The main purpose of this study is to determine achievement changes that occur in fifth grade students using the social studies curriculum program, "Man: A Course of Study (MACOS)". The experimental group consists of 103 students using the MACOS materials, and the control group of 103 students using a traditional social studies course. Controlled variables include a child's sex and I.Q. The null hypothesis is that there will be no significant difference in standard achievement test scores based on either the child's sex or I.Q., or whether they studied the standard curriculum or Bruner's MACOS course for the year. No significant difference between the test performance of the two groups is observed, demonstrating to teachers and administrators -- who frequently are reluctant to try newer social studies programs because they fear the students' achievement test scores will decline -- that students do not suffer by using innovative, inquiry-oriented curriculum. Instead, teachers should be encouraged to use the new materials based on the findings. Some of the criticism aimed at the MACOS project are also answered in the document. (Author/BR)
A STUDY OF THE EFFECTS OF JEROME BRUNER'S MAN: A COURSE OF STUDY ON SOCIAL STUDIES ACHIEVEMENT IN FIFTH GRADE

by

Lloyd Tredwell
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A Study of the Effects of Jerome Bruner's Man: A Course of Study on Social Studies Achievement in Fifth Grade.

The main purpose of this study was to determine what achievement changes would occur in fifth grade children after studying Jerome Bruner's Man: A Course of Study as their year's social studies curriculum. To determine this outcome, a posttest of a standard achievement test was given to several fifth grade classes using Bruner's study and classes studying a traditional social studies course.

Three basic themes of Bruner's course are What's human about humans?, how did they get that way?, and how can they be made more human? Five related areas to these themes are a continuous study of language, social organization, the need to explain, world-view and extended childhood. The basic content areas are studied in the following sequence: salmon, herring gulls, baboons, and an in-depth study of a human society the Netsilik Eskimos. Throughout the course, children are encouraged to find comparisons and contrasts between man and other animal groups. Pertinent topics related to the course sequence are innate-learned behavior, hostility, life cycle variables, and many others. A multi-media and multi-discipline approach permeates the entire program.

A major goal in Bruner's program is the constant encouragement, through various teaching techniques, of having children experience how to ask the right questions to find correct solutions. This program, then, is of an inquiry-oriented nature. Regardless of what content part of the
course is being considered, the various student worksheets, the simulated games, and suggested activities all aim at encouraging the students to reorganize data so that they may draw relevant conclusions. Therefore, the learning of facts becomes the means leading, hopefully, to the acquisition of broader conceptual understandings as desired ends.

In recent times, congressional inquiries have been made relevant to variously labeled "controversial" social studies programs, including Jerome Bruner's *Man: A Course of Study*. Included amongst the wild accusation of Bruner's program are statements claiming that the course books and activities stress sexual promiscuousness, infanticide, and senilicide. These statements betray the ignorance of this program made by the persons levelling these charges. The crucial problem, in these types of pressures toward social studies teachers, is not just whether *Man: A Course of Study* will be allowed to continue, but how much reality social studies teachers will be allowed to include in their teaching of other cultures.

Several years ago, a study was done with 250 fourth, fifth and sixth grade students to determine their attitudes in the areas of social responsibility, independent thinking, democratic living, empathy, and group cooperation. A statistical analysis of the students' responses showed, significantly, that independent thinking had the lowest positive attitude score as expressed by the students. (David Zodikoff, Research
If teachers are further prevented from teaching in a more comprehensive, balanced manner, it would seem that independent thinking will remain very low in terms of student receptivity.

Since 1969, the authors have been consultants and teachers of *Man: A Course of Study* and worked with hundreds of pre-service and inservice college students and teachers. The largest majority of these people expressed attitudes of great excitement and interest in both the teaching and learning aspects of the program. The major question or criticism made by many of these same people was how to effectively evaluate the children's learning experiences, not the reckless statements cited earlier. Furthermore, many teachers reported high interest on the part of slower students who expressed more desire to learn from the films and games in the program than just gaining information from only a book. In fact, the multi-media structure of Bruner's course has been one of its most convincing aspects of a meaningful inquiry-oriented curriculum.

Although the reading level of the student texts in *Man: A Course of Study* is fifth grade, the multi-disciplinary content of the program, and its broad conceptual themes seem to appeal to many primary grade and high school
teachers. This point is made because a large number of primary and secondary teachers, after participating in the program, selected out various aspects of the course and used them in their classroom teaching, even in non-social studies areas such as science and art. Also, the five basic cultural areas of the Netsilik Eskimo unit, language, tool-making, need to explain, extended childhood, and social organization, are universal enough to be applied to any human society. An obvious value of this fact is that many standard social studies programs include the study of various human societies, and each of these cultures cope, in a different manner, with these five areas.

Even granting the possible affective benefits students may derive from Bruner's course, the question may be asked if students will be deprived of basic social studies skills and content. In other words, if fifth or sixth grade students studied *Man: A Course of Study* for a year, instead of the usual social studies curriculum, would they be deficient in content for the next grade level? The remainder of this report represents an attempt to give statistical evidence that this wasn't the case in a large controlled sample of fifth grade students.

A study was conducted among 206 fifth grade students, with 103 students in a control group setting and 103 students in an experimental setting. The control group was defined as
those students taking the established fifth grade social studies curriculum for the year. The experimental group was defined as those fifth grade students using Jerome Bruner's *Man: A Course of Study* for the year instead of the usual social studies curriculum for fifth grade. A child's sex and I.Q. were controlled variables, with an equal number of boys and girls of above and below average I.Q. scores in both the control and experimental groups. The results of the Kuhlmann-Anderson test were used for I.Q. scores. The dependent variable was the student's social studies achievement score at the end of the fifth grade year as measured by the social studies section of the Metropolitan Achievement Test.

The null hypothesis was that there would be no significant difference in standard achievement test scores based on either the child's sex or I.Q., or whether they studied the standard curriculum or Bruner's course for the year.

The analysis of covariance was the statistical technique used to test any differences in achievement test results between the two groups. The results showed no significant difference between the achievement test performance of the two groups.

Table I
Results of Analysis of Covariance

<table>
<thead>
<tr>
<th>Within Groups Variance</th>
<th>1668.42 + 50</th>
<th>1668.42 + 47 = 35.50</th>
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<tbody>
<tr>
<td>N - 2 - 1</td>
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Between Groups Variance
\[ \frac{32.39 + 2}{A - 1} = \frac{32.39 + 1}{32.39} \]

F ratio = \[32.39 \div 35.50 = .91 \text{ N.S.}\]

Frequently, school administrators are reluctant to try newer social studies programs as they fear the students' achievement test scores will suffer, and/or they will not gain the desired content background for further study in the area. The results of this study, showing no significant differences between either group, should encourage more administrators to experiment with innovative inquiry-oriented curriculum. There seems to be more to gain, by the students, in such a program, as they are learning not only content but having practical experience in many varieties of open-ended activities and thinking processes.

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