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Michigan State University PH.D. 1983

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AN ASSESSMENT OF THE GLOBAL INTERESTS, KNOWLEDGE, AND ATTITUDES OF FOURTH-, EIGHTH-, AND TWELFTH-GRADE STUDENTS IN THE INGHAM INTERMEDIATE SCHOOL DISTRICT

By

Mary Louise Wyniemko

A DISSERTATION

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ABSTRACT

AN ASSESSMENT OF THE GLOBAL INTERESTS, KNOWLEDGE, AND ATTITUDES OF FOURTH-, EIGHTH-, AND TWELFTH-GRADE STUDENTS IN THE INGHAM INTERMEDIATE SCHOOL DISTRICT

By

Mary Louise Wyniemko

This study was undertaken to determine the interests, knowledge, and attitudes about other peoples and countries of a selected number of fourth-, eighth-, and twelfth-grade students who attended school in the Ingham Intermediate School District in Michigan during fall 1981. The study was an extension of research conducted in 1974 by the Educational Testing Service (ETS) for the U.S. Office of Education, entitled Other Nations, Other Peoples, A Survey of Student Interest, Knowledge, Attitudes, and Perceptions (ONOP).

The study sample was drawn from four school districts in the Ingham Intermediate area. Three of the school districts that agreed to participate were suburban; one was rural. A total sample of 53 teachers and 1,600 students participated in the study.

The test instruments were provided by ETS and included three sets of booklets, which were parallel in content and form. The instruments for fourth-grade students and those for eighth and twelfth graders differed in terms of format and reading level, so that the measures were appropriate for each grade level.

Null hypotheses were formulated to analyze the data on the Ingham Intermediate students' interest in studying and visiting foreign countries, the resources students employed to learn about other countries, and students' global knowledge, as measured by the ONOP test. The level of significance for all tests was set at .05.

The results of the comparisons between the 1981 Ingham Intermeidate study and the 1974 national study indicated statistically significant differences between certain items in the global-knowledge test and in resources students selected to learn about foreign countries. No significant differences existed between the two studies in terms of student interest in studying and in visiting foreign countries. Differences were noted in terms of sex and grade level in that males performed significantly better than females on the global knowledge test, and older students answered a greater percentage of questions correctly than did the younger students.

The results of this study will be used by the Michigan Department of Education to improve Michigan's social studies curriculum in the area of global education.

To my father and mother, Louis and Mary Wyniemko, who have instilled in me the motivation and ambition to accomplish personal goals.

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This study would not have been possible without the guidance and assistance I have received during my educational program at Michigan State University from my chairperson, advisor, and friend, Dr. Lois Bader. I am grateful to her for having confidence in my ability to succeed.

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CHAPTER I

BACKGROUND OF THE STUDY

The Importance of Global Education

In the early stages of its history, the United States was concerned with domestic policies and internal growth. A belief in the philosophy of isolationism, a concern for the expansion of the nation's borders, and a desire to obtain wealth and to attend to a rapidly growing population characterized the United States during its early years of development. Immigrants entering the United States were expected to assimilate themselves into the "American" culture.

As a result of World Wars I and II, the birth of the United Nations, the Vietnam War and the Iranian crisis, and the rise in illegal immigration, the United States has been forced to reevaluate its policies toward and relationships with other countries. Such factors as world finance, population growth, nuclear power, and food shortages have been instrumental in determining the United States' world policies during the twentieth century.

Actions taken by the United States government affect not only U.S. citizens, but other peoples as well. Economic policies, military disturbances and questions of disarmament, import and export issues, medical concerns, and the United States' relations with foreign countries affect people throughout the world.

> If Americans are to understand the importance of present and future global realities upon their own fortunes, and upon the fortunes of their fellow human beings around the world, and if America is to have both leaders and followers capable of dealing effectively with these complex matters, education for global relations must receive a new and sustained national priority and support. (American Council on Education, 1975, p. 5)

Former Secretary of State Henry Kissinger (in Shaw, 1979) stated, "Unless we become aware of our global interdependence, the Western world as we know it will not survive. . . . The national interest can no longer be defined or attained in isolation from global interests" (p. 1).

Nations throughout the world are now depending on one another for survival. Hutchins (in Collins, 1971) stated,

> The doctrine of every man for himself or every nation for itself loses its charm in an interdependent world. This doctrine has to give way before the idea of a world community. We have to understand and rely on our common humanity if we are to survive in any condition worthy to be called human. (p. 28)

In 1974, Wood observed that, despite a growing global interdependence,

> Our schools tend to inculcate in pupils a general outlook in which this country forms the hub of the world. This outlook leads to an interpretation of events and situations in other parts of the world that centers primarily on how those parts of the world influence the position of our own country. Rarely do we ponder how the actions of Americans affect other countries. This narrow outlook tends to overvalue our own culture and interests as it simultaneously undervalues the cultures and interests of other peoples. It is also one of the basic obstacles to world peace. (p. 664)

Henderson (in ASCD, 1973) held much the same view:

> Much of secondary school social studies, backed up by considerable home conditioning, still tends to convey the impression that the west is and always has been superior to all other civilizations. The 19th century position of dominance over the rest of the world is presented as natural and its continuance into the

> future as indefinite. Some of the most widely used textbooks still manage to imply that, while civilization may have started in some such unlikely place as Mesopotamia, it failed to improve man's lot until the Israelites and the Greeks took over; they in turn passed it on through the Romans and Christians to the northern Europeans, who brought it to North America and achieved the ultimate. (pp. 115-16)

Kenworthy (1978) believed,

> The greatest miracles today are not space flight or microbiology, but the drawing together of peoples. Instead of fearing the outside world as complex and chaotic, boys and girls should learn to perceive these patterns of change. They should also be aware that their actions, the way they choose to live, how they cooperate and respect each other's rights to develop in their own ways, and how they use the earth's resources will affect the kinds of lives people will be able to live today and in the future. These ideas and feelings about people and the world are very simple and basic. . . . But they must become a part of a child's attitudes and values at the earliest possible age. (p. 1)

There is an increased need for people from a variety of cultural and national backgrounds to accept the concept of interdependence as being vital to the earth's continued existence. It has become increasingly clear that problems arise because of people's misconceptions and their inability to recognize basic similarities among all people. The necessity for global education as a means of fostering a positive attitude in children toward other nations and peoples provides an initial point of discussion for educators. Are schools meeting global-education needs through traditional educational curriculum and instructional programs? Are the media beneficial in promoting an increased global awareness? What are the knowledge levels and attitudes of students toward different peoples and cultures?

These questions prompted the researcher to explore the level of global knowledge of students within the Ingham Intermediate School

District. In 1974, the Educational Testing Service (ETS) in Princeton, New Jersey, conducted a study that sought to answer the question regarding the extent of students' global awareness. The ETS found that there were gaps in the interests, knowledge, attitudes, and perceptions of randomly selected fourth-, eighth-, and twelfth-grade American students in regard to other nations and peoples. The present researcher's interest in obtaining data on a comparable group of students led to this research.

The intervening years since the 1974 ETS study have brought curriculum modifications, changes in university teacher-preparation programs, the rise of the back-to-basics movement, an emphasis on competency and accountability programs, millage cutbacks, changes in educational priorities, school closings, teacher layoffs, and a decline in public-school attendance. Improvements in technology have brought "on-the-spot" reporting and an opportunity for people to learn more about world events in a shorter period of time.

Despite these occurrences and the passage of time, the hypothesis set forth by this researcher is that there will be no appreciable difference between the student results in the 1974 study and those in the 1981 Ingham Intermediate study. To verify this opinion, the fourth, eighth, and twelfth grades were selected for testing to determine the extent of students' global knowledge in 1981 as compared to that of students tested in 1974. Certain factors must be considered when making comparisons between the two studies. Demographic characteristics such as financial resources, geographic location, and the ethnic backgrounds of the 1981 sample produced a student group

that was different from the 1974 study group. That is, the students in the 1981 Ingham Intermediate study generally tended to be from more affluent families and the overall sample appeared to be better educated than the 1974 sample.

The number of students included in each study was approximately the same, and all of the students attended school in the United States during the time of the testing. Both studies employed the same test instruments; in the 1981 study, certain modifications were made to update the test instrument.

Purpose of the Study

This study was undertaken to determine the interests, knowledge, and attitudes about other peoples and countries of a selected number of fourth-, eighth-, and twelfth-grade students who attended school in the Ingham Intermediate School District. The study is an extension of research conducted in 1974 by the ETS for the U.S. Office of Education. The original study, entitled Other Nations, Other Peoples, A Survey of Student Interests, Knowledge, Attitudes, and Perceptions (ONOP), was an attempt to determine the global-knowledge level of randomly selected fourth-, eighth-, and twelfth-grade students in United States schools. A review of the literature did not reveal any evidence to indicate that there had been another replication of the ONOP study. The results and findings of the Ingham Intermediate study will be used to make recommendations for social-studies curriculum improvement and staff-development modifications in the Ingham Intermediate area and in other school districts in Michigan.

Rationale

Robert Leestma, Associate Commissioner for Institutional Development and International Education, expressed a need for further research in the area of global education. In the final report of the 1974 national study, he stated:

> Hopefully, this study is the first of a series. While only a beginning and modest in its dimensions, it is important in its own right for the knowledge and insights resulting from its questions, approaches, and sample; for the impetus it provides for subsequent replication or adaptation in local, state, or national contexts; for the cues and stimulus to undertake related research endeavors; and for its contribution to raising the level of professional and public awareness about the existing status of the subject and serving as a general stimulus for strengthening international education in the schools. (Pike & Barrows, 1979, p. xvi)

Leestma suggested the possibility of replicating the 1974 study at a later date and comparing the results with those of the original study.

> The data were collected in the fall of 1974. It would be interesting to know what differences might be found if the study were replicated in the fall of 1979. It does not seem likely that the basic situation reflected in this study would have changed significantly in the intervening years, although there may be some improvement with respect to the Middle East because of that region's increased prominence in our national life, and perhaps also with regard to China and the USSR, given the extent to which both countries have continued to be in the news and therefore may be receiving additional attention in the curriculum over that noted in the study. (Pike & Barrows, 1979, pp. iv-v)

Leestma recommended that additional research would help to expand and improve the international dimensions of United States education. He suggested that local school districts could use the information from the studies as baseline data for conducting needs-assessment and accountability programs.

John Porter, a former Superintendent of Public Instruction in Michigan, expressed a need for data on Michigan children's knowledge of and feelings toward other countries. He felt that baseline data on students' global knowledge are important for educational-program development and for the proper use and management of funds. In a report to the President's Commission on Foreign Language and International Studies in May 1979, Porter said:

> We have not, as of this date, obtained adequate empirical baseline data on what Michigan children know about other countries and how they and their teachers feel about other countries. I think it is very important, for two reasons, that we proceed in gathering such information: First, in an era of heightened fiscal crisis and accountability, performance objectives and competencies, the policy makers, legislators, and general public are convinced by hard data and demand proof for funds being used for any programs. Moreover, they want to know if what the money is being used for, does indeed make a difference.
>
> Second, it is just plain reasonable in terms of program development and implementation that good evaluation procedures should be followed and that we should be accountable if we are to effectively incorporate . . . international studies into the curriculum. (pp. 10-11)

Phillip Runkel, Superintendent of Public Instruction in Michigan during the time of this study, expressed his support of research on global education. In correspondence with the researcher, he indicated that schools need to provide opportunities for all students to acquire knowledge, skills, and positive attitudes about the global society that will enable them to become effective world citizens. He stated, "The data which you will obtain will be of particular use for curriculum coordinators, administrators and teachers within a large number of Michigan school districts." (See Appendix A for a copy of this correspondence.)

