

Are First Answers Right?

An instructor at a medical school gave his new students some advice before they began an examination: "Once you've marked an answer as correct, don't change it. The odds are you will lower your score."

It was the kind of advice that has been given students for more than half a century. But was the instructor right?

A brief study of examination data at the Eastern Virginia Medical School seems to show conclusively that the instructor was wrong. Indeed, the advice he gave is a myth: answer changes go more frequently from correct-to-wrong than from wrong-to-correct.

Dr. Richard E. Davis, psychiatry professor at the school, recently found that of the total answer changes made by students, incorrect-to-correct changes

occurred about 2.8 times as often as did correct-to-incorrect changes.

Davis points out that other investigators have come to a similar conclusion: no matter how persistent the belief that first impression answers on objective examinations are so dependable that subsequent changes more often result in a loss than in a gain of credits, there is little, if any, objective data to support it. Moreover, the scientific literature almost always identifies the myth as verbal in origin.

Why is it that students can better their scores by changing their answers?

"Speculation as to why answer changes are more frequently beneficial than not," Davis writes, "seems to include the possibility of subliminal stimulation of stored information."



BEGINNINGS OF A SHOE—Felton Elliott has broken the mold from around the cast of a patient's foot. From this cast and the one for the other foot, he will make special shoes to fit the patient's misshapen feet. The Limb and Brace Shop, one of a number in the country, has helped numerous amputees resume almost normal lives.

Limb and Brace 'Carpenters' Reshape Lives

By David Williamson

On a wintery morning in Rome, Ga., a year and a half ago, a rural road lay covered by a thin film of ice and snow.

When two young Georgia men on a quail hunting trip rounded a curve in a pickup truck, their vehicle lost traction and skidded head-on into a large flatbed trailer rig hauling 43 tons of granite slabs.

Johnny Wilson, 25, was thrown from the pickup as it spun across the roadway, and he slid beneath the heavy-duty tires of the larger truck.

The cruel wheels cut away a quarter of him just below the waist.

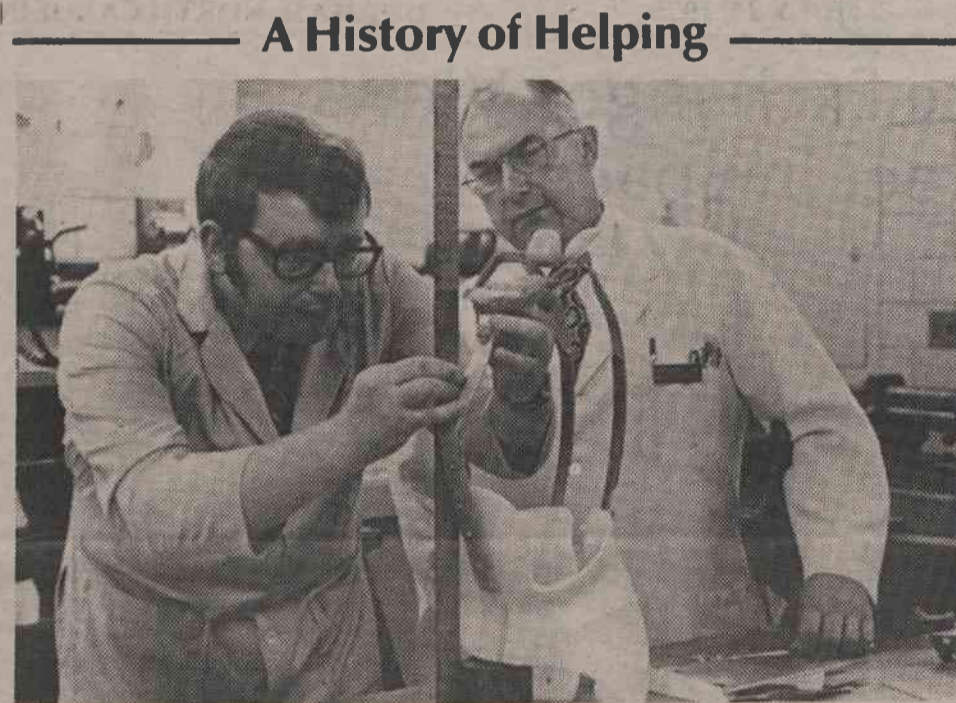
Although emergency medical aid saved his life, by August of 1974, Wilson had almost given up the idea of ever walking again. One of his legs was gone along with part of his pelvis, and experts in Atlanta and Chattanooga told him he couldn't be fitted with an artificial limb since he had no stump on which to attach any such device.

