

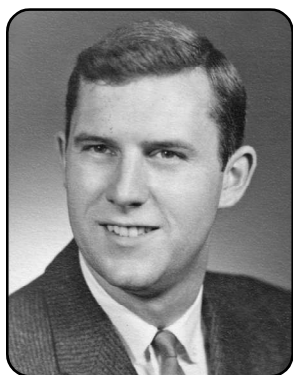
MESTA - A Beginning



Chapter 1 A Beginning and Getting Started - The 1960s

The Beginning

What was Earth Science Education in Michigan like during the middle of the 1960s? Rod Cranson, a young Earth Science teacher at Waverly



Rod Cranson - 1964
Waverly High School

High School just west of Lansing, asked that question. After some research, it became obvious that little was known about Earth Science instruction in Michigan. In one sense, it can be said that this was the actual beginning of the Michigan Earth Science Teachers Association (MESTA).

Curiosity about this question led that teacher to a discussion of the matter with Dr. Julian Brandou, a faculty member with the Science-Math Teaching Center (SMTC) at Michigan State University. This initial meeting led to a research project to learn more about the status of Earth Science education in Michigan. In the Spring of 1965 a survey, supported by the SMTC, was mailed out to nearly all the second-

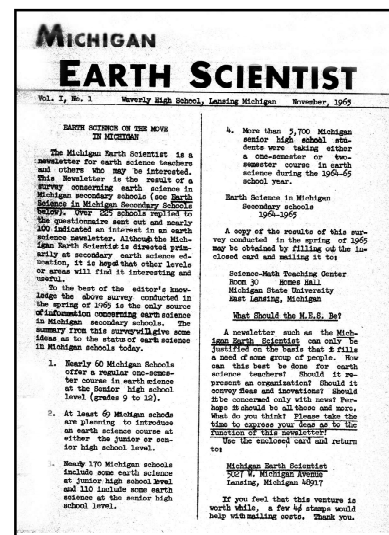


Dr. Julian R. Brandou
MSU Science-
Mathematic Teaching
Center

ary schools in the state. Over 225 schools responded with about 60 indicating a one semester Earth Science course was being offered at the senior high school level (grades 9-12) and nearly 70 more indicated plans to do so. In addition, Earth Science topics were included in other courses in many other schools. See Appendix 1 for a complete report of survey results.

Michigan Earth Scientist

One of the survey questions asked about interest in an Earth Science newsletter. The interest justified the beginning of a newsletter and the *Michigan Earth Scientist* (MES) began with the first issue mailed out in November of 1965. The first issue was a single sheet with a response card seeking interest in a newsletter and comments about what it should include. That first issue was entirely supported by Waverly High School including the typing, graphics masthead, printing and post-



The front page of the first issue of the Michigan Earth Scientist



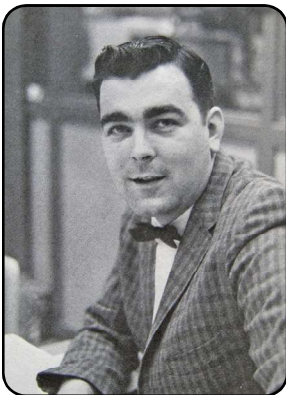
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*Waverly High School, a few miles directly west of Michigan's Capital in Lansing
Photograph by K.R. Cranson*

age. The response was good and additional issues were planned for the 1966 calendar year. Among the comments received were: information on equipment, films and other instructional materials, ideas for classroom activities, and collecting areas in Michigan, among others.

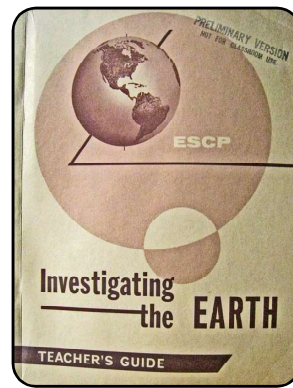
A few years earlier, 1963, the Earth Science Curriculum Project (ESCP) was established with a grant from the National Science Foundation (NSF). Summer writing sessions were conducted at the University of Colorado in Boulder, Colorado. Then, centers were established for the 1964-65 academic year to test the Earth Science materials developed by ESCP.



Dale Hansen, Waverly H.S. Industrial Arts teacher provided critical support for the MES.

