult to imagine Tom Bowen as lazy. The cleancut 28-year-old with red hair and clear, sincere eyes seems the hard-working, energetic type, so eager to be productive.

But lazy is how Bowen describes himself after suffering a broken back in a 1981 motorcycle accident that left him without movement from the chest down.

"I was getting lazy; my wife was doing everything for me," says Bowen, a native of New Madrid in Missouri's bootheel.

After the accident he tried to return to his job as service manager and head mechanic at a hometown bike shop. He could do the work, but the fun was gone. "I like taking the bikes out for a ride."

A vocational counselor at Rusk Rehabilitation Center recommended TODCOMP (Training of the Disabled in Computer Programming). "My only other alternative was nothing," he says.

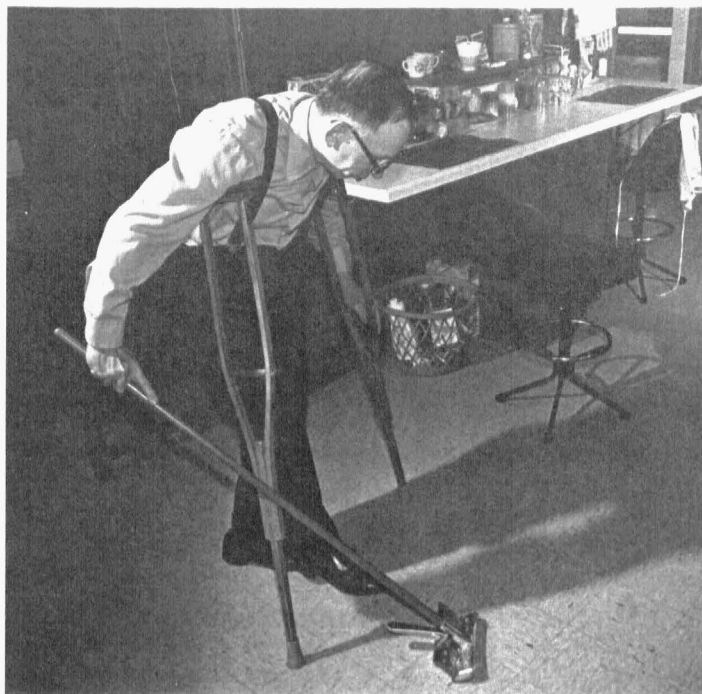
Encouraged by his wife, Sharon, Bowen left his spouse and their three children in New Madrid to start the 10-month computer programming course Nov. 1.

The move, he says, "made a 180-degree turn in my outlook when I wake up in the morning.

"The excuse, 'Oh, I'm in a wheelchair' doesn't work here." Instructors don't baby students because they're handicapped, but teachers also "go out of their way to help you if you don't understand something."