Representatives of local school districts in the Ingham Intermediate area met in spring 1980 and indicated an interest in designing an educational program that included an emphasis on global and multicultural knowledge. Certain districts exhibited a willingness to participate in a study that would provide information on their students' global knowledge and awareness levels. The results of the study would be used to help districts in the Ingham Intermediate area plan a global-education curriculum.

This study, then, was conducted for the purposes described above and was based on needs expressed by those responsible, in large part, for the original study: the Michigan Department of Education and representative school districts in the Ingham Intermediate School District.

Research Questions

The following research questions were constructed to guide the gathering of data for this study.

1. Do fourth-, eighth-, and twelfth-grade Ingham Intermediate students' selections of countries to study differ from those of students in the 1974 study?

2. Do fourth-, eighth-, and twelfth-grade Ingham Intermediate students' selections of countries to visit differ from those of students in the 1974 study?

3. Do the resources fourth-, eighth-, and twelfth-grade Ingham Intermediate students selected to learn about other countries differ from those of students in the 1974 study?

4. Is there a significant difference between the eighth- and twelfth-grade Ingham Intermediate students' knowledge about the United States and student knowledge in the 1974 study?

5. Is there a significant difference between the eighth- and twelfth-grade Ingham Intermediate students' knowledge of particular nations of the world and student knowledge in the 1974 study?

6. Is there a significant difference between the fourth-, eighth-, and twelfth-grade Ingham Intermediate students' global knowledge and student global knowledge in the 1974 study?

7. Is there a significant difference between the fourth-, eighth-, and twelfth-grade Ingham Intermediate males and females' global knowledge and the global knowledge of males and females in the 1974 study?

8. Is there a significant difference between the fourth-, eighth-, and twelfth-grade Ingham Intermediate males and females' global knowledge?

9. Is there a significant difference across the fourth-, eighth-, and twelfth grade levels of students in the Ingham Intermediate study in terms of global knowledge?

10. Is there a significant relationship between fourth-, eighth-, and twelfth-grade Ingham Intermediate students' knowledge about a particular country and their interest in visiting that country?

11. Is there a significant relationship between fourth-, eighth-, and twelfth-grade Ingham Intermediate students' knowledge about a particular country and their interest in studying that country?

12. Have Ingham Intermediate teachers traveled to a greater number of foreign countries than teachers in the 1974 study?

13. Have Ingham Intermediate teachers spent a longer period of time in foreign countries than teachers in the 1974 study?

Limitations

The results of this study must be considered within the limits of the population and procedures used in the investigation. The findings may not be generalized to school districts other than the ones examined in this study.

Population and Sample

Ingham, Eaton, Ionia, and Clinton Counties constitute the Ingham Intermediate School District area. The study sample was drawn from four school districts in the Ingham Intermediate area. Three of the school districts that agreed to participate in the study were suburban; one was rural. A total sample of 53 teachers and approximately 1,600 students participated in the study.

Definition of Terms

The following terms are defined in the context in which they are used in this study:

Urbanized area--According to the U.S. Census Bureau, urbanized areas

> . . . generally consist of a city, and its closely settled surrounding territory, for example, suburbs, population and population density, as shown in census-determined urban areas' boundaries which are usually also dividing lines between urban and rural territory.

> An urbanized area comprises an incorporated place and adjacent densely settled surrounding area that together have a minimum population of 5000. . . (U.S. Department of Commerce, Bureau of Census, 1982).

Rural area--An area outside of the urban area and other urbanized places within the Standard Metropolitan Statistical Area (SMSA) and having a population of less than 2,500.

Global education--The Michigan Department of Education defines this term as the life-long growth in understanding of the world community and the interdependence of its peoples and systems.

"A country you would like to visit"--In this study, "visit" was defined as living in a country for a period of at least six months.

Summary and Overview

The problem, background, rationale, purpose, and research questions were presented in Chapter I. The limitations of the study and definitions of important terms were also stated.

In Chapter II, literature related to the meaning and component parts of global education, curriculum implications, the development of student attitudes toward other countries, and the importance of the media in promoting global education is reviewed.

The study design and methodology are explained in Chapter III. In Chapter IV, the data gathered in the study are reported, analyzed, and discussed. The summary, conclusions, and recommendations for further study are presented in Chapter V.

CHAPTER II

REVIEW OF THE LITERATURE

The review of the literature encompasses three areas: First, the goals, elements, and definitions of global education are discussed. Second, the writer presents research on curriculum issues concerning children's attitude development and readiness for global education, the role of teachers and educators in planning a global-education curriculum, and curriculum implications. The third area is a description of the influence and effect of the media in global education.

Goals of Global Education

If people accept the belief that humanity has a common destiny and that the world's survival depends on people's ability to relate to one another in a civilized manner, then global education is a necessary part of today's educational curriculum. Accepting the concept of interdependence requires a change in the thought processes of many people. It is up to educators to nurture the concept of change in a person's life and in the world as inevitable and positive. In Collins' (1977) words,

> When viewed from the perspective of what needs to be done to equip children and young people to live constructively in the anticipated world of the 21st century, there are few grounds

> for complacency. There is much that can and should be done to enhance the quality of international education in the nation's elementary and secondary schools. (p. iii)

Becker (1974) suggested that one of the goals of global education is to provide a knowledge base that might encompass isolation and integration, diversity and unity, aggression and cooperation. In the past, educational materials emphasized the differences among people--their racial, physical, cultural, and linguistic diversities. Education needs to affirm the fact that although differences exist, there are many commonalities among human beings that should be emphasized. These similarities should not be ignored, nor should the differences be overlooked. According to Becker,

> Students must be helped to form accurate perceptions of problems that transcend national boundaries. More importantly, they must be given a whole new map of the world--one that shows shared ethnic and cultural nationalism and cultural interests, ecological perspectives overlapping social and economic concerns, as well as geopolitical configurations. (p. 679)

The need for students to possess global understanding has reached a critical point. Educating children to accept the belief that no one is isolated from another's actions is long overdue. Decisions made today affect not only the present, but have important implications for the future. "Education for responsible participation in an interdependent world or a global society has become a must," said Becker (1978, p. 11).

Developing the skills necessary to participate responsibly in an interdependent world and to understand and know about that world is a function of global education. It is also a means of helping people

understand how their lives are shaped and affected by world events. In this regard, Becker (1978) noted:

> It seems clear that global education should seek to connect rather than divide men, to make clear their common humanity, and to emphasize their common fate. This does not, however, mean that we can afford to ignore the diversity of humankind--composed of many nations unequally endowed with the good things of the earth and of multitudes of groups and individuals holding different ideas about society and having different values. Global education should focus equally on the unity and diversity of the globe, the contrasting demands of these two aspects of one reality, and the conflict between the general necessities of survival and the preservation of justice and dignity and actual people and societies. (p. 681)

The U.S. Commissioner of Education's Task Force on Global Education (1979) spoke to the need for global education by saying that such knowledge helps increase the likelihood of having responsible leaders and better-informed citizens. People need to be aware that decisions in economics, science, and politics affect the growth of a country, their own employment, their standard of living, and their country's stability.

Elements of Global Education

Leestma (1978) described five components of global education:

1. "Unity and Diversity of Mankind," which implies that students need to understand that no one country's view of the world is shared by all other countries. Global education is concerned with the commonalities and the differences among people. Leestma said the earth's peoples are a single species endowed and enriched by diversity. One purpose of global education is to correct cultural myopia and to reduce ethnocentrism.

2. "International Human Rights," which Leestma described as follows:

> Human rights are basic to human dignity, to the maximum development of human potential, and to the "human use of human beings." A proper concern for human rights at home and abroad needs to become part of the shared commitment in the minds of citizens everywhere. (p. 7)

3. "Global Interdependence," which portrays the world as a planetary system. Nations and peoples have become interdependent economically, politically, and environmentally. The survival of man is now an operational problem, not a philosophical one.

4. "International Responsibility," which means that each person has an obligation to maintain the health of the planet.

5. "International Cooperation," which recognizes the fact that many problems in the world are common to numerous nations. Solutions can be reached if they are resolved worldwide. According to Leestma,

> Global education helps students develop an understanding of these differences, of mankind in other settings, of other ways of being human, of different views of what the world's future should be like and how it should be shaped. By helping correct cultural myopia and astigmatism, global education reduces ethnocentrism and thus better prepares students to cope with the complex realities of nationalism and cultural differences on an international scale. (p. 7)

Becker (1972) outlined four requirements of a global-education program. They are as follows:

1. The need to break down sharp distinctions between the study of American society and the study of other cultures.

2. The need to integrate the traditionally separate disciplines and concerns associated with international relations at the high school as well as the college and university levels.

3. The need to highlight the wholeness and interdependence of the modern world, while at the same time recognizing its great diversity and acknowledging the individual's attachment to separate groups and cultures.

4. The need to integrate a concern with the earth as a planet and mankind as a species of life with a study of the international system as such (p. 2).

Kinghorn (1982) identified the following four themes for a global-education curriculum:

1. Children should be taught the value of diversity through the identification of alternative beliefs and life styles. An appreciation for unfamiliar cultural styles and the influence of different cultures on one's own can expand a group's viewpoints and repertoire of choices when confronting issues.

2. The second theme of a global-education curriculum acknowledges the interconnectedness of the modern world. International resources such as organizations, agencies, and programs operate in conjunction with one another throughout the world. Communities and individuals are affected by world events.

3. The third theme is the development of an effective working relationship with others. This implies the need to develop in one's self the ability to accept and comprehend alternative attitudes, ideas, and negotiation and conflict-management skills.

4. The last theme involves the understanding of world conditions and trends. This can be accomplished by teaching students how

and where information regarding world conditions may be obtained and how to recognize emerging world trends (pp. 8-12).

A recurring theme in global education is interdependence. Wood (1974) thought the concept of interdependence should be included in all global-education courses. She felt that such knowledge is needed at both the affective and cognitive levels to develop a global consciousness. Wood believed that behavioral objectives should be developed to reflect the idea of interdependence.

Hanvey (1979) saw interdependence as part of the more complex concept of systems theory. He wrote:

> The emergent global condition contrasts sharply with the pre-global. Long term consequences begin to be considered. Linkages between events are seen in the more complex light of systems theory. Social goals and values are made explicit and vulnerable to challenge. And nations begin to note that their interests and activities are not separable from the interests and activities of others. Further, systematic attention is given to problems that transcend the national, regional, or coalitional. (p. 25)

Case (1979) identified five themes for a global-education curriculum. They are:

1. "Interdependence"--The people of the world should know that they are dependent on one another through the use of natural resources, through industry and commerce, and through ecological structures.

2. The "Systems Theory"--Complex problems can be solved by viewing the immediate problem as connected with and part of a large network or system that has interrelated parts.

