

INDIVIDUALIZED AND TRADITIONAL METHODS OF INSTRUCTION
IN HIGH SCHOOL EARTH SCIENCE:
A COMPARISON AND EVALUATION

An Abstract of a Thesis
Presented to the
Department of Geography
Western Illinois University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts in Geography

by
Duane M. Lang

March 1974

MAP
QE
40
.13
C.13

ABSTRACT OF THESIS

The purpose of this study was to compare and evaluate the effects of individualized instruction and traditional instruction on achievement in high school earth science classes. A second objective of the study was to compare the effects of the two methods of instruction on student attitude, self-concept, sense of independence, and willingness to accept responsibility. The two methods of instruction utilized during this investigation were: (1) individualized instruction, a method of instruction which allowed the student to select the methods to be used for achieving unit objectives established by the instructor, and (2) traditional instruction, a method of instruction in which the teacher establishes the objectives and the method for achieving them.

Achievement as measured in the change in student scores from pretest to posttest and the residuals from regression between pretest scores and achievement were correlated with variables concerning each student. The data was analyzed for the experimental and control groups for each of the three teachers involved in presenting the materials.

Grade point average, as an independent variable, was found to be significantly related to achievement. Students with a higher ability achieved higher scores and low ability students were less successful with the individualized materials. The differences in achievement were directly related to the teachers employing the two forms of instruction.

Student attitudes were analyzed from responses on a questionnaire. The questionnaire was administered to students in both the experimental and control groups. The responses were compared.

Students in the experimental group as compared with the control group did not demonstrate a positive attitude toward the individualized method of instruction. This was true also when the responses to the questionnaire were analyzed on the basis of the teacher presenting the material.

This study indicated that neither individualized nor traditional instruction is inherently better. Success in the classroom is a combination of what works best for both the teacher and the student.