Communication problems? Clinic offers help

By MARCY MERMEL
Collegian Staff Writer

Communication is something most of us take for granted. But for people with communication problems, the College of Education's speech and hearing clinic is available for help.

Located in Moore Building, the clinic serves students, faculty and local residents with difficulties ranging from stuttering to severe hearing loss, said Debra R. Suffolk, coordinator of clinical experiences.

A prime function of the clinic is to help people to communicate more effectively in a setting where students learn audiology and pathology techniques. The clinic also provides supervised practical experience required of University students majoring in speech pathology, audiology or the teaching of the hearing impaired.

"Because we are a training institute, our fees include a 50 percent discount over all other similar programs in the state," Suffolk said.

The clinic also serves as a center for research, she said.

University students receive free therapy, and University staff and their immediate families receive a 75 percent discount, she said. However, that discount is being investigated by clinic administrators because University insurance may cover hearing therapy.

Children and adults who go to the clinic must first undergo a hearing or speech and language evaluation — or both, depending on their problem, she said.

Thomas A. Frank, another coordinator of the program, said the graduate students in the Audiological Services Program test clients for measurement of hearing sensitivity, location of hearing loss and children's brain disorders connected with hearing. Otologists — ear doctors — also examine the patients.

Hearing aid evaluations are available for clients diagnosed as needing them, he said.

The clinic's staff has also been involved in community hearing screening projects. Last year, for example, the staff screened about 950 people in a project sponsored by the Lions Club. When an organization or a facility provides the transportation to the clinic, "we provide the equipment and the expertise," Frank said.

Stephen N. Calculator, director of the Child Diagnostic Program of the clinic, said students see "mostly kids that are otherwise developing normally but whose speech and language are lagging behind the rest (of the children their age)."

The University's clinic is different from many others because of its philosophy that all children can be tested, he said.

Because no formal testing is available for children less than three years old, the graduate students who work at the program under Calculator's supervision use informal means to assess them. These clinicians observe the children interacting with their mothers to determine if they have difficulty understanding and producing language, Calculator said.

As part of the more structured testing, an older child's vocabulary is measured as he or she defines words or points to pictures of objects named by a clinician, and the child's articulation ability is measured as he or she identifies pictures containing sounds he or she may be unable to produce, Calculator said. A child's abilities to use grammar and sentence variety are also assessed.

Also, the child's oral mechanism, including lips, teeth and palate, is examined by clinicians "to rule out any possibility of a motor problem," he said.

When children are diagnosed as having a speech or language disorder, clinicians refer them to a therapy program — often the one at the University, he said.

About once a term a child who is severely impaired —often because of cerebral palsy — comes to the clinic and receives therapy that includes a communication display board or some other communication aid, he said.

Suffolk said the clinic offers child and adult speech therapy in articulation (the production of sounds), language (word order), fluency (stuttering) and disorders where voices do not sound like others of the client's age.

Frederick P. Weiner, coordinator of the Child Speech Therapy Program, said about 25 percent of the child speech clients speak unintelligibly, about 25 percent are non-verbal and the others have difficulties such as poor articulation or the inability to understand the subtle cues of when to speak.

Sometimes, children who speak unintelligibly have somehow developed their own language.

"Their errors are not haphazard — they're very structured," Weiner said.

In such cases, the therapistr, graduate and undergraduate students, try to decode the language as if they were going into the jungle and decoding a language there. Once they break the code, they have methods of changing the speech patterns, he said.

Some non-verbal children may not have developed language because they have an older brother or sister who speaks for him or because his parents anticipate his needs, Weiner said. Difficulties in hearing and processing language can also cause children to be non-verbal.

During therapy, the non-verbal child is encouraged to imitate his therapist's speech. Once he can say "car go" the therapist tries to expand his speech by saying, "Yes, the car is going," encouraging and correcting the child at the same time, Weiner said.