3. "Worldmindedness"--People should be aware that they are part of a global society. They should know some meaningful aspects of that society.

4. "Finite Resources"--The world's resources are exhaustible and limited.

5. "A New Economic Order"--The economic structure throughout the world will shift and new patterns will form, i.e., the development of wealthy countries in the Middle East (pp. 66-77).

Anderson's (1978) global-education philosophy was that "Students should be educated about the world as a system and taught that individuals are participants in the world system, and their competencies should be cultivated towards effective and responsible participation in the world system" (p. 21). Anderson believed people need five characteristics to deal effectively with global education:

1. A capacity to perceive oneself and all other individuals as members of a single species of life whose numbers share a common biological status, a standard way of adapting to their natural environment, a common history, a common set of biological and psychological needs, common existential concerns, and similar social problems.

2. A capacity to perceive oneself, the group to which one belongs, and the human species as a whole as part of the earth's ecosystem.

3. A capacity to perceive oneself and the groups to which one belongs as participants in the transnational social order.

4. A capacity to perceive one's self, one's community, one's nation, and one's civilization as both "culture borrowers" and

"culture depositors" who both draw from and contribute to a "global bank of human culture" that has been and continues to be fed by contributions from all peoples in all geographical regions and throughout all historical periods.

5. A capacity to perceive that the world system and its component elements are objects of perceptions, beliefs, attitudes, opinions, values, and assumptions on our part as well as on the part of others (pp. 23-27).

Anderson thought these capacities would enable people to make wise decisions. Separating judgments based on beliefs and those founded on biases is important to promoting self-understanding and multicultural perception.

The Role of Education in Promoting Global Awareness

Education should assume a leadership role in promoting global awareness and understanding. Morehouse (1978) stated that education is inherently conservative and rigid. Yet education is the principal means of achieving social change. Brown (1972) wrote,

> For much of mankind, it is the door into the twentieth century, it is the means to improving the quality of life, achieving social mobility and participating in the world's affairs. The educational system, broadly defined, must begin to provide the individual with much more information on the relationship between man and nature. A liberal education in the traditional sense continues to be important, but a basic understanding of man's place in the earth's complex and threatened ecosystem will be at least as essential in the decades immediately ahead. (p. 115)

Brown said that education offers a way to improve human resources and to raise people's productivity. An irrelevant education breeds discontent and frustration in countries of all economic levels.

Griffin and Spence (1970) stated that global-education programs should include instruction on the fundamental changes that are occurring in the world, which affect every country's educational plans. Some of these changes are:

1. No large group of people will live their lives in isolation from other peoples of the world.

2. Large groups of people must not continue to live in conditions of poverty, ignorance, disease, and hopelessness.

3. It is questionable to accept the idea that certain peoples are destined to dominate others.

4. An attitude of racial and cultural pride is developing, which will no longer make it believable that certain races are superior to others.

5. Programs of assistance to "underdeveloped" nations can make a greater contribution by cooperating with the people of these nations than by providing them with the "answers."

Griffin and Spence further stated that no country has an effective educational program for modern times. They believed that education has not kept pace with the changing needs of the world:

> The world situation demands a more profound and effective contribution from education. . . . More and more recognition is being given to education as the means of bringing about changes in human institutions, attitudes, and processes necessary for developmental change.
>
> More of the same kind of education is not the answer. New programs must be qualitatively different, and they must produce results on a broad scale in economic periods of time if they are to meet the challenge of the times. Education is a main instrument for building and maintaining appropriate behaviors.
>
> New insights into human behavior, increasingly refined concepts of social change, and invention of new means of

> communicating, teaching, and learning make possible and education vastly superior to current programs. Educational planning must become sophisticated in making use of these new tools. (p. 6)

Griffin and Spence thought that education could contribute to the development of society, if development is conceived of as being broader and more fundamental than merely economic and technological advancement. According to these writers, the concept of development needs to be broadened.

> It relates to matters of human spirit and will, values and aspirations, human relationships, ideas and ways of thinking, leadership and planning abilities, awareness of alternatives, social control over science and technology, recognition of the ways of other peoples, awareness of responsibilities in the world community, and sensitivity to the social, cultural, and intellectual qualities necessary for organized and sustained effort toward agreed-on goals. (p. 7)

Griffin and Spence believed that

> Cooperation among the people and nations of the world holds promise of a more creative and imaginative approach to answers. Cross-stimulation of ideas from different cultures and cooperative searching for solutions, not the transplantation of practices across cultural borders, may hold the key to many problems.
>
> An important result of cooperation in educational planning can be reoriented teaching in each country about the history, culture, society and people of other countries, and about the world as a social system. In a real sense, the effects of current chauvinistic educational programs comprise a formidable obstacle to efforts for cooperation and for world peace and harmony. Every country teaches the superiority of its way of life and either neglects or distorts what is taught about other countries and their ways of life. This has to change if the world is to survive as a harmonious unit in the universe. (pp. 7-8)

These two researchers felt that an education worth striving for must deal with attitudes. Since education should be future-oriented, appropriate attitudes must be developed. Because attitudes are affected by a person's range of experiences, educational planning

should take into account the influence of the family, religion, recreation, the mass media, school, and formal agencies. Moyer (1970) stated:

> The task [for global education] becomes one of educating for acceptance and understanding in an ever-widening milieu of self, groups, ages, cultures, nations. Relationships with groups, ages, cultures, and nations occur in a random rather than a sequential order. In reality the areas overlap, and an all-inclusive and comprehensive term human relations education more aptly describes the process. (p. 5)

Definitions of Global Education

A number of terms have been used in the literature to describe global education. Some of these are: multicultural awareness, world citizenship, ethnic studies, cultural pluralism, cultural parity, global values, world affairs, and international education. Many definitions for global education have also been offered. There does not seem to be a consensus regarding any one term or definition.

In his report to the Council of Chief State School Officers, Collins (1977) cited terms that may be used when referring to a structured learning experience or to formal coursework in global education. These terms are: world, cross-cultural, international, global, and global citizenship. Collins preferred two of the terms for his own purposes. These are "global education," which describes the field in its broadest, most universal sense, and "global studies," which describes those activities and programs normally associated with formal study in the schools. Neither term implies a separation between domestic and foreign study.

A term that is no longer appropriate and confuses the meaning of global education is "international education." According to Becker and Mehlinger (1968), this term, which has been used to describe activities between nations, is subject to cultural lag. These authors stated that important changes in the essence of relationships among individuals and nations in the world are occurring. The term "international," as used in describing exchanges throughout the world, is outdated because the reality the word describes has changed vastly. The authors would like a new word to describe the transactions between nations and cultures or a change in the meaning of the word "international."

King (1970) compared the word "international" to separate pieces of real estate and a giant trashcan. "It encompasses so much that it virtually means nothing at all" (p. 16).

Case (1979) differentiated between international and global education. He saw international education as a study of all that global education encompasses for the purpose of understanding the problems. Global education requires an interdependent perspective to the study and a development of a sense of world community.

Strasheim (1978) saw global education as an emerging philosophy whose definitive rationale will not be written for some time. Marker (1977) described global education as a way of thinking about the world, which is characterized by the notion of "Spaceship Earth." He stated, "We are all in this thing together, and the fate of some of us is quickly becoming the fate of all of us" (p. 13).

Griffin and Spence (1970) used the term "international education" to refer to a curriculum that deals with other countries and societies, international relations among countries, exchange of students between countries, assistance to other countries for diplomatic and other international work, cultural-relations programs between nations, and international cooperation.

The British use the term "world studies" to describe global education, whereas the Canadians have selected the term "developmental studies." UNESCO prefers the designation "international education." Collins (1977) said that all of these terms have a common problem: They can mean whatever anyone chooses.

In its Guidelines for Global Education, the Michigan Department of Education (1978) used the term "global education," which it defined as follows:

> Global education is the lifelong growth in understanding, through study and participation, of the world community and the interdependency of its people and systems--social, cultural, racial, economic, linguistic, technological, and ecological. Global education requires an understanding of the values and priorities of the many cultures of the world as well as the acquisition of basic concepts and principles related to the world community. Global education leads to implementation and application of the global perspective in striving for just and peaceful solutions to world problems. (p. 3)

Hanvey (1979) described global education in terms of specific goals or dimensions. These are an awareness of the state of the earth, knowledge of global dynamics, awareness of human choices, perspective consciousness (recognizing that others have views different from one's own), and cross-cultural awareness.

Anderson (1968) argued that global education is based on three principles: that students should be educated about the world in ways that show the world is a system, that individuals are participants in this system, and that students should be taught in ways that promote the development of competencies necessary to participate effectively and responsibly in the world system.

Hickman and Price (1980) viewed global education as a new bandwagon. They felt advocates of this philosophy want a shortcut to a new objective, global perspective. These authors did not believe global awareness can be taught. They thought that the elements can be taught but that it is up to the individual to develop the perspective. "We would be foolish to assume we could teach a global problem, or global awareness, or global perspective without references to at least a representative number of its parts or pieces" (p. 209).

Swift (1980) viewed global education from a teacher's point of view. He said it is a philosophy or an attitude toward daily living; it is not a new course, program, or content. He continued,

> Global education calls for a curriculum that will involve students in cultural, scientific, ecological and economic issues that affect everyone. It promotes an understanding of the values and priorities of the many cultures of the world, as well as the basic concepts and principles related to world communities. It can offer a vital combination of language, literature and the arts of many cultures. Global education aims to increase student awareness of the cultural, political and economic interdependence in the world of the past, present and future. (p. 46)

According to King (1970), global education is "the social experience and the learning process through which individuals acquire and change their images of the world perceived as a totality and

their orientation toward particular components of the world system" (p. 15). He also stated,

> In education this means that schools must help children to develop international understanding but not in the traditional meaning of the word, a sort of strange lands and friendly people approach. Instead the implication is that students must be led toward an understanding of the world as a single unit. Schools will then be transmitting to the next generation a rich image of the total earth. (p. 1)

Kenworthy (1967) indicated that international understanding is primarily a point of view rather than a subject. He stated that this understanding must be inculcated in young children while they are forming attitudes and points of view that will have an influence in their adult lives.

From the preceding discussion, it is apparent that there is no one view or definition of global education. Leestma (1978) said that because of the complexity of the area of concern, there can be no single meaning for global education. In the present study, the term "global education" is used to describe the activities and programs that promote global understanding, as defined by the Michigan Department of Education.

Research Studies

Global Education

During the last few years, an increased effort has been made to assess the knowledge, skills, and attitudes of university students toward countries other than their own (Barrows, Klein, & Clark, 1981). However, there has been very little concern with measuring the ability of children in grades K-12 to understand global issues. Research

is limited and few data have been accumulated on children's state of international understanding. The following is a review of the major studies that have been conducted on attitudinal development in children.

In the early 1970s, the Educational Testing Service (ETS) developed a test called Other Nations, Other Peoples, A Survey of Student Interests, Knowledge, Attitudes, and Perceptions (ONOP) to explore the interests, knowledge level, attitudes, and perceptions of American school children toward other countries and peoples. The ONOP study examined data to determine whether there were differences based on geographic location, grade level, or sex. Background information was collected to examine relationships between student knowledge, attitudes, community, family, and individual student variables.