Development continued with a commercially published textbook prepared for the 1966-67 school year. During this same period a series of NSF Earth Science Summer Institutes were offered across the country for secondary teachers.

On Saturday, March 5, 1966, the Michigan Science Teachers Association (MSTA) held their annual convention at



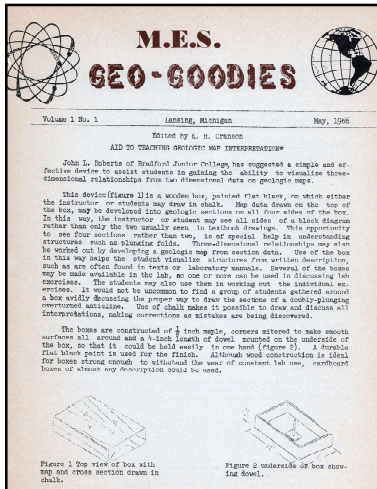
*A preliminary version of **Investigating the EARTH.***

Everett High School in Lansing. Registration for members was \$1.00 and it cost \$2.00 for non-members. Although there was no formal relationship with MSTA, the *Michigan Earth Scientist* did support their annual conference. Among the programs offered was an Oceanography Classroom Activity, the Earth Science Curriculum Project, and Geology and Mineral Resources of Michigan.

In addition, the National Association of Geology Teachers (NAGT) and the American Geological Institute (AGI) were just being organized and offering support to secondary and elementary teachers. Each issue of the *Michigan Earth Scientist* carried sources of Earth Science educational materials; books, lab manuals, films, maps, etc. The May, 1966 issue included the first book review, a column destined to become a regular feature in the future. The book was *Introductory Geology* by Cox and Cox published in 1965, 268 pages with 53 illustrations. It sold for \$2.75.

That 1966 May issue of the *MES* was mailed out to over 200 teachers. It had become a bi-

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monthly newsletter and grown to 4-pages. This issue also included the first installment of a regular feature called Geo-Goodies that included classroom activities designed for secondary students. In the next

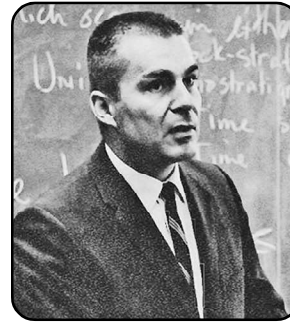
issue, published in September, 1966, a one-day field trip to the Grand Ledge outcrop area was offered for teachers attending the regional Michigan Education Association (MEA) fall meeting. That issue also announced a purposed organization, the Michigan Earth Science Teachers Association (MESTA), along with a conference being planned. There were no dues or membership fees - teachers could join and receive the *Michigan Earth Scientist* free.

MES Moves to LCC

With the conclusion of the 1965-66 school year, publication of the *Michigan Earth Scientist* moved from Waverly High School to the Science Department of Lansing Community College (LCC). Waverly



LCC 's Arts & Science Building where many early MESTA Conferences were held



Lloyd Schmaltz and Richard Passero with the Geology Department at Western Michigan University.

Schools sponsored and supported the publication of the newsletter for two years and was instrumental in establishing the Michigan Earth Science Teachers Association.

In the November, 1966, issue of the newsletter Dr. Lloyd Schmaltz and Richard Passero, both with the Western Michigan University Department of Geology, were introduced. They had established a curriculum for both a major and minor in Earth Science Education at Western and were working on a masters degree program. Some 20 majors and 30 minors were enrolled in the Earth Science program. This may have been the first serious effort to address the need for Earth Science teachers in Michigan. A second survey of Earth Science in Michigan Schools was also being conducted.

As the new year, 1967 began, the *Michigan Earth Scientist* reported the results of the second survey. Of the 291 schools that returned the survey, 132 offered either a one-semester or full year Earth Science course. In addition, many schools offered Earth Science topics in other science courses. When schools planning to introduce an Earth Science course were included, the number increased to 164 secondary schools in Michigan. The first *MES* issue in 1967, published



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in January, also announced tentative plans for a one-day Earth Science Conference to be held in Lansing.

By March, 1967, the first Earth Science Teachers Conference was announced to be held at Lansing Community College on Saturday, April 15. The success of this meeting appeared a bit shaky as only a few teachers had indicated an interest in attending. That issue of the *Michigan Earth Scientist* also carried information on acceptance of a high school Earth Science course by Michigan universities and colleges along with other colleges across the country. The good news was that most colleges would accept an Earth Science course if it was a “laboratory science of vigorous college-preparatory content.”