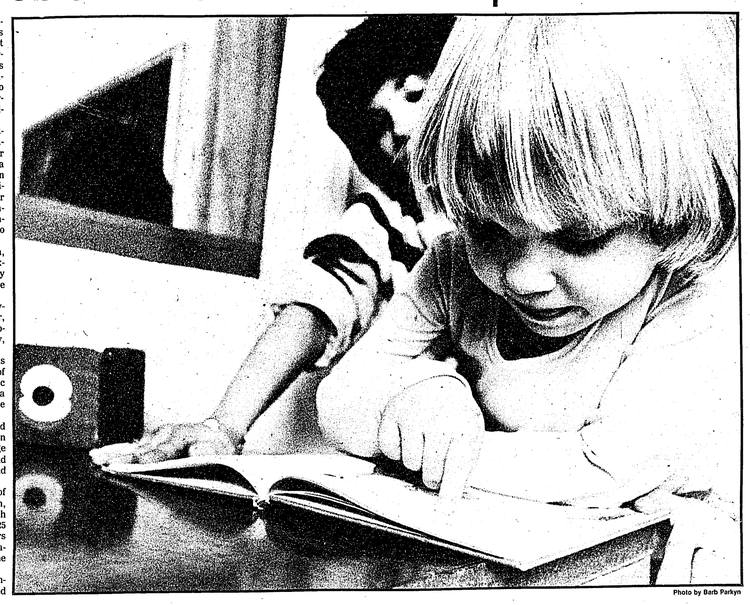

Photo by Barb Parkyn

A girl at the College of Education's speech and hearing clinic in Moore Building works on pronunciation by reading through a book with her therapist.

Voice disorders, caused by children who yell too much and have developed growths in their voice box, are sometimes treated at the clinic. The children are taught to relax or tense up their throats when speaking.

Richard G. Stoker, coordinator of the Hearing Impaired Child Therapy Program, said the graduate students who provide therapy try to teach the children to make appropriate use of their hearing aids, develop their concepts of words relating to actions and objects and promote their vocalization.

Infants as young as 6 weeks old can be fitted with hearing aids.

"It's not the age of the child, it's the age we've diagnosed the problem" that determines when children can obtain hearing aids, Stoker said. "Our goal is to put a hearing aid on them as soon as the problem is diagnosed.

"In my experience there's just no comparison in terms of being a potentially strong achiever in a child diagnosed and worked with immediately by his parents and one diagnosed at three or four," he said.

The therapy is divided into Parent-Infant Counseling and Child Therapy, he said.

In the parent-infant therapy, the clinicians "primarily work with the parents and train them to work with their children at home," he said.

Marilyn French-St. George (graduate-education of the hearing impaired) said, "It's very important that parents talk to the (hearing impaired) baby, even more so than a hearing child because he can't hear the environment around him."

Natural baby games such as finger-play can be turned into a speech activity, she said. When a hearing impaired baby puts his fingers into his mother's mouth she should make sounds.

Later, when the baby puts his fingers into his own mouth he tries to produce the same vibrations and begins to vocalize, she said.

In therapy, young children are taught to acquire sounds and then verbalize them. For example, the clinician tries to get the child to produce "oo" and later, "shoe," French-St. George said.

Once the clinicians teach a child to add consonants to the beginning of sounds they have him say them faster, so "ba" becomes "babababab." The next step is to teach him to stop, she said.

Parents watch and participate in the formalized therapy and then work with their children at home between sessions, she said.

Music time and juice and cookie time are two periods in the 2-year-old child therapy program that simulate the home environment, she said. During those times the children get together and the parents are able to exchange experiences and ideas. The music time helps to build the rhythm that the children will need to speak properly, she said.

Laurie Pfeifer (graduate-education of the hearing impaired), who provides therapy to 2-year-old Robin Fye, said, "the point is to get them to know their voice has a use and to use it."