Fourth, eighth, and twelfth graders throughout the United States were tested in the ONOP survey. These grades were selected for study because it was felt they "might reveal something about different stages of development in such dimensions as levels of egocentrism and extent of differentiation in attitudes" (Pike & Barrows, 1979, p. iv).

In fall 1974, data were gathered from 550 to 600 students at each grade level. The students were randomly selected from 55 to 60 schools for each of the grades and from 27 states. Participation was voluntary. Information was collected on such variables as languages and nations studied, sources influencing students' views and attitudes, nations students would like to study or visit, students' knowledge of selected countries, and their attitudes about and

perceptions of various countries. Data were also gathered on the social-studies teachers, concerning such aspects as countries taught, experiences influencing teachers' career choices, and teachers' perceptions of factors that might affect student learning, i.e., people, events, and audio-visual materials. The study provided an opportunity for educators to review the schools' contributions to improving international understanding.

The 1974 study contained a Knowledge Test that focused on six countries and on the world in general. The attitudes and perceptions children held toward these countries and their peoples were tested. The six countries were chosen by the Educational Testing Service according to their national status, mass-media visibility, historical importance, and geographical and cultural characteristics. The items concerned geographic, cultural, political, and economic subjects. Responses to a questionnaire were also examined to determine the effect of students' background and interest on their global understanding (Pike & Barrows, 1979, p. iv).

The 1974 study results were quite detailed and extensive. An adequate review may be obtained by reading the book Other Nations, Other Peoples by Pike and Barrows (1979). Summarizing briefly, in the Knowledge Test it was found that students lacked knowledge of geography, the Middle East, Africa, Western Europe, and American government. In the map-location section, the investigators were not satisfied with the results at the eighth- and twelfth-grade levels. They noted that eighth and twelfth graders suffered serious gaps in their geographic knowledge.

Results on the Perceptions section of the test indicated evidence that ethnocentrism diminished with age and schooling. Fourth graders selected the United States as the most desirable country. The older students made choices depending on their knowledge of the area and their realization that the United States might not always be the most desirable answer.

On the Student Interest Questionnaire, pupils reported that they learned about other countries through their coursework, reading, and television. Television was ranked the most influential source of information outside of schoolwork. This interest questionnaire also revealed information about students' attitudes toward studying and visiting foreign countries. Fourth graders desired to visit Mexico and Canada and to study Mexico and Japan the most of any of the 15 possible countries. Eighth graders selected England and Mexico to visit and Canada and England to study. There was a greater differentiation in choices of countries to study at the eighth-grade level than at the fourth-grade level. Twelfth graders chose England and Canada to visit and the USSR and Canada to study. Again, twelfth-graders' responses evidenced differentiation between countries selected to study and to visit.

Pike and Barrows (1979) wrote that the level of international understanding of the students in the 1974 study was not satisfactory for "American students and future voting citizens who face the increasingly interdependent world of the present and the foreseeable future" (p. xxi). They felt that there is enough time during a student's 12 years of schooling to do a better job of teaching global affairs

than was reflected in the 1974 study. The authors suggested a change in curriculum or a priority policy commitment to global programs, which would ensure attention to the intercultural facts of life.

Direct comparisons between the 1974 sample and the Ingham Intermediate sample on the Knowledge Test and parts of the Student Interest Questionnaire are presented in Chapter IV of this paper.

Shaw (1979) reported on a community-based global-education program in Findlay, Ohio, which was established to develop practical, high-impact programs at the community level. The project was designed to identify, train, and renew leaders with interest in international issues and emphasized the interaction of people within a community. The results indicated:

> What individuals feel and do with respect to world affairs is, at any moment in time, a consequence of a complex process of interaction among the attitudes, perceptions, and activities already present in their environments. While attitudes influence perceptions and behavior, they are, in turn, shaped by them. No single factor alone accounts for individual orientations regarding world affairs issues. (p. 22)

Optimal Time to Begin Global Education

Research has indicated that children between 8 and 13 years old are at an optimum age to learn about other people and countries of the world. Before the age of seven or eight, most children do not possess the necessary cognitive capacities, for example, to understand that people have differing views, depending on their nation of birth. Children between 8 and 13 are more open to global ideas. After 14, many become disinterested in people who are different from themselves. In this regard, Torney (n.d.) wrote,

> The years from seven or eight to 12 or 13 are ideal for teaching about our global society and our need to deal constructively with its problem. . . . The lack of rigid outlook at age seven or eight makes the individual more receptive to an international or global view. Materials about our conflict-ridden interdependent globe should be introduced into elementary schools. Rather than dealing with a nation's own domestic problems the stress ought to be the global society; domestic issues should be dealt with as part of that totality. Recent research completely contradicts the erroneous belief that children under 12 or 13 years of age are not yet ready to learn about the world, especially outside their own nation. It tells us seven to 12 is optimal both for education directed toward attitudinal objectives and for openness about the world. (pp. 4-13)

Morris (1979) cited a number of research studies that supported the readiness of children in the early grades to have a more global curriculum rather than a routine and redundant social-studies content.

Learning about other peoples and countries is a cumulative process. Piaget (in Torney & Morris, 1972) theorized that most children, by seven or eight years of age, achieve a new and different type of cognitive functioning. At that age, they begin to take into account perspectives other than their own. This ability may be prerequisite to the acceptance of different or unfamiliar characteristics of others. The years between 8 and 13 represent a time before too many stereotyped perspectives dominate the child's view of the world. Piaget and his followers reported that, as children develop cognitively, they take on qualitatively different ways of looking at the world. The older child has more information and different ways of looking at, processing, and testing the information.

Torney and Morris (1972) cautioned that, in considering Piaget's theories, the important thing to remember is the order in which children progress, rather than their age. Children can be taught more

effectively if material is geared to their current understanding, which is influenced by cognitive developmental aspects.

Gilliom and Remy (1978) reported on social-science research, which has indicated:

> By the time they reach the intermediate grades, children have developed a sense of national identity, a set of attitudes, beliefs, and values about their own and other nations as international actors and about such international processes as war and peace.
>
> What children learn about the world at one age, builds upon and is influenced by what they have learned previously. Through a continuous process of cumulative learning, a political self develops. (p. 499)

In a recent summary of research in international socialization, it was concluded that international learning begins early in life and is cumulative. Grades three through eight are an important period in international learning. Each individual student brings his/her own particular configuration of orientations toward the world. The mass media play an important role in international learning (Remy, Nathan, Becker, & Torney, 1975).

Torney and Morris (1972) concurred with this conclusion. They stated that there was some evidence from skill- and attitudinal-development studies to indicate there is a prime time for educational intervention.

> Children in the early years have fewer preconceptions about the world and are not as likely to screen out information contrary to their evaluations or beliefs. By the time a child has finished elementary school, he is likely to have developed a considerably more rigid perspective about his own way of doing things, his own culture, his own country. An individual with such a perceptual screen may be less receptive to the international world. (pp. 8-9)

The researchers also stated that although students in the early years are more receptive to other peoples, they have formed strong attachments to their own country. They may not understand geography or politics, but they have a strong sense of national identity.

Attitudes Toward Other Nations and Peoples

In 1962, a nationwide study of 13,000 American school children was undertaken to examine their attitudes toward the United States and other nations, and to determine the strength of their attachment to the United States. Ninety percent of the children who had reached the third grade agreed with the statement, "America is the best country in the world." The results of the survey indicated that these children exhibited a strong sense of national pride. Torney and Morris (1972) pointed out that a positive concept about one's own nation can lead to respect for others: "A balanced positive national feeling can serve as the basis for a flourishing international orientation" (p. 15).

More than 30,000 preadolescent and adolescent students in nine democratic countries were surveyed in 1971 by the International Association for the Evaluation of Educational Achievement. Variations in the strength of national identity were found. United States students evaluated their government in a highly positive manner. These students also ranked fairly high in terms of discussions engaged in with parents, friends, and teachers on topics of civic interest.

As compared to pupils of other nationalities, 14-year-old United States students exhibited substantially less interest in

international political discussions. United States students scored higher on cognitive items concerning domestic politics than on those related to international politics. Adolescents in the United States seemed to focus more on national than on international concerns. The United States had the least foreign contact in regard to films and textbooks imported and international mail and telephone services. Figures on television programs that dealt with international topics also gave the impression that United States students had minimal exposure to international matters (Abramowitz, Leighton, & Viederman, 1978).

When attempting to determine political attitudes, investigators sometimes include questions concerning human rights in a democratic society. The focus is usually on rights protected by national constitutions or laws. Abramowitz et al. (1978) discovered that American students thought only of the rights and freedoms guaranteed to citizens in particular documents such as the United States Constitution and the Bill of Rights. "For young children democracy is America and America is democracy. . . . Other countries may have this democracy but for a variety of inarticulable reasons, other people's democracy is not as good as the American version" (p. 152).

Many young Americans think that the United States is the only country that believes in protecting human rights. This mistaken impression leads students to conclude that other countries do not care about having and protecting such rights and freedoms. Many American students have difficulty accepting the fact that they may share a

belief in human rights with people who look and speak very differently from themselves (Abramowitz et al., 1978).

Research has shown that American children seem to have many stereotypes about certain countries. The people whom children reject or see as being different from themselves come from countries with customs that are perceived as being backward or strange, those recently involved in a war, or those that speak a different language. Seventy percent of American 6 to 12 year olds mentioned speaking a different language as a way in which countries differ from the United States (Abramowitz et al., 1978).

In the late 1950s, Lambert and Klineberg (1967) collected information on the attitudes of more than 3,000 children, ages 6, 10, and 14, from 11 parts of the world. Some of the questions in the survey attempted to determine whether children saw a country as similar to or different from their own, and in what ways. Groups identified as different by American children were Chinese, Indians from India, Russians, and African Negroes. Differences in children's responses were a result of sex, social class, and the most significant factor, age. Younger children were concerned with clothing, physical features, languages, and habits. Older children were preoccupied with personality traits, habits, politics, religion, and material possessions.

Lambert and Klineberg (in Torney & Morris, 1972) concluded that "children in certain cultural settings consider themselves as minority members of a world community" (p. 18). In a review of Lambert and Klineberg's study, Torney and Morris (1972) added:

"Children in many parts of the world also consider certain groups as minority members of the world community. In particular, the Chinese and African Negroes who were considered by children in many countries to be 'not like us'" (p. 18).

Another conclusion reached by Lambert and Klineberg was that American children at all age levels ranked high in their liking for foreigners. However, children about ten years of age were particularly receptive to foreign people and were interested in those seen as similar and dissimilar to themselves. By 14, they seemed less open to positive opinions on foreign nations (Torney & Morris, 1972). Lambert and Klineberg (in Goodman, 1970) said, "Children apparently come to think about foreign peoples in an increasingly more stereotyped manner, between six and 14 years" (p. 58). The authors also stated that cultural factors could override age differences.

An important conclusion of the Lambert and Klineberg study is that educators need to ensure that the information children are taught is accurate and comprehensible. The information should also have a positive association for the children. Because children throughout the world seem to be attuned to the same aspects of others, educators may not be able to do much to change this focus. They can, however, make sure the information being taught about other cultures is correct. Goodman (1970) stated, "The culture of childhood is learned, shared and transmitted. It is to some degree learned by children from one another. Mainly, however, it is learned from adults" (p. 7).