A special April issue of the newsletter announced a National Science Foundation in-service institute in Earth Science for secondary teachers. It was to be held at Eastern Michigan University during the 1967-68 academic year. Dr. Daniel Turner, Institute Director, outlined the program topics, eligibility, credit, and how to obtain application information. One interesting aspect of this first NSF Earth Science Institute offered in Michigan was the inclusion of field activities.

Later (1969-70?), an NSF Earth Science Institute conducted by Dr. Harold Stonehouse at Michigan State University would introduce many of the participants to the Michigan Earth Science Teachers Association. They would significantly influence the organization over the next several decades.



Win Linderman



The group of teachers that created the Michigan Earth Science Teachers Association at Lansing Community College. April 15, 1967

MESTA Established

The Michigan Earth Science Teachers Association was officially established at the April 15, 1967, conference held at Lansing Community College. About 20 Earth Science teachers attended from both the high school and college level. In its first formal meeting, MESTA established the following:

- 1) An Executive Committee to consist of a Chairman, Secretary-Treasurer, and Editor. This committee was charged with how appointments of the association's officers shall be made. It was also responsible for developing a constitution to present to the entire membership at the next meeting. Teachers elected to the Executive Committee were: Chairman - Win Linderman from Portage Northern High School, Secretary-Treasurer - William Hindle from Grosse

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Pointe University School, and Editor - K.R. Cranson from Lansing Community College.

2) Dues of one dollar per year shall be assessed all individuals desiring to become members of MESTA. An application for membership was developed and included in the May, 1967 *Michigan Earth Scientist*.

3) Any items of business for the association that comes up prior to the next meeting will be handled by the Executive Committee. This committee will set the date and location for the next MESTA Conference. All information regarding MESTA business will be published in the *Michigan Earth Scientist*.

The MES issue that reported the creation of MESTA also carried information on the progress of Earth Science programs being developed by Michigan Universities. Western Michigan University reported on the three parts of its Earth Science Program: undergraduate for teachers, Master of Arts, and a field course. They also established the disciplines required for these degrees that included astronomy, geology, meteorology, and oceanography.

A course, Teaching Earth Science, was also required as part of the curriculum that included the philosophy, objectives and methods for teaching secondary school Earth Science. The field course was being offered August 12-25, 1967 and would travel through Michigan, Wisconsin and Illinois.

By September of 1967 the MESTA Executive Committee had set a date for the next one-day conference - December 9, 1967 at Lansing Community College. The September issue of the *Michigan Earth Scientist* included a conference

FALL CONFERENCE of the MICHIGAN EARTH SCIENCE TEACHERS ASSOCIATION			
Saturday,		December 9, 1967	
Lansing		Community College	
P R O G R A M			
8:15 - 9:00	Registration & set-up	exhibits	
9:00 - 9:05	Welcome*	- William Hindle, Executive Sec	
9:05 - 10:00	What should we be doing in Michigan		
	- -	Glen Hart, Western Michigan U	
	- -	K R. Cranson, Lansing	
Community Coll			
10:00 - 10:30	The Time, Space & Matter Approach		
10:30 - 10:45	A Student's Reaction to A.V.T. Ast-Geology		
	- -	Gail Wilson, Lansing Community Coll	
10:45 - 11:15	Organization of Regional Planning (MEA Days, MSTA, etc.)		
	- -	Win Lindeman, Portage Northern High	

registration form that encouraged teachers to display or demonstrate a teaching device or technique at the meeting.

The November issue included the conference program that had been developed and published to encourage teachers to register. Also included was the proposed MESTA Constitution developed by the Executive Committee. An early indication of the nature of MESTA was indicated by a field trip offered during the Region 8 MEA Conference - forty teachers spent a day studying the glacial geology from Mason to Jackson.

Second MESTA Conference

The second MESTA Conference was a modest event that attracted 35 Earth Science teachers from across Michigan. During the business meeting several ideas were discussed regarding



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the role that MESTA should play in the development of Earth Science education in Michigan. The following suggestions and actions were made:

1) A state-wide comprehensive Earth Science exam for secondary schools. There were mixed feelings about this idea within the group.