Pfeifer said she has to devise lessons that Fye will enjoy. For example, an activity to teach him how to determine loud from soft had him putting paper bugs into cups with frogs on them. If the "ah" sound he makes is loud, the bug goes into the cup of the wide-mouthed frog.

Sue Oden, whose son Erik is in the program for two-year-olds, said, "We've been elated because we've been getting some feedback on what we've been doing here and at home."

Erik has been speaking without being coached. After the milk and cookie session, he said "apple" and "banana" when he saw drawings of them on the wall.

"That's what's exciting," Oden said.

A special program for University students and staff members is provided, said James V. Frick, head of the program.

The clinic is "one of the few programs that offers a residential program," Suffolk said.

The residential clients, who live in the residence halls, receive intensive therapy, averaging 15 hours of independent therapy and five hours of group therapy a week, she said. As temporary University students, they qualify for a rehabilitation counseling intern, who assists them in adjusting to their disability, and adaptive physical education.

Jeanie Hall, a supervisor for student therapists of adult hearing impaired clients, said she supervises a minimum of one of every four sessions her students teach and holds conferences with them as they devise lesson plans.

Photo by Barb Parkyn

A patient at the speech and hearing clinic works with his therapist at communicating through sign language.

Photo by Barb Parkyn

Among the services at the speech and hearing clinic is testing for measurement of hearing sensitivity. Otologists — ear doctors — also examine the patients, and hearing evaluations are available for clients, like this man, diagnosed as needing them.

Clinic's work extended through research

By MARCY MERMEL
Collegian Staff Writer

The work of the speech and hearing clinic reaches beyond Happy Valley through the clinic's research.

Thomas A. Frank, head of the clinic's Audiological Services Program, said the clinic acts as a volunteer pool for research. Graduate students working in the program often act as the normal hearing subjects, while clients are invited to participate in the research and are either paid or given reductions in their clinic fees.

Also, "there is tremendous individual variability of the results (of telephone and crowd hearing ability studies) and a group trend may not necessarily be true for an individual," he said.

The volunteers are informed immediately of the their tests results when the discoveries can benefit their hearing, Frank said.

The Audiological Services Program is conducting research in the abilities of hearing-impaired individuals to hear conversations on the telephone and in crowds and trying to determine a measurement for the normal threshold of hearing by bone conduction.

The research on ways that hearing impaired people can better communicate on the telephone has improved the communication in 80 percent of the hearing-impaired subjects, he said.

With the help of a telephone amplifier adaption, some individuals can improve their hearing capabilities from 60 percent to 90 percent of the conversation.

"For others the tele-amplifier doesn't help; then they use hearing aids," Frank said.

"There is extreme variability of the results, even with people with the same amount of hearing," he said.

Telephone listening ability is a "thing many people in our profession have overlooked for a long time," he said.

Research on how hearing aids process speech in backgrounds similar to a cocktail party has determined that many people should be fitted for aids with conversation in the background, Frank said.

In the past, doctors have fit the aid settings in quiet areas and assumed they would work in noise, but this was not always true. However, the tests have found "if we fit them in noise we'll also get significant gains in quiet," he said.

The bone conduction standard is used to determine if a hearing loss can be treated medically or is a nerve loss, Frank said. Bone conduction is transmitted through the outer and middle ear and "if a person's air conduction is the same as his bone conduction, the loss is in the inner ear," he said.

Most laboratories use only hearing subjects for their bone conduction studies. However, the clinic has been verifying its results with people with nerve hearing losses because these people do not receive air conduction messages.

The International Standards Association and other standards institutions are considering the University's measurement of the threshold of hearing by bone conduction, he said.

For testing, clinics have been using adult measurements for children. Because Frank and others are "not particularly sure this is appropriate," this fall the University's clinic will begin a two-year series of studies on bone conduction in children, he said.

Air Florida revises takeoff procedures after 737 crash

By H. JOSEF HEBERT
Associated Press Writer

WASHINGTON (AP) — A month after the crash of Flight 90, Air Florida tightened procedures guarding against ice accumulation on aircraft and told its pilots to increase their takeoff speeds during severe weather, investigators were told Tuesday.