According to Goodman (1970), what children know about culture depends on their age, sex, intelligence, curiosity, insight, and amount of formal and informal education. The social class and ethnic position of their parents and of other people in their social world also affect children's development. She said that "a child's cultural learnings will be limited only by his inherent intellectual capacities and his cultural exposures" (p. 12).

Education must deal with attitudes. Torney and Morris (1972) wrote that improving a program of international education requires a determination of existing attitudes in children and the factors important in maintaining or changing these attitudes. Morris (1974) saw global education as a chance to help a child "see him/herself in relation to all other people around the globe and in relation to the earth itself" (p. 673). Educators must be aware of the process by which children's attitudes and beliefs develop and change. Teachers must view the earth as a unit and see their own culture as on a continuum with other cultures. To make education a dynamic process, educators need an accurate perception of children's attitudes and an international view of the world.

Torney and Morris (1972) stressed the need to deal with attitude formation in young people:

> First, educators must have more awareness of the process by which children's attitudes, beliefs, and values develop, a clearer view of the audience to which we speak; next, an understanding of the process by which these attitudes are changed or remain stable as they are influenced by various factors such as cognitive development and social circumstances (expansion of technology, and current social issues in the adult political world); and, finally, a new perspective, a view of the earth as

> a unit and a view of our own culture as resting in a variety of continua with the cultures of the rest of the world, a view which values diversity in the human species and is conscious of the impact of old assumptions about the world on the real messages children receive from instruction. We need to move away from merely formal and rote teaching which expects children to accept on faith, statements of vague ideals about the way we wish the world to be, and toward a dynamic process of education and socialization in which all elements of society, not just the schools, participate. For this we need accurate perceptions of children's attitudes, and a truly international view of the world. (p. 7)

Teachers' Role in Global Education

Teachers play a vital role in the global-studies curriculum. To carry out this role properly, they need to be well informed. "Study and travel abroad, community programs and graduate research centers are among the activities that are vital to develop an adequate base of knowledge and experiences" (U.S. Task Force, 1979, p. 8).

Gilliom and Remy (1978) wrote that teacher-education programs should include opportunities for student teachers to study and travel abroad as part of their professional program. They said,

> Teachers themselves would necessarily be sensitive to global issues and would view the world from an international perspective. They would serve their pupils as models of the globally concerned person and international references in their teaching would flow naturally from their personal experiences. (p. 502)

Stearns (n.d.) reiterated the importance of relating teachers' personal experiences to their teaching of global perspectives:

> Teachers have a unique opportunity to give youths the kind of experiences that will enable them to become world minded and intelligent participants in world affairs. To be effective exponents of world-mindedness, it goes without saying, teachers should be well informed on international affairs; they should

> know how to help children think and work effectively, they should have an awareness of strategies that can be shared in bringing about desirable changes in other cultures as well as their own, and they should also be alert to possible future directions for improving intercultural and international relationships. (p. 2)

Concerning teachers' role in global education, Wheeler (1979) wrote, "It goes without saying that the more expertise a teacher has regarding the culture and/or country to be studied the better" (p. 188). Teachers should understand they are intermediaries between their students and other nations and peoples.

Swift (1980) described global education from a teacher's point of view:

> It is a new teacher attitude toward the pertinence of study to life in the future; it is an emphasis for students and teachers on individual and group responsibility, on multicultural awareness inside and outside the continental United States, on the enormous human movement and commerce to and from the U.S. that illustrate the notion of global interdependence, on the newly realized world culture into which all nations plug; and it is a multidisciplinary way of relating knowledge, skills, attitudes, and experiences to tomorrow's living in a global community. (pp. 46-47)

Curriculum Implications

Teaching that the world is a dynamic system rather than a static one should be the focus of global education. To understand the successes and failures in teaching global studies, the methods of instruction should be well organized and not haphazard.

The assumptions that children make about their world must be understood, and global-education should match these frames of reference. The U.S. Commission on Education (1979) stated that because of the importance of early learning, the development of global perspectives should be given priority in the schools' curricula.

> Education for global perspective occurs through learning experiences, formal or informal, that increase the individual's ability to understand his or her condition in the community and the world. It includes the study of nations, cultures, and peoples, with a focus on understanding how these are interconnected, how they change, and what the individual's responsibility is in this process. It provides the opportunity to develop realistic perspectives on world issues, problems, and prospects, an awareness of the relationships between self-interest and the concerns of people throughout the world, and the basic knowledge and skills essential for life in a global age. (p. 4)

Morehouse (1978) believed that all secondary-school students should receive a basic global education. He stated,

> The education of the nation's adolescents must be superior to that of their parents. Part of this superiority must be an enhanced sense of the globe as the human environment, and instruction to this end must reflect not only the ancient characteristics of the world, but emerging knowledge of biological and social unity. (p. 17)

Reischauer (1973) stated that education is not moving quickly enough to produce the knowledge about the outside world and the attitudes toward other peoples that may be essential for human survival in the twenty-first century. He believed that world citizenship and the acceptance of ethnic diversity within the United States are "two sides of the same coin. Both accent the universality of man" (p. 194). Reischauer proposed "a reorientation of education so as to give young people everywhere a sense of the shared interests and basic oneness of mankind and to prepare them for effective participation as members of a world community" (p. 195).

Many other individuals and groups have expressed concern that education must develop human beings who are rooted in their community, loyal to their country, and concerned about the welfare of other people. Students should be prepared to exist cooperatively with the diverse

people of the world. Anderson and Becker (1968) stated that elementary-school children should be able to view themselves in relation to all other peoples and to the earth. Children should learn that people are a single species with common basic needs and that the world is a single integrated system.

A variety of people have adopted different viewpoints on the social-studies curriculum and global education. Wood (1974) did not believe it is necessary to create a new course on global education. She did think, however, that new questions dealing with international interests, and not only local or national ones, should be raised. The topics arising from these questions could be incorporated into existing social-studies courses. "Today's students must begin to develop an awareness of global community, for within another generation such an awareness may be essential for human survival" (p. 664).

Gilliom and Remy (1978) believed the global-education curriculum should involve all areas of the curriculum. It should capitalize on the local community and look beyond the school for areas of international learning. It should involve learning <u>for</u> something, rather than <u>about</u> something. Finally, the global-education curriculum should be included in teacher-education programs.

Strasheim (1978) reported that the consensus among most supporters of global education is that it should be included in current social-studies programs. The responsibility for teaching global education would lie with the social-studies departments.

In regard to the social-studies curriculum, Marker (1977) stated:

> The social studies curriculum is already crowded, but world development seems to clearly indicate that humankind is confronting a situation which demands the attention of everyone. . . . As educators, we have a professional obligation to become familiar with the arguments which surround global issues and to inform our students of them in a manner that helps them feel they still have a voice in where the world is headed. . . .
>
> With school enrollments declining and many school systems experiencing budgetary problems, this is not the time to call for a new social studies course. Such a course would surely be categorized as an elective at the very time that other social studies electives are being eliminated. Instead it seems more realistic to develop materials and to prepare teachers to add a global dimension to the courses which are already in place in the social studies curriculum. (pp. 18-19)

In Michigan, the State Board of Education and the State Department of Education have mandated that every school district in the state should develop a program of global education. The Michigan Board of Education has approved two publications, The Common Goals of Michigan Education and Essential Performance Objectives for Social Studies, which call for Michigan schools to provide opportunities for students that will enable them to acquire the knowledge, skills, and attitudes needed for effective participation in a pluralistic, interdependent global society.

Essential Performance Objectives for Social Studies lists students' learning expectations for each grade level in regard to global issues. The booklet provides a series of social studies objective strands that have been developed by the State Department of Education. It recommends that schools establish a K-12 curriculum that would provide students with the opportunity to study, compare, and analyze the world's cultures.

The approach encouraged by the State of Michigan is interdisciplinary, with people from various disciplines sharing their ideas and programs with each other. Porter (in Strasheim, 1978) said, "Michigan schools must carefully plan and carry out curriculum changes that are commensurate with the realities of living in an interdependent world" (p. 6).

The State of Michigan's philosophy regarding social studies is as follows:

> The central purpose of social studies education is the development of citizenship. The goal of citizenship, in turn, is the constant effort through decisions and action to foster just relations among people and institutions. . . . Both personal and social welfare require education for citizenship. Schools, therefore, must provide it for all young people from kindergarten through high school. Many areas of school programs as well as out-of-school life contribute to the development of citizenship. Still it is social studies education which focuses directly and systematically upon those learnings required for citizenship. (Miller, 1981, p. 1)

Stearns (n.d.) reviewed different global-education programs and concluded that the most promising ones contained the elements of knowledge, appreciation, and skills. He defined "knowledge" as awareness of the nature of the world community, forces that have shaped different cultures, basic elements of national and international policies, the process by which changes are made, and background information on various cultures' languages, literature, art, and music. To Stearns, "appreciation" meant a concern for all cultures and peoples. It was an acceptance of responsibility for creating international understanding and cooperation and a desire for more effective cross-cultural communication. "Skills" were the abilities to

relate to people, to work with intercultural groups, and to use resources to develop new evaluative approaches.

Collins (1977) reminded educators that in an era of accountability, global studies should allow for evaluation. He wrote:

> No one advocating global education has yet developed measures to evaluate the "activities" of its efforts. This is not an easy task, but . . . the inability of global studies to do more than state its case based only upon "good will" and "faith" is a serious deterrent to moving the field forward. . . . Evaluation must become a central concern. Without it, global studies will not be taken seriously by the states, the schools or the public. (p. 17)

However, mere exposure to new information or to classroom materials will not bring about classroom change. In the words of Abramowitz et al. (1978),

> Effective and lasting curriculum change occurs under certain conditions, innovations must be comprehensible and sensible to the managers of the school or district, teachers and administrators must be convinced of the need for change and the relevance and utility of the new methodologies used, the strategy for introducing the innovation must be consistent with the local reward system, and the innovations contemplated must be locally verifiable and modifiable on the classroom level. (p. 159)

Morehouse (1978) listed six factors he felt were necessary in bringing about a change in education and making it better prepared to deal with global interdependence:

1. It is important to develop a comprehensive, long-range strategy on the realities of global interdependence that can be accomplished through curriculum revision, teacher training, and community education.

2. It is necessary to develop policy support at the national and state levels for local initiatives in implementing changes.

Priority must be given to allocating existing funds to help promote these changes.

3. A stronger knowledge base on issues of interdependence is vital to building political consensus and to sustaining political policies for interdependence.

4. Data on the world views of Americans must be collected and analyzed. Ways should then be found to reshape these views so they become more compatible with global interdependence.

5. Strengthening existing activities and developing new ones with educational communities throughout the world would enable Americans and others to develop an understanding of interdependence.

6. A major effort to assist the mass media is important so they can deal with the realities of global interdependence.

A few examples of global-education programs that have been developed are the following:

1. In 1978, a global-education program was initiated at Stevenson High School in Livonia, Michigan. It offered three multidisciplinary sequences for all students. Participation was voluntary, and students could change programs at the end of semesters.

2. In Chicago, Illinois, the Louisa May Alcott Elementary School implemented a global-education program that involved all areas of the school and followed the principles of Gilliom and Remy, which have already been explained.