2) A cooperative program to distribute 35 mm slides. MESTA would duplicate slides and provide to members at a low cost (about \$0.25/slide). Members would be encouraged to contribute good slides for this program.

3) Publicity of MESTA in the form of a display that could be used at Michigan Education Association and Michigan Science Teachers Association conferences was proposed.

4) Support for another state-wide survey (similar to those in 1964-65 and 1966-67) to learn the status of Earth Science education in Michigan's schools was discussed. The weak financial status of MESTA was noted as a drawback.

5) The proposed MESTA Constitution as published in the November issue of the *Michigan Earth Scientist* was adopted.

Dr. Dan Turner with Eastern Michigan University was the keynote speaker and concluded the conference program with a description of Eastern's Earth Science program and a series of interesting teaching techniques. MESTA Membership at the time of the meeting was 68.

Michigan State University (MSU) announced a 6-week National Science Foundation Institute during the summer of 1968 for Earth Science teachers. Forty participants would be selected, primarily from the Great Lakes region, with pref-

erence given to those planning to teach an Earth Science course during 1968-69. Geology, meteorology and planetarium astronomy composed the 11 credit hour curriculum. Dr. Jane Smith of the Science and Mathematics Teaching Center at MSU was Institute Director.

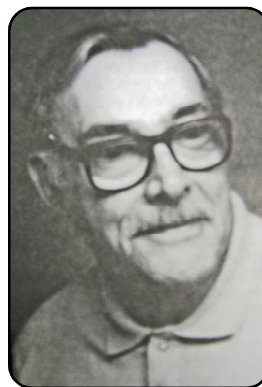
As plans were developed for the MSTA's 15th Annual Convention scheduled for March 2, 1968, they agreed to provide space for MESTA's display. A traveling display board had been created and it was being used at the meetings of other organizations to encourage MESTA membership. This may have been the first formal agreement between MSTA and MESTA. Six Earth Science related sessions were offered including one on the Earth Science Curriculum Project. The conference cost was \$2.00 to register (\$3.00 for non-members).

Third MESTA Conference

Saturday, November 2, 1968, was set for the 3rd Annual MESTA Conference at Lansing Community College. Mr. Garland Ells, Petroleum Geologist with the Michigan Geological Survey (Department of Conservation) was the keynote speaker. His topic was "The Petroleum Geology of the Michigan Region." A collection of 35 mm

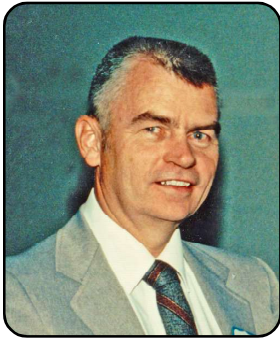
slides were on display along with descriptions and participants could order duplicates that would be reproduced and mailed later.

A slate of nominees for MESTA officers was prepared for presentation to the general membership with the election scheduled at the conference. The origi-



Gar Ells

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Ernie Fischer

nal officers of the Executive Committee served 2 years as prescribed by the MESTA Constitution. Officers elected for the 1969-70 school years were:

Executive Chairman:
Ernest Fischer, Jackson East Jr. High School

Executive Secretary: Virginia Chamberlain, Ovid-Elsie High School

Editor-Treasurer: K R. Cranson, Lansing Community College

College Section Representative: Paul Myers, Flint Community College

The March issue of the *Michigan Earth Scientist* had increased to 8 pages, including the Geo-Goodies section. With the approach of spring, the Geo-Goodies column listed a series of field trip opportunities, including: Bancroft & Arkona, Virginia Chamberlain Ontario, Copper Harbor, Marquette, and glacial and bedrock in the Lansing area that MESTA members could consider. It also provided information on three sessions that MESTA sponsored during the March 8, 1969 Annual MSTA Convention held at Lansing Everett High School. A booth with the MESTA display was again planned for the meeting and free materials would be offered to Earth Science teachers attending.

A time was also established for an MESTA meeting during that 1969 MSTA Convention. Items from a February 1, 1969 Executive Com-



mittee meeting were presented to those members attending, including (among others):

1. Sending an information letter about MESTA to all Michigan Earth Science teachers.
2. Approved a field trip approach idea to draw Earth Science teachers together and encourage membership - the newsletter will carry a field trip section.
3. Approved sending membership cards to sectional members to push membership.
4. Recommended that MESTA become a channel for information through the newsletter.
5. Approved requesting several universities to send dates of special programs in Earth Science and related fields for the inclusion in the newsletter.
6. Recommended an increase in MESTA membership dues to \$5.00/year, with rational.
7. Agreed there should be more funds for the newsletter and approved a new printing method (offset press).