Following the suggestion of a friend, he contacted the medical center's Department of Prosthetics and Orthotics, otherwise known here as "the limb and brace shop."

Director Bert Titus suggested that Wilson make the 350-mile journey to Durham, and they'd see what could be done.

Less than two months later, Wilson was walking once again. Now, in spite of "phantom pains" — discomfort which seems to originate in his severed leg — the young man hunts, fishes and hikes as he used to before the accident.

"I feel I've been slowed down some," he said, "but I haven't been stopped by a long shot."



SUPPORT FOR A CHILD—Bert Titus, right, examines a Milwaukee brace being built by Bill Harris. The brace is for a child, a victim of scoliosis, or curvature of the spine. (Photos by Thad Sparks)

A History of Helping

Helping people to have the use of limbs after their own have been removed as a result of disease or accident and helping children with congenital birth defects grow to productive adulthood has been the goal of the limb and brace shop since its founding in the early '30's.

Director Titus explained that orthotics is the science of making and fitting orthopaedic braces for the support of weakened body parts and the correction of bodily defects. Prosthetics, he said, is the science of making and fitting artificial limbs.

The use of man-made limbs and braces is probably as old as accidents, warfare and birth defects, he suggested.

"In prehistoric times, ancient man undoubtedly made splints for broken arms and legs and constructed wooden legs for those who had lost the ones they were born with," Titus said.

And the care of the congenitally deformed has often reflected the political and cultural ideas of the times. Under a line of pharaohs in ancient Egypt, a powerful military state simply exterminated imperfect babies. The same was true in Nazi Germany under Adolf Hitler.

Titus said that before artillery made armor obsolete, armorers were the chief artificial limb makers. Later, locksmiths, physicians, watchmakers and carpenters all made contributions to the science.

Although most of their incisions are unintentional today, barbers frequently doubled as surgeons during the Middle Ages in Western Europe. Since the creation of an artificial limb is dependent on the skillful surgical creation of a useful stump, most of the early prostheses were unsatisfactory.

The stumps of amputees weren't closed surgically, Titus said. Rather, they were immersed in boiling oil or simply crushed to stop bleeding. It's not surprising then, that before the advent of sterile techniques, at least 75 per cent of all surgical procedures resulted in death at that time.

Professional Requirements

Today, prosthetists and orthotists are highly-specialized professionals and the requirements for becoming certified are becoming more demanding each year.

"Currently," Titus said, "a candidate must have either an associate of arts or a bachelor's degree. Four years of on-the-job training precede certification by the American Orthotic and Prosthetic Association, and 15 hours of continuing education are required yearly to maintain the rating."

Duke's limb and brace shop currently employs 19 people, including four certified prosthetists, four certified orthotists, several who are about to take their examinations, clerical personnel and a corseteer. Titus, who serves as professor in the School of Medicine, is certified in both specialties.

The people who go into either of these closely related fields come from

(Continued on page 4)

Personnel Invites Employees To Phone-In Change Requests

Since its recent reorganization and accompanying changes of location, the Personnel Department is urging employees to save steps whenever possible by calling in changes for their personnel records.

According to Richard Bindewald, personnel director of benefits and records, "we want to give assistance with a minimum of inconvenience to our personnel. We are encouraging employees to use the telephone whenever possible to make any necessary changes in their personnel records."

The Benefits and Records Office of the department, which serves employees both on campus and at the medical center, was centralized recently by a move to room 160 in the Bell Building.

Bindewald stated that the move was made primarily to provide more space to house records previously kept at several locations throughout

the university. Now, he said, the department wants to encourage all employees to use the telephone for records changes so that "we may render service with a minimum effort on the part of the employees."

Employee changes of address can be called in to the department, Bindewald said, as well as some other changes which an employee might wish to make in his records.

"Information about any of the fringe benefit programs can and will be provided by phone from this office," he said. "However, if a person desires a more confidential discussion dealing with fringe benefits or payroll, we will be pleased to have them make an appointment or drop by."

The Benefits and Records Office has three extensions which may be used for questions from employees: 684-6086, 684-3033 and 684-6723.

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