3. The United States began in 1970 to participate in the Associated Schools Project, organized by UNESCO, with a small group

of pilot schools. In 1974, its participation was expanded to include six states and 30 schools.

4. Becker described a model global-education program in his book Schooling for a Global Age. In the chapter "A Visit to Middleton's World-Centered Schools," Becker asserted the need to establish a world-centered school. He also discussed the organization, curriculum, goals, and procedures for promoting global perspectives.

Global education has received support from the federal government and other educational agencies. In October 1979, the U.S. Task Force on Global Education reported that at least 14 states supported the global-education movement. This support was seen in teacher-training programs and policy statements issued through educational agencies.

The federal government has been involved in promoting global education through the International Communication Agency, the National Endowment for the Humanities, and the National Science Foundation. Funding for global-education programs was made available in 1979 under Title VI of the National Defense Education Act, which provided grants for projects that would increase multicultural understanding.

The Role of the Media in Global Education

The mass media are a major source of information and ideas through which Americans learn about the rest of the world. According to Hanvey (1979), the media are event centered, culture bound, and culture generating. They reflect the culture and reinforce it. They are also capable of turning it in new directions.

The communications media, including television, radio, newspapers, magazines, and book-publishing companies, are highly involved in education. "The media--television, radio, magazines, newspapers--and an increasing number of supplementary education publications are beginning to concentrate on the crisis of global resource scarcities and the interdependence of nations in sharing needed resources" (Morris, 1974, p. 675).

Becker (1974) said that the media, especially television, play an important part in children's international learning. "Many, if not most, young people look to the media as their major source of information and ideas about both national and international events" (p. 679). He also stated that the media often give national events priority over international affairs in terms of time and space. The international news events that are covered are usually concerned with violence and misfortune. "International society is all too frequently portrayed in the media as a society of hostility, explosion, and catastrophe, while domestic society is characterized by a range of activities from harmony to disruption" (p. 679).

After interviewing hundreds of children, Lambert and Klineberg (1967) found that television, movies, and, to a lesser degree, parents constitute the major sources of information about foreign peoples for six year olds. For ten year olds, television and movies are still important, but so are school sources.

The effect of the media on the educational process is immense. The media are important learning and teaching tools. Brown (1972)

said, "Increasingly, the distinction between formal and informal education will become blurred, with the relative importance of the former diminishing" (p. 130).

Given the importance students attach to the media, the schools must become more active in understanding and using this resource. Hanvey (in Morehouse, 1978) commented, "Schools are hard put to match the drama and appeal of the mass media" (p. 17). The media provide the facts and interpretations of events. Hanvey said that the media are not concerned with the processes of change over time. Rather, they concentrate on an event and ignore the relationship between occurrences and facts. The framework into which the facts and occurrences might be placed is seldom covered by the media.

> Therein lies the role of the school in educating young citizens for their future roles in relation to international and global concerns. It is not simply a matter of increasing the number of "facts" which may characterize many efforts in these areas today. Instead, it is a matter of providing learners with the conceptual framework for analytical thinking about these myriad issues. It is to assist the learner in processing and organizing the information received from the whole range of sources in society--formal, nonformal, and informal. (Abramowitz et al., 1978, p. 161)

The mass media are so influential in students' lives that the role of the teacher is changing. A teacher no longer merely dispenses information but guides students into gaining a perspective on trends and events that the media present in a superficial manner. The media do provide a vast amount of information about world affairs, and at the same time they influence the way world affairs are taught. Correct use and understanding of the media in teaching and shaping viewpoints are skills that teachers and schools cannot ignore.

Summary

Research on the development of children's attitudes toward other nations and peoples has suggested that children are able to profit from instruction in global-education concepts. Considering the ideas conveyed in the research literature on the development of attitudes in children and the recommendations of researchers and the Michigan Department of Education toward global-education issues, it seems feasible and desirable for educators to provide opportunities to develop global perspectives. This can be accomplished through activities and materials that enable children to form generalizations at their level of understanding. Materials should be presented to children with a vocabulary and in a manner they can understand.

The mass media are an important teaching and learning device and should be used in teaching global understanding. Television, radio, newspapers, and publishing companies should be encouraged to promote positive global attitudes. They can be used to make curriculum dynamic and to reflect the changes that are occurring in today's world.

Children need to become aware of their own actions and the ways these actions may affect others. Accepting responsibility for the effects of individual acts is necessary for the development of personal growth and global awareness. Authorities in global education believe that children should be able to see themselves in relation to other peoples and to the earth. Once children begin to perceive their relationship with others and their world, the more real the complex concept of global interdependence can become for them.

The findings of available research on children's conceptions of foreigners should indicate to educators a need for global education. Stereotyped thinking appears to be the norm. It is nourished through the emphasis people place on differences between one another; the lack of first-hand experiences with foreigners; the comparison of other groups with one's own, usually to the detriment of the other group; and the strong influence of the media (Lambert & Klineberg, 1967).

A summary of the importance of global education for Americans may be found in Bailey's (in Morris, 1977) statement:

> If Americans are to understand the impact of present and future international realities upon their own fortunes, and upon the fortunes of their fellow human beings around the world, and if America is to have both leaders and followers capable of dealing effectively with these complex matters, education for interdependence must receive a new and sustained national priority and support. (p. 38)

CHAPTER III

DESIGN AND METHODOLOGY

This chapter contains a description of the subjects who participated in the Ingham Intermediate study and the general population from which they were drawn. The test instruments and procedures used to measure the global knowledge of the students involved are explained, and the null hypotheses are stated.

The School-District Sample

The study sample included fourth-, eighth-, and twelfth-grade students drawn from the following four counties in central Michigan: Ingham, which had a population of 272,437 people; Eaton, with a population of 88,337 people, Clinton, with 55,893 people; and Ionia, with 51,815 people. The total population of this census area, as listed in the 1980 census, was 478,482 people.

The Standard Metropolitan Statistical Area (SMSA) in the present study surrounded the core city of Lansing. It included three school districts from suburban areas and one school district from a rural area located approximately 40 miles from Lansing and outside of the urbanized area. According to the United States Census Bureau, any city with a population of 2,500 or more within the SMSA is considered urban. Rural areas are locations outside of an urbanized

area, or other urban places within the SMSA, with a population of less than 2,500.

Sections of the above-mentioned counties constitute the Ingham Intermediate School District (IISD) area. Four school districts in the IISD agreed to participate in this study. They were labeled suburban or rural, according to the definition given by the United States Census Bureau.

Most of the students in the four participating districts were Caucasians. The minority population, which included American Indian, Afro-American, Oriental, and Latin American, ranged from .06% to 17% of the total 1981 kindergarten through twelfth-grade student population of these districts. (See Tables 3.1 and 3.2.)

Table 3.1.--Racial/ethnic count of the four districts on October 2, 1981.

District	American Indian	Afro-American	Oriental	Latin American	Caucasian	Total
A	15	361	198	164	3,715	4,453
B	4	198	39	164	3,134	3,539
C	10	64	64	103	4,172	4,413
D	5	8	7	53	1,960	2,013

Table 3.2.--Racial/ethnic composition of the four districts (in percent).

District	Minority	Caucasian
A	17%	83%
B	12	88
C	6	94
D	6	94

The socioeconomic status of the four participating districts is not being reported in this paper, as per agreement with these districts. This agreement was reached before the testing occurred.

To ascertain certain demographic information regarding the communities and schools, the School and Community Questionnaire was sent to the participating schools. This survey sought information about the community size, student enrollment, community resources used by the schools, the social-studies curriculum, and student and teacher exchange programs. The school principal or a designated staff member completed the questionnaire. The returned questionnaires and the 1981 school census provided the information for the following report on the four school districts that participated in the study. To maintain their anonymity, the participating school districts are referred to as Districts A, B, C, and D.

District A

According to the 1981 school census, District A is a suburb of a medium-sized city. In 1981, it had a total student population

of 4,625. The fourth grade comprised 359 students, the eighth grade had an enrollment of 345 students, and the twelfth grade had 355 students. The sample selected to participate in the study was drawn from nine elementary schools, two middle schools, and one high school.

The elementary schools had between 100 and 299 students per building and from 21 to 25 students per class. The junior high had from 500 to 699 students per building and between 26 and 30 students per class. In the high school there were between 1,000 and 1,499 students, with 26 to 30 students per class. From 91% to 100% of the students in this district graduate from high school, and 76% to 90% go on to college.

In District A, 14 teachers from the nine elementary schools, six teachers from the two middle schools, and three teachers from the high school participated in the study. The total tested student sample numbered approximately 638.

District A made use of many community resources. The most frequently used resources, as determined by the ten community surveys that were returned, were as follows: Seven of the schools used the public library and a four-year college or university. Five schools had students who attended a planetarium, and four schools went to an art museum, a park, and watched live theater. Students in three schools observed a dance company; visited buildings of historical interest, a community college, and a sports stadium; and attended adult-education courses. Students from two of the schools went to a zoo, a science museum, a movie theater, a symphony orchestra, and a natural-history museum.

The community surveys also provided information about the social-studies curriculum. District A had a social-studies guide that had been revised at all grade levels during 1980. The survey provided no information about teacher flexibility in using the guide.

District A was involved in a foreign-exchange program at the high school level. Foreign students from Europe, South America, and Australia attended the high school, whereas some students in the district attended school in Germany and Mexico. The district had employed teachers from other countries, such as Spain and Greece. Some of the teachers in District A had taught in foreign schools in Belgium, Greece, Brazil, Spain, Puerto Rico, Japan, and England.

District B

District B is also a suburb of a medium-sized city. In 1981, the district enrolled 3,644 students. Study participants were selected from four elementary schools, two middle schools, and one high school. The fourth grade had an enrollment of 281; the eighth grade, 302; and the twelfth grade, 347.

The elementary-school buildings varied in size from 100 to 299 students and from 300 to 499 students, with 21 to 25 students per classroom. The junior high had an enrollment of 500 to 699 students, with 21 to 25 students per class. In the high school there were between 700 and 999 students, with 26 to 30 students per class. From 76% to 90% of the students in District B graduate from high school, and 26% to 50% are college bound.

In District B, study participants were seven teachers from two elementary-school buildings, one teacher from one of the middle schools, and two teachers from the high school. The total student sample was approximately 276.

This district employed a variety of community resources, as indicated by the four returned community surveys. The respondents to all four of these surveys stated that the students in their schools attended the planetarium. Classes from two of the schools visited the public library, a natural-history museum, a park, a sports stadium, a live theater, a four-year college or university, a community college, and buildings of historical interest.

The District B high school enrolled foreign students from Mexico, the Philippines, Japan, Yugoslavia, and Venezuela. Some teachers in this district reported having taught in Japan and Germany.

District B had a social-studies guide that allowed elementary-school and junior-high teachers a moderate amount of flexibility. According to the community surveys, the elementary-school social-studies guide was revised in 1979, and the junior high guide in 1978. The social-studies guide for the high school was revised annually. The guide permitted a great deal of teacher flexibility, except in the area of government, which had a structured curriculum.

District C

District C is a suburb of a medium-sized city. Its total student population in 1981 was 4,573. There were 342 fourth graders, 318 eighth graders, and 320 twelfth graders when this study was

conducted. The district has five elementary buildings, a middle school, a junior high school, and a high school.

