ELECTRONICS

Tell If Speaker Is Boring

Electromagnetic movement meter measures amount of fidgeting done by audience. Quoting statistics found to cause much fidgeting among listeners.

➤ ARE YOU a bore?

If your best friends won't tell you, the invention of a University of Oklahoma professor will.

The tattle-tale device is an electromagnetic movement meter developed by Dr. Elwood A. Kretsinger, assistant professor of speech. The audience-reaction machine measures the amount of fidgeting or physical movement in a group of listeners.

It consists of three instruments. One feeds electromagnetic energy into a wire strung along the backs of chairs where the audience is seated. As the listeners move, the energy they absorb is recorded on an amplifier, and another instrument charts the movements on a long coil of graph paper.

Study the red-ink squiggles on the paper tape, compare them with a carefully timed speech and you have a picture record of where you lost your audience's interest.

If you have quoted a boring batch of statistics for five minutes, the tape will tell the tale. Instead of a steady, relatively even red line, the meter will zig-zag back and forth like a drunk trying to walk a chalk line.

Dr. Kretsinger has a four-year background in radio and radar while in the Marines during World War II, plus experience as a seismograph engineer doing geophysical exploration for a short time following his discharge.

At the University of Southern California in 1949, where he was working on his Ph.D., Dr. Kretsinger developed his meter, after helping set up equipment for a series of studies on dramatic plays.

"We began to wonder if there wasn't a way we could measure audience reaction, to get unconscious response, and hit on the idea of doing it electronically," he said.

The movement meter is most effective in recording reaction to serious works.

"In some passages, the only response you want is lack of movement," Dr. Kretsinger explained. "Repeated tests showed us that where there is maximum movement in the audience, there is minimum interest in the drama."

To glue his test audiences to their seats, Dr. Kretsinger used dynamic recordings of recent historic events. To induce fidgets, he played a recording of a speech in which a woman explained how she raised squash.

So far the meter has been used only to test the reactions of adult audiences.

"A group of children probably would give us completely different results," he pointed out. "Youngsters move for everything, often wiggling when they are particularly interested. I want to try the meter on them one of these days."

The audience never touches the wiring for the meter, and the wire can be hidden on a panel placed behind a bank of chairs. The present equipment will test the reactions of 12 persons at a time, but he would like to have enough meters to test individual reactions in a larger group.

Two of the electrical units plus the ink-writing recorder cost about $550.

Science News Letter, May 24, 1952

PSYCHIATRY

Normal People Focus Energies on Main Problem

➤ "NORMAL PEOPLE are those who grow up to focus their energies on main problems."

This definition was offered by Dr. Earl D. Bond of Philadelphia at the meeting of the American Psychiatric Association in Atlantic City.

DUMMY "MAN"—With a skeleton of steel, loaded with lead and covered by rubberized foam, this dummy will take free falls through space just as an unconscious man would. The model, developed by W. S. Ruff, will be dumped from high-speed planes at high altitudes.

Normal people, however, are not uninteresting and they are not perfect, Dr. Bond declared.

Psychiatric and psychologic examinations of 64 college students, men and women who were members of student councils and as normal as could be found, showed that half were "carrying an important neurotic disability" and that nine were in serious neurotic trouble at the time. The moral of the study, given by Dr. Bond:

"To demonstrate that so many gifted and successful people have neurotic handicaps may be a source of comfort to others like them who now see normality as an all or nothing proposition."

Science News Letter, May 24, 1952

DENTISTRY

Toothache Causes 2% To Play Hooky From Jobs

➤ TOOTHACHE CAUSES about two percent of all industrial absenteeism, Dr. James M. Dunning of Harvard School of Dental Medicine calculates.

This figure is exclusive of absences from more remote effects of dental disease.

Relief emergency service in one industrial plant, requiring about 10 minutes in the dental chair for each case, returned to work over 85% of the employees seen at the dental clinic, Dr. Dunning reported to the Industrial Health Conference, Boston.

Additional reductions in absenteeism and substantial saving of teeth for the average worker can be achieved by a service which also provides dental health education, dental examination and referral to private dentists of cases needing corrective or restorative treatment.

The nation's teeth need 700 million fillings, according to figures compiled by the American Dental Association.

It would take five times as many dentists as we now have to catch up within a single year with this backlog of needed fillings. These figures do not include needed extractions, bridges, crowns, dentures, examinations, X-rays, cleaning, fluoride applications and other dental services.

Science News Letter, May 24, 1952

ELECTRONICS

Electronic Megaphone Uses Transistor Amplifiers

➤ THE MEGAPHONE has gone electronic. Through use of the new transistor amplifiers powered by tiny drycells, a normal speaking voice is turned into a sturdy shout for any outdoors communication, from cheerleading to military command.

It was demonstrated by Richard F. Shea of General Electric's Electronics Laboratory, Syracuse, N. Y., to electromics engineers meeting in Washington.

Science News Letter, May 24, 1952

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