## lan-made Moonquakes

If the moon is too dead to make its own quakes, scientists may take over the job, setting off grenades by remote control to learn about the lunar crust.

This is old stuff to earth geologists, who for years have been blowing up sticks of dynamite and timing the shock waves to locate oil deposits, rock faults or underground pockets that might cave in under heavy buildings.

Now a Stanford University geophysicist has plans for a lunar version. A grenade launcher, left on the moon by astronauts, would be triggered from earth to throw four little bombs out 500, 1,000, 3,000 and 5,000 feet. The explosions would be picked up by a row of sensitive electronic ears called geophones, spaced 150 feet apart, which would radio the signals to earth.

With grenades shaking up the deeper

layers of rock, another implement is being devised for the rocks just under the surface. Called a thumper, it is described by Prof. Robert L. Kovach, as a glorified plumber's helper.

It is shaped like an upside-down funnel with a handle. An astronaut picks his spot, stands the thumper on the ground and pulls a trigger. A carefully measured explosive charge goes off and "thumps" the ground with exactly the same force each time.

There are problems, however, Prof. Kovach told the American Association for the Advancement of Science. A big one is that explosions behave differently in a vacuum than they do in an atmosphere. With no air in the way, gases from the explosion may rush along the ground at 360 miles per hour and upset the touchy geophones.

**PSYCHOLOGY** 

## Student Suicides

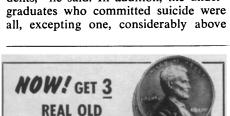
Contrary to popular belief, the peak period for college suicides appears to be the first six weeks of the semester, not finals weeks or midterms.

Over a 10-year period from 1952 to 1961, 16 out of a total of 23 suicides at the University of California at Berkeley occurred in February and October -within six weeks after the semester had begun. Only one student killed himself during finals during the decade.

This, along with a description of the suicidal student, was reported by Richard H. Seiden of the University's School of Public Health.

body, the suicidal group was "older, contained greater proportions of graduates, language majors and foreign students," he said. In addition, the under-

Compared to the overall student



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average in scholarship.

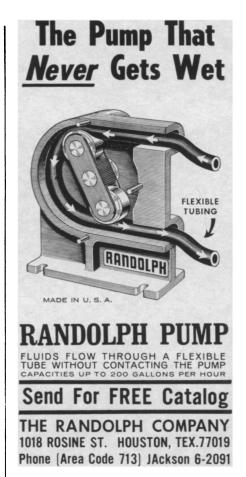
As in the general population, Seiden found a direct link between age and suicide. While the student body averaged 22 years of age, the mean age for suicides was 26. And graduate students took their lives more often than undergraduates.

The study disclosed that students majoring in languages, particularly English literature, made up the highest risk group, when analyzed by subject major. Reflecting this literary bent, some of the students left lengthy dissertations, said Seiden, one of which ended with a quotation from the French philosopher, Albert Camus: "Life as a human being is absurd."

While the graduate students were average in scholarship, the undergraduates had "performed on a level well above their fellow classmates," noted the professor. Yet friends reported them unhappy with their records.

Socially, the typical suicide was withdrawn and virtually friendless. The most calamitous example of such isolation was the student, dead for 18 days before he was found in his room.

In his report, published in the Journal of Abnormal Psychology, Seiden predicted a rise in student suicides due to an average rise in student age and increasing academic competition. He could not, however, say which came first, the disturbed student or the stresses of student life.



## Why Are You Ignored When You Talk?

A noted publisher in Chicago reports a simple technique of everyday conversation which can pay you real dividends in social and business advancement and works like magic to give you poise, selfconfidence and greater popularity.

According to this publisher, many people do not realize how much they could influence others simply by what they say and how they say it. Whether in business, at social functions, or even in casual conversations with new acquaintances there are ways to make a good impression every time you talk.

To acquaint the readers of this publication with the easy-to-follow rules for developing skill in everyday conversation, the publishers have printed full details of their interesting self-training method in a new book, "Adventures in Conversa-tion," which will be mailed free to anyone who requests it. No obligation. Send your name, address, and zip code to: Conversation, 835 Diversey Parkway, Dept. 540-011, Chicago, Ill. 60614. A postcard will do. (Adv.)

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