The elementary schools had an enrollment of between 300 and 499 students per building, with 21 to 25 students per room. The junior high and middle school had 500 to 699 students per building, with 26 to 30 students per class. The high school enrollment was 1,000 to 1,499 students, with 26 to 30 students per class. From 91% to 100% of the students in District C graduate from high school, and 26% to 50% attend college.

In District C, participants included seven teachers from three elementary schools, four teachers from the junior high school, and one teacher from the high school. The total number of students tested was approximately 340.

District C used many community resources. The four returned community surveys indicated that four schools had students who attended adult-education courses, and three of the schools used the public library. Students from two of the schools visited a planetarium, a sports stadium, and had access to both a four-year college or university and a community college. Students in one school visited a park, a movie theater, and buildings of historical interest and hired a dance company for a school program.

The high school had a student foreign-exchange program, attended by foreign students from France and South America. The district had also worked out a cooperative exchange plan with Germany, through which 15 students are exchanged each year. The returned

surveys indicated that none of the teachers in District C had been employed as a teacher in a foreign country.

According to the community surveys, District C had a moderately flexible social-studies guide. In 1981, the elementary guide was in the process of being revised. The junior high guide had been revised in 1980, and the high school guide had been revised in 1979.

District D

District D is a rural community. In 1981, the district had a student population of 2,079. Within the district are three elementary schools, one middle school, and one high school. The fourth-grade student population numbered 162 students. In the eighth grade there were 135 students, and the twelfth grade had 126 students.

The three elementary schools varied in size from 100 to 299 students and from 300 to 499 students per building, with 26 to 30 students per room. The junior high had from 300 to 499 students, with 26 to 30 students per classroom. The high school had 500 to 699 students, with 26 to 30 students per class. From 76% to 90% of the students in District D graduate from high school, and 11% to 25% go on to attend college.

The study participants from District D included six teachers from the three elementary schools, one teacher from the middle school, and one teacher from the high school. The total number of student participants was approximately 254.

An examination of the five community surveys returned in District D revealed that this district used fewer community resources

than did the other participating districts. This could be a result of the distance of District D from the core city, Lansing. The most frequently employed resources were the public library and buildings of historical interest; four of the schools reported using these resources. Students in two schools visited a park and attended adult-education courses. One school's students visited a natural-history museum, a movie theater, and a community college.

The survey results indicated that the high school participated in a foreign-exchange program with Spain. No teachers were reported to have had any teaching experience in overseas schools.

According to the community survey questionnaire, District D had a social-studies guide that allowed teachers moderate flexibility. The elementary-school guide had been revised in 1980, and the junior high and high school guides had been revised in 1979.

The Teacher Sample

A Teacher Background and Interest Questionnaire was sent to all 53 teachers participating in the study. Of those teachers, 47 returned the teacher surveys. Eighteen respondents were males, and 29 were females. The respondents taught grade levels from kindergarten through twelfth grade; the majority of participants taught fourth grade. Forty-four of the teachers had been born in the United States, two in Canada, and one in China. Fourth-grade teachers appeared to have traveled to more countries than eighth- or twelfth-grade teachers.

According to the survey responses, most of the teachers enjoyed teaching about the customs and lifestyles of other cultures. Many of the teachers, however, considered their educational training for teaching cultures to be only "fair." Specifically, in District A, 36.4% of the respondents thought they had a "strong" background. In District B, 57.1% of the teachers considered their background to be "fair," as did 60% of the teachers in District C. In District D, 40% selected "moderate" as a descriptor of their educational training in other cultures.

The Student Sample

The sample selected for this study included fourth-, eighth-, and twelfth-grade students from four school districts in the Ingham Intermediate School District area. The number of students per grade level ranged from 50 to 300 per district, depending on the size of the school district and the district's decision regarding how many students to test. The number of students tested was more than 1,600. The demographic characteristics of students in the three grade levels are discussed in the following subsections.

Fourth Graders

A majority (93.2%) of the fourth graders in this study had been born in the United States. A small percentage (8.5%) had lived outside of the United States for six months or more (Table 3.3).

A majority (84.4%) of the fourth graders were Caucasians, followed by a small percentage of Orientals (6.2%) and Blacks (4.7%).

This ethnic composition was consistent across grade levels as well as across the four volunteer districts (Table 3.4).

Table 3.3.--Student background information (in percent).

Student Background	4th Grade	8th Grade	12th Grade
Students born in U.S.	93.2%	93.5%	94.7%
Students living outside U.S. 6 months or more	8.5	11.7	9.3
Students living in community 5 years or more	...	68.1	81.5
Fathers born in U.S.	87.1	89.3	94.1
Mothers born in U.S.	90.7	90.5	91.7

Table 3.4.--Ethnic composition of student sample (in percent).

Ethnic Background	4th grade	8th grade	12th grade
American Indian	1.3%	3.3%	2.5%
White	84.4	79.7	87.9
Hispanic	1.7	3.3	2.8
Black	4.7	4.8	2.2
Asian	0.3	0.8	0.3
Oriental	6.2	2.9	0.3
Other	0.5	5.4	4.0

Some of the fourth graders could speak a foreign language. Spanish was the language spoken most frequently (22.6%), followed by French (9.7%). Besides English, the two major languages spoken by the parents were also Spanish (21.6%) and French (17.0%) (Table 3.5).

Table 3.5.--Foreign languages spoken by parents and students (in percent).

Language	4th Grade		8th Grade		12th Grade	
	Parent	Student	Parent	Student	Parent	Student
Chinese	%	%	1.9%	0.9%	0.3%	%
French		9.7	8.4	11.0	3.1	7.0
German			5.1	3.9	5.5	6.3
Greek			0.9	0.2	0.3	0.7
Italian			1.3	0.9	1.0	1.8
Japanese			0.4	0.7	0.3	0.0
Polish			0.9	0.4	1.4	0.4
Russian			0.4	0.0	1.4	0.0
Spanish		22.6	7.9	8.1	7.9	12.9
Portuguese			0.0	0.2	0.0	0.0
English			95.6	85.5	97.2	86.8
Other			8.4	5.1	5.8	9.1

Eighth Graders

Almost 94% of the eighth graders in the sample had been born in the United States. A majority (68.1%) of them had lived in their community for five years or more. A minority (11.7%) of the students had lived outside of the United States for at least six months (Table 3.3).

The eighth-grade sample was composed primarily of Caucasians (79.7%). About 5% listed their ethnic background as "Other," and 4.8% were Black (Table 3.4).

A large majority (85.5%) of the eighth graders spoke mainly English, but 11% also spoke French, 8.1% Spanish, and 3.9% German.

The majority (95.6%) of their parents were also proficient in English, whereas 8.4% spoke French, 7.9% Spanish, and 5.1% German (Table 3.5).

Some of the eighth-grade students had studied a foreign language, the most popular being French (23.3%) and Spanish (22.7%) (Table 3.6).

Table 3.6.--Foreign languages studied by eighth and twelfth graders (in percent).

Foreign Language	8th Grade	12th Grade
Spanish	22.7%	26.9%
French	23.3	20.5
German	6.1	14.7
Russian	1.3	1.2
Latin	1.3	7.0
Other	9.3	2.8

About 29% of the eighth-grade students described themselves as "A/B" students (Table 3.7). They had taken social-studies courses in school; U.S. history (91.4%) was the major course studied (Table 3.8).

Twelfth Graders

The majority (94.7%) of the participating twelfth graders had been born in the United States. Only 9.3% had lived outside of the United States for six months or more. Most of the students (81.5%) had lived in their community for five years or longer (Table 3.3).

Table 3.7.--Class standing of eighth and twelfth graders in the sample (in percent).

School Grades	8th Grade	12th Grade
Mostly A's	16.6%	13.3%
Half A's/half B's	28.6	21.6
Mostly B's	18.3	18.2
Half B's/half C's	21.3	25.3
Mostly C's	8.2	14.2
Half C's/half D's	5.0	6.2
Mostly D's	0.8	0.6
Mostly below D's	0.2	0.3
Ungraded system	1.1	0.3

Table 3.8.--Subjects studied by eighth and twelfth graders in the sample (in percent).

Subjects Studied	8th Grade	12th Grade
U.S. history	91.4%	98.5%
European history	24.8	28.1
Asian history	16.6	16.2
African history	30.0	15.3
World history	44.7	67.0
Geography	38.9	43.4
Sociology	8.4	11.0
Anthropology	0.2	4.6
Economics	16.9	53.8
Government	0.2	89.9
Political systems	0.4	35.5
World problems	0.4	31.8

Most (87.9%) of the twelfth graders were Caucasians. The next highest ethnic-group listings were "Other" (4.0%) and Hispanic (2.8%) (Table 3.4).

A number of the twelfth-grade students had studied foreign languages. Spanish (26.9%) and French (20.5%) were listed most frequently as languages the twelfth graders had studied (Table 3.6).

Some of the students were able to speak French (7.0%), Spanish (12.9%), or German (6.3%). The majority (97.2%) of their parents spoke mainly English, but 7.9% did speak Spanish (Table 3.5).

The twelfth graders rated themselves as mostly "B/C" students (Table 3.7). The twelfth-grade students had completed more social-studies courses than the eighth graders. Almost all of them (98.5%) had taken U.S. history, and 89.9% had had a course in government (Table 3.8).

A list of the birthplaces of the fourth-, eighth-, and twelfth-grade students in the Ingham Intermediate sample and their parents is given in Appendix B, Table B-1.

Procedures

The present study was coordinated by the researcher in cooperation with members of the Curriculum and Evaluation staffs at the Ingham Intermediate District office. Teachers in the participating districts administered the tests. The testing sessions were conducted in fall 1981. Training opportunities were made available for those schools that desired additional clarification of the survey instruments and the original 1974 study, and to answer related questions teachers might have had.

School-district participation was voluntary. District curriculum coordinators selected the school buildings in which the survey would be conducted. Building principals selected the teachers who would participate. Students were chosen according to the appropriate grade level. In the fourth grade, entire classes were tested. In the eighth and twelfth grades, teachers chose total social-studies classes to be tested. Students were given the option of not participating in the testing sessions.

To assist teachers in administering the tests, the student answer sheets were precoded with the names and identification numbers of the students. Confidentiality of test results was promised.

Study Design

Because this study was an extension of research conducted in 1974, the same instruments were used in both projects; some modifications were made in the instrument for the 1981 study. The Educational Testing Service permitted the Michigan Department of Education to replicate the ONOP study. The test instruments were provided by the Educational Testing Service and were validated by that agency. National norms were established. (See Appendix C.)

The instruments included three sets of survey booklets, which were parallel in content and format. The instruments for fourth-grade students and those for eighth and twelfth graders differed in terms of format and reading level, so that the measures were appropriate for each grade level.

All student measures were designed for pencil-and-paper administration. The researcher and members of the Ingham Intermediate evaluation staff rewrote the administration manuals so they would be appropriate for Ingham Intermediate teachers. The manuals were self-explanatory.

Description of Student Instruments

The original set of instruments for fourth-grade students comprised four separate booklets requiring 60 minutes for completion. Five instruments were included in these booklets: Student Background and Interests Questionnaire, Your Interest in Foreign Countries, Describing Nations, Knowledge Test, and Perception Measure.