The vote to increase MESTA dues from \$1.00 to \$5.00/year passed with 10 in favor and 4 opposed. After a lengthy discussion, the vote was accepted, and under provisions of the constitution, membership dues would be partitioned as follows:

\$3.00 for General Dues

\$2.00 Registration Fee/Annual Meeting

Also, Student Membership Dues was set at \$1.00/year

Dues were payable as a single \$5.00 payment or could be split into an initial payment of \$3.00 and \$2.00 for those attending the annual conference. Several ideas were presented to jus-



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tify the dues increase, including increased mailing costs, improved newsletter and conferences, and increased professional activities for members.

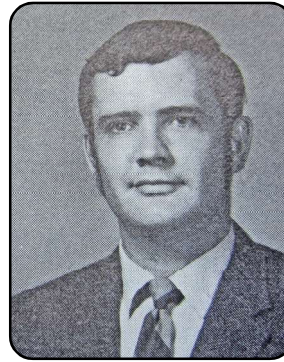
In late March, 1969 a group of educators met at the University of Michigan to discuss the status of Earth Science education in Michigan. One outcome was the establishment of a committee to study Earth Science teacher certification policy in Michigan. A later report from this committee included:

- 1) an effort to inform and influence appropriate organizations about curriculum at the secondary level and,
- 2) familiarize the Michigan Board of Education with the growth, nature, and needs of Earth Science education in the state.

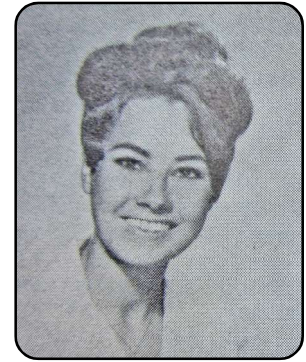
The May, 1969 issue of the *Michigan Earth Scientist* included results of the MESTA Executive Committee's decision to establish 16 regions across Michigan. MESTA representatives for 7 of the regions were in place and others were being recruited. Regions were based on Michigan Community College regions. MESTA also impacted the national scene with the announcement that four MESTA members had articles published

in the *Journal of Geological Education*, Wayne Hagland and C.H. Wilson from Flint Community College, and Richard Yarger and K R. Cranson from Lansing Community College.

Charles and



Charles Wall



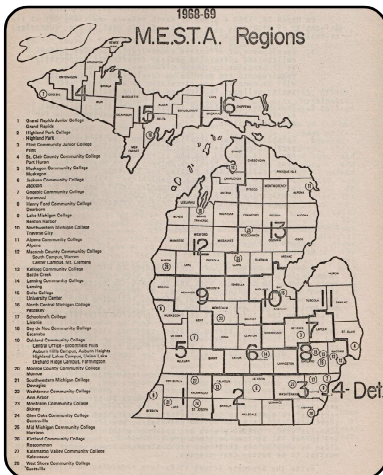
Janet Wall

Janet Wall, with the Department of Science Education at the University of Georgia, introduced their Rock and Mineral Exchange in the May, 1969, issue of the *Michigan Earth Scientist*.

It offered teachers interested in obtaining rocks, minerals, fossils and other earth science related curriculum materials the opportunity exchange items across the country. Teachers were encouraged to submit a list of materials they would like to receive along with a list of those items they have to offer. The Walls managed the process and posted these lists in various publications so teachers could contact other teachers to set up trades. In addition, a teacher could request the current listing of materials being offered for trade by sending a SASE to the Walls. It was a simple system and worked well.

This may have been the germ of an idea that eventually became MESTA's Free and Inexpensive Earth Science materials, one of the most popular services the organization provides.

Advertising in the *Michigan Earth Scientist* was offered to Michigan colleges and universities to promote their Earth Science Programs. A full-page announcement in 5 issues cost \$50 while a half-page was \$25. The letter announcing this offer indicated that the newsletter was being sent to some 400 Earth Science teachers across Michigan. It also indicated that West-



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ern Michigan University, Michigan State University and Flint Community College were each contributing \$50 annually to support the publication.