Summer Calendar

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ANCIENT EXCITEMENT

How can a subject older than the earth itself be taught dynamically today?

Thirty top U. S. teachers, administrators and professional geologists are seeking answers to that question in a no-holds-barred yet friendly study in UMD's Science facility these days.

The six-week conference, jointly sponsored by UMD and the American Geological institute under a National Science foundation appropriation, is being directed by Robert H. Heller, UMD professor and head of geology.

On Aug.14, approximately 25 U. S. industrial, educational and governmental leaders will come to the campus to observe conference progress and make recommendations of their own.

Meanwhile, the problems of dynamic geology teaching might well find their solution in the dynamic character of the conference itself.

An example was a four-hour discussion the other day introducted by Chairman Clarence H. Boeck, associate professor of education on the Minneapolis campus, a specialist in science education.

He had hardly finished when the discussion sprang up, then raced along for four hours with split-second intervals between speakers. In the seminar room were assembled men and women whose total background represented nearly eight centuries of preparation and experience.

"This is the first time this many people with such varied and extensive background have spent six weeks studying the problems of geology education," observed Robert C. Stephenson, Washington, D. C., AGI executive director.

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"Although this conference was called to develop better teaching methods and materials in geology, I would frankly be disappointed if it resulted in any one-two-three solutions including specific texts, guides and other materials, for then I would have to conclude that geology is a lot more shallow than it is."

That after two weeks the discussion continues lively rather than labored indicates that neither 1) geology nor 2) geology teaching is shallow or subject to sweeping generalities.

Said one veteran practitioner of the earth sciences "A thorough-going geologist is required to have strong backgrounds in mathematics, chemistry, physics and other sciences as well as his own. And by the nature of his ability to reason deductively, it has been said that any good geologist would make a good lawyer."

Some of the conferees belive much would be achieved if only the esthetic values of geology were imparted in basic science courses, let alone its scientific and practical values. Others speak for whole new courses in geology at the high school livel.

Some are concerned about the adequacy of science teachers with minimal preparation in the other sciences who try to sandwich in geology information about which they know the least.

Others feel that a general science course embracing several sciences including geology will accomplish more than a poorly taught geology course. One holds that, because of its complexity, geology is best taught at the college level.

When not discussing such concerns, the conferees are busy in other phases of the six-week study. Evaluating teams are poring over all materials

available for geology teaching and recording their judgments on easy reference punch cards. They are studying content of various courses now available with an eye to setting up optimum outlines for geology instruction in various grades.

On several points they are in agreement:

1) Geology teaching in the average classroom can be as good and timely as the teaching materials are good and timely.

2) It is impossible to teach geology effectively without a knowledge of the other sciences; more than any other science, geology blends many sciences.

3) Geology may be offered in various ways and with various emphases but its effectiveness still rests pretty much with effective and interested teaching.

Director Heller sums it up this way: "Most students in elementary and secondary schools have a natural enthusiasm and interest in geology, but teaching of earth sciences at these levels is usually either inadequate or lacking.

"The goal of our conference is dynamic teaching of a subject whose esthetic and practical applications can be seen throughout our world today."