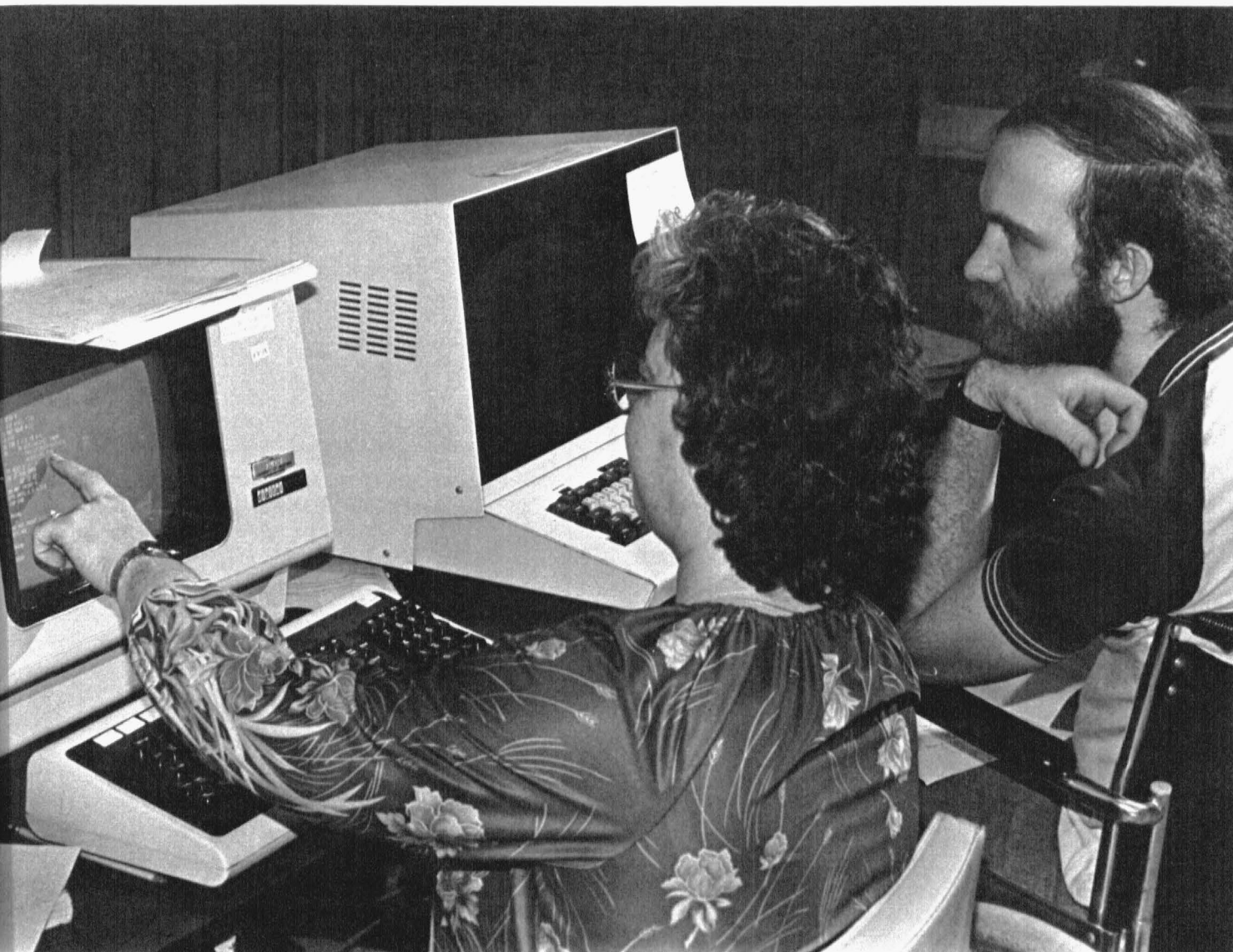
The 34 students come from Midwestern states and range in age from 18 to 48. Their disabilities (spinal cord injury, paraplegia, quadriplegia, hearing or vision loss, cerebral palsy, polio, multiple sclerosis or muscular dystrophy) represent a significant barrier to employment.

Instructor Ellen Scheer, left, constantly updates teaching techniques. "We try to teach state of the art," says Scheer whose computer education career spans two decades and three generations of computers.



At TODCOMP, students like Lavern Howdeshell function independently by doing their own cleaning, cooking and laundry. They live in cottages with kitchens and baths adapted for disabled persons.

Students Linda Sims and Tom Bowen, below, got terminal time from the start of the 10-month program.



For six hours a day, they can be found listening to lectures or glued to computer terminals.

FOR MANY, it's their first time away from home. Some had overindulging parents. "There's a lot of independence they have to learn," says instructor Ellen Scheer, who has taught at TODCOMP since its inception in 1975.

After successfully completing the 10-month vocational program that includes training in BASIC language on TODCOMP's in-house PDP-11/34 minicomputer and COBOL on the University's Amdahl 470/V7 main frame, and a six-to-eight-week, on-the-job internship, the student receives a computer programming certificate. "The student leaves TODCOMP job ready," Scheer says. The program's placement rate is 85 percent. The University employs more of the graduates

than any other single employer.

One of the program's 50 graduates and success stories is quadriplegic Ron Carr, a programmer analyst for Brown and Root in Houston. Since the hardest part of computer programming is mental — being able to write a program — Carr is on equal footing with his co-workers. An internship with the University's Computing and Information Systems at the end of his training program landed him a full-time job when he graduated in August 1980.