The airline issued its new orders in bulletins to pilots in mid-February in response to the crash of one of its Boeing 737s during a snowstorm Jan. 13, killing 78 people.

Federal investigators believe that the aircraft, Flight 90, may have had an accumulation of ice on the forward edge of its wings and in its engines, hindering the plane's ability to climb and giving false readings on takeoff speed to the pilot.

In a bulletin issued Feb. 15, Air Florida's chief pilot outlined a series of precautions to be taken whenever it is snowing or raining and whenever conditions are such that an aircraft must be deiced.

Four days later, another memo ordered pilots to increase their takeoff speed by 12 miles an hour during icy weather to guard against possible stall problems that could be caused by an accumulation of ice on the wings.

The airline ordered the increase in takeoff speed although it acknowledged that under some circumstances as much as 8,000 pounds of weight must be sacrificed in order to take off at that speed at some airports.

The changes in procedures came as investigators focused in on a variety of actions taken by the crew of Flight 90 that may have led to the accumulation of ice on the aircraft.

Robert Reding, the airline's chief pilot, said the Feb. 15 bulletin was sent out to follow up on a number of findings that had emerged from the investigation into the crash of Flight 90.

"I wanted to get them out to the (flight) crews as quickly as possible," Reding told investigators.

The Boeing 737 crashed seconds after taking off from National Airport, hitting a commuter bridge before it slammed into the ice-filled Potomac River.

Testimony before a National Transportation Safety Board panel of inquiry has disclosed that there was confusion as to who had final responsibility for checking the aircraft for snow or ice on critical parts of the plane before takeoff.

Investigators also believe the pilot did not engage a critical engine defrosting system, possibly causing a sensor to freeze and give the pilot a false indication of takeoff speed as the plane moved down the runway.

Documents presented to the NTSB panel Tuesday showed that in its Feb. 15 bulletin, Air Florida tightened many of its cold weather operating procedures.

Marathon dissidents hold out

By JACK A. SEAMONDS
Associated Press Writer

FINDLAY, Ohio (AP) — A leader of dissident Marathon Oil Co. stockholders said yesterday the group probably doesn't have enough votes to block the $6.2 billion merger of Marathon and U.S. Steel Corp.

But investment consultant James McElroy said dissidents are studying an Ohio law giving them "appraisal rights" that could result in a higher price for their shares. The dissidents complain they aren't getting enough money for their stock.

The merger of the nation's 17th-largest oil company with the steel giant is the key topic before Marathon shareholders in a special meeting scheduled for today.

If approved, the merger will be the second-largest in history, behind the $7.8 billion acquisition of Conoco Inc. by DuPont Inc. last year.

"I don't think we can stop it (the merger). It's too late; there isn't enough time," McElroy said in a telephone interview from Cleveland.

"We're going very heavily on the appraisal rights," he said. "But that's a complicated procedure. One fear I have is that there are too many shares held by banks and investment companies, and the shareholders who own the stock can't exercise appraisal rights unless the shares are in their name."

Appraisal rights under Ohio securities law provide for the appraisal of stock by an independent party, generally a state court. One rule is that the shareholders's stock must be in his own name. The shareholder must notify the company by registered mail within 10 days after a merger vote that he intends to exercise appraisal rights.

The law is aimed at allowing courts to decide if stock has a higher value than is being offered. A shareholder loses his appraisal rights if he votes for the merger.

The higher price, if any, would have to be paid in this case by U.S. Steel. The company's chairman, David Roderick, has said he won't "sweeten" the deal for Marathon shareholders.

U.S. Steel is making a two-phase purchase of Marathon.

Hurry sundown

A lazy winter sun sheds its late afternoon light on the greenhouses and puddles behind Tyson Building.

Photo by Dan Vogsley