A Brown and Root job offer too good to refuse allowed Carr to up his annual earnings from \$15,000 to \$25,000 in two short years. Illustrating a point Director Ron Wilson likes to make about TODCOMP's benefits to taxpayers, Carr went from receiving \$2,400 a year in Social Security benefits before starting TODCOMP to paying \$4,600 in federal income taxes alone as a TODCOMP graduate.

Director Ron Wilson depends on members of his business advisory committee to alert TODCOMP instructors of changes in data processing and help him place students in internships and jobs. Here, Jim Grazier, data processing manager for the Missouri Division of Employment Security, critiques student Steve Ganaway's videotaped mock interview, resume and programming samples.



TODCOMP began eight years ago in a small Paquin Tower basement room with a handful of students and Comprehensive Employment and Training Act funding. In 1976, the program became part of the University's Extension Division.

BY 1978, Dr. Charles C. Campbell, associate vice provost of extension, had secured a \$400,000 establishment grant from the Missouri Division of Vocational Rehabilitation. The large administrative classroom building and 10 cottages at TODCOMP's present location eight miles south of Columbia had been developed in 1966 for Peace Corps training. The grant enabled the facilities to be made handicapped-accessible. A minicomputer, terminals, two vans with wheelchair lifts and furniture for the cottages also were purchased. TODCOMP, one of 22 such programs in the country, now is totally self-supporting through fees for service. Tuition is \$5,850.

The program receives support in other ways, though. Volunteers who serve on the business and independent living advisory committees keep the program up to date. In addition to alerting instructors of changes in data processing, the professional programmers on the business advisory committee do everything from conducting mock employment interviews with students and reviewing their computer programs to providing internships and assisting Wilson in finding jobs for graduates.

"The feedback from the volunteers has a great impact on our students," Wilson says. Scheer agrees. "After the first evaluation, they're never the same. It shakes 'em up, challenges them. The ones who had been casual or indifferent find it's going to be hard work."

Only 55 percent of those who start the program complete it. "We have to meet the industry standard," Wilson says. Input from the advisory committee "keeps our people employable." Scheer adds, "If there hadn't been 30 to 40 employers who took a chance, we'd have no success at all.

The technical computer skills acquired would be meaningless, however, if the TODCOMP graduate couldn't, for example, arrange transportation to get to work. Through independent living skills training, coordinated by Cathy Unterreiner, students pick up self-management techniques for daily living.

For about a third of the students,

trained personal care attendants are on call to help with bathing, dressing, meal preparation and medical procedures. Ellen Calhoun coordinates and trains the attendants, but also instructs students on how to advertise for, interview, hire, pay and schedule the attendants they'll need when they get out of school.

"You can't wait on students hand and foot if you want them to be independent when they graduate," she says. "They should do as much as they can themselves."

During the first five months of the program, students live in TODCOMP cottages equipped with roll-in showers and lowered kitchen counters. Several times a week, trips into Columbia for shopping, church and other activities are scheduled. Students are responsible for doing their own cooking, cleaning and laundry. During the second five months, students rent apartments in Columbia and commute to classes. The arrangement simulates life after graduation.

RECREATIONAL and social situations open up avenues for lifelong leisure, Unterreiner says. Trips to restaurants, lectures and art museums are scheduled. Right outside the cottages, an exercise/fitness/nature trail encourages staying in shape. The trail, planned and built by Dr. Hardeep Bhullar, associate professor of recreation and park administration, and student volunteers, offers a half mile with 14 different exercise stations for both the handicapped and able-bodied. Unrestricted gifts to the Development Fund provided \$27,000 for user and site analyses, material and equipment.

The program wouldn't be complete without driver's education. Now, students are trained by Columbia Public Schools driver's ed teachers. In the near future, a driver's education instructor will be hired, and a van equipped with reduced-effort steering and brakes will be purchased with Missouri Division of Vocational Rehabilitation funds.

"We meet as many needs as possible before students leave," Unterreiner says.

Cramming intense computer programming and independent living skills into 10 months gets graduates off to a good start.

"The neat thing about this program," says 19-year-old Teresa Lage, "is it gives you independence."

And hope, says the determined Bowen. "If someone'll give me a little crack in the door, I'll show 'em." □



Instructors individualize computer programming training by providing devices as expensive as a talking computer for blind students to ones as simple as a mouth stick, wrist clip or hand strap, above, that enable students with limited movement to punch out a program.