The set of booklets for eighth and twelfth graders required 80 minutes for completion. The instruments in these booklets were entitled Student Background and Interests Questionnaire, Describing Nations and Peoples, Knowledge Test, and Perceptions.

For the purpose of efficiency and to facilitate scoring, the four separate booklets were combined into two booklets, A and B. Included in Booklet A, Fourth Grade, were the measures Describing Nations, Your Interest in Foreign Countries, and Student Background Questionnaire. Booklet B contained the Perception Measure and the Knowledge Test.

For eighth and twelfth graders, Booklet A contained Perceptions, Describing Nations and Peoples, and the Student Background and Interests Questionnaire. Booklet B contained the Knowledge Test.

The students wrote their answers directly in Booklet A. These answers were then keypunched and analyzed by means of a computer. Students used a separate answer sheet for Booklet B. These answers were computer scored.

A few modifications were made in the test instrument before it was administered. The foil for "President of Egypt" was changed from Sadat to Mubarak because of Sadat's death. Sensitive questions regarding income and socioeconomic status were deleted from the student-background questionnaires, as had been arranged by the volunteering school districts and the Ingham Intermediate School District.

The instrument comprised five subparts. Each section is briefly explained below, according to the grade level for which the test is intended and the test booklet in which it is located.

Booklet A, Fourth Grade

The Describing Nations test required 15 minutes of instruction and test time. The students were asked to describe each of ten countries in terms of such basic adjectives as large, small, peaceful, warlike, and so on, by drawing a circle around the adjectives they felt were appropriate descriptors of that country.

The Your Interest in Foreign Countries section of the instrument took about ten minutes to administer. The students were asked to circle the names of the countries they would most like to study, those they would most like to visit, and ways other than regular school work that helped them most to learn about other countries (i.e., television, books, travel, and relatives).

The teacher filled out the Student Background Questionnaire, which sought information regarding the students' birth date, sex, country of birth, amount of time spent outside the United States, and languages spoken by the students and their parents. Together, the Your Interest in Foreign Countries test and the Student Background Questionnaire provided data on the students' interests and background that might be related to what they thought about other nations and other peoples.

Booklet B, Fourth Grade

The Perception Measure section of the instrument took about 15 minutes to complete. In this measure, ten countries were paired in different combinations. The students were asked to mark how similar or how different they thought the countries were from each other.

The Knowledge Test required 15 minutes of test time and assessed the students' attainment of basic information about six selected nations and the world. The test emphasized information that students need to understand current events. Each of the 26 items was read aloud to the students. The questions were classified according to the following academic disciplines: 12 geography items, 3 culture items, 4 politics items, and 7 economics items.

Booklet A, Eighth and Twelfth Grades

Perceptions required 13 minutes for instruction and test time. The eighth-grade Perceptions measure differed from the fourth-grade one in that it listed 12 countries, rather than 10, to be rated for degree of similarity or difference.

Describing Nations and Peoples required a total of 25 minutes to administer. This test expanded on the fourth-grade test by including 12 nations and increasing the number of descriptors for each nation. The test also included a Describing Peoples section, which was designed to determine if students viewed the people of a country differently than they perceived the country itself.

Students were given ten minutes to complete the Student Background and Interests Questionnaire. This section included the questions asked of the fourth graders, as well as questions about social-studies courses completed and languages studied.

Booklet B, Eighth and Twelfth Grades

The Knowledge Test required 32 minutes of total instruction and test time. The questions in this test were more difficult than those in the fourth-grade test. As in the fourth-grade test, there were questions in each academic discipline. For the eighth grade, the classification included 16 geography items, 12 culture items, 11 politics items, and 13 economics items, for a total of 52 items. For the twelfth grade, the classification was 16 geography items, 11 culture items, 12 politics items, and 15 economics items, for a total of 54 items. Individual items on the Knowledge Test were identical at more than one grade level whenever possible. In some cases, the items were reworded slightly to make them more appropriate for the different grade levels.

Data-Analysis Procedures

In analyzing the data for the present study, the investigator used the same measures as those employed in the 1974 ONOP study, where appropriate, as well as other statistical procedures. In the Student Interests Questionnaire, the percentage of countries students selected to study and visit was explored. Data were listed in terms of percentage of respondents choosing a particular country. T-scores were used to analyze the data.

The resources students selected to help them learn about foreign countries were analyzed by Z-scores and chi-square tests to determine statistically significant differences. The Knowledge Test assessed the students' attainment of basic information about current events. Test results included average scores for males and females as well as for the group as a whole. Item scores were grouped by nations and included a mean and a standard deviation. T-scores were used to analyze the data.

A comparison between the countries students wanted to study and visit and their knowledge of those countries was analyzed using a one-way analysis of variance. The Ingham Intermediate teachers' travel experience was compared with that of the 1974 national teacher sample, using the Kolomogorov-Smirnov test.

The level of significance for all tests was set at .05. The results of the data analyses are presented in Chapter IV.

Hypotheses Tested

Null hypotheses were formulated to analyze data on the Ingham Intermediate students' interest in studying and visiting foreign countries, the resources students employed to learn about other countries, and students' global knowledge, as measured by the ONOP test. The Ingham Intermediate students' test results were compared to those of students in the 1974 national study, as well as across grade levels and between sexes in the Ingham Intermediate study. In Chapter IV, subhypotheses of each major hypothesis are stated to reflect these comparisons.

Ho_1: There is no significant difference between fourth-, eighth-, and twelfth-grade Ingham Intermediate students' selections of countries to study and those of students in the 1974 study.

Ho_2: There is no significant difference between fourth-, eighth-, and twelfth-grade Ingham Intermediate students' selections of countries to visit and those of students in the 1974 study.

Ho_3: There is no significant difference between fourth-, eighth-, and twelfth-grade Ingham Intermediate students' choices of resources to learn about foreign countries and the resources chosen by students in the 1974 study.

Ho_4: There is no significant difference between eighth- and twelfth-grade Ingham Intermediate students' knowledge of the United States and that of students in the 1974 study.

Ho_5: There is no significant difference between eighth- and twelfth-grade Ingham Intermediate students' knowledge of the world and five selected nations--Egypt, the USSR, China, France, and Mexico--and the knowledge of the 1974 students.

Ho_6: There is no significant difference between the total-item Knowledge Test results of fourth-, eighth-, and twelfth-grade Ingham Intermediate students and the test results of students in the 1974 study.

Ho_7: There is no significant difference across the fourth-, eighth-, and twelfth-grade levels in the Ingham Intermediate study, in terms of students' Knowledge Test results.

Ho_8: There is no significant relationship between fourth-, eighth-, and twelfth-grade Ingham Intermediate students' knowledge about a particular country and their interest in visiting that country.

Ho_9: There is no significant relationship between fourth-, eighth-, and twelfth-grade Ingham Intermediate students' knowledge about a particular country and their interest in studying that country.

The travel experience of teachers in the 1981 study, as measured by the Teacher Survey Questionnaire, was compared with that of the teachers in the 1974 sample to determine if statistically significant differences existed between the two groups. Hypotheses 10 and 11 were formulated to make this comparison.

Ho_{10}: There is no significant difference between Ingham Intermediate teachers and teachers in the 1974 study in terms of the number of countries they have visited.

Ho_{11}: There is no significant difference between the amount of time Ingham Intermediate teachers have spent in foreign countries and the amount of time spent by teachers in the 1974 study.

Summary

The methodology used in conducting the study was described in this chapter. The study sample comprised more than 1,600 fourth-, eighth-, and twelfth-grade students who attended school in four districts in the Ingham Intermediate School District, as well as 53 teachers from the same districts.

The procedures for obtaining the information in this study and the test instruments were also discussed in this chapter. The

statistical measures used to analyze the data included t-tests, chi-square tests, Z-scores, the Kolomogrov-Smirnov test, one-way analysis of variance, and percentage comparisons. Last, the null hypotheses formulated for the study were presented.

In Chapter IV, the data gathered in the study are presented and analyzed.

CHAPTER IV

DATA ANALYSIS

The purpose of this study was to explore the extent of global interests, knowledge, and attitudes toward other nations and peoples among selected fourth-, eighth-, and twelfth-grade students in the Ingham Intermediate School District. The data were obtained from students' responses to the Educational Testing Service's instrument, Other Nations, Other Peoples: A Survey of Student Interests, Knowledge, Attitudes and Perceptions (ONOP).

Students' results on the global Knowledge Test and attitude and interest inventory were compared with those of the 1974 national sample surveyed by the Educational Testing Service. The results of the 1981 Ingham Intermediate study and the 1974 national study were analyzed to determine if there were statistically significant differences between the two groups. The 1981 Ingham Intermediate students' test results were also compared internally on the basis of sex and grade level.

Ingham Intermediate students' global knowledge, their interest in studying and visiting certain foreign countries, and the resources they used to learn about other countries were analyzed to determine whether any statistically significant differences existed between the 1981 and the 1974 samples and between males and females in the Ingham

Intermediate sample. Ingham Intermediate teachers' travel experiences were compared with those of teachers in the 1974 sample to determine if statistically significant differences existed between the two teacher groups.

The procedure for collecting and analyzing the data was described in Chapter III. The hypotheses were analyzed by means of t-tests, chi-square, Kolomogrov-Smirnov test, Z-scores, and one-way analysis of variance (ANOVA) using the Statistical Package for the Social Sciences (SPSS) at the Data Processing Center of the Ingham Intermediate School District. This chapter presents the results of the statistical analyses as they relate to the various hypotheses and subhypotheses. In the following discussion, to avoid unnecessary repetition, the 1981 Ingham Intermediate sample is referred to as the 1981 sample and the 1974 national sample as simply the 1974 sample.

Student Interest in Studying Foreign Countries

The first major hypothesis stated that:

Ho_1: There is no significant difference between fourth-, eighth-, and twelfth-grade Ingham Intermediate students' selections of countries to study and those of students in the 1974 study.

Task Description

Given a list of 15 countries, students were asked to select all of those they wished to study. The data are listed in terms of the percentage of the total number of countries students selected to study. Each subhypothesis is presented individually, followed by a presentation and interpretation of the results for that subhypothesis.

Fourth Graders

Ho_{1a}: There is no significant difference between the 1981 fourth-grade students' selections of countries to study and those of the 1974 fourth-grade students.

Results:

For the scores for the 1981 fourth-grade sample and the 1974 sample on the question of the number of countries students selected to study, the t-score of -1.0376 was not statistically significant. The data supported the null hypothesis of no significant difference between the two groups ($p > .05$).

Eighth Graders

Ho_{1b}: There is no significant difference between the 1981 eighth-grade students' selections of countries to study and those of the 1974 fourth-grade students.

Results:

For the scores of the 1981 eighth-graders and the 1974 sample on the question of the number of countries students selected to study, the t-score of 1.3696 was not statistically significant. The data supported the null hypothesis of no significant difference between the two groups ($p > .05$).

Twelfth Graders

Ho_{1c}: There is no significant difference between the 1981 twelfth-grade students' selections of countries to study and those of the 1974 twelfth-grade students.

Results:

For the scores of the 1981 twelfth graders and the 1974 sample on the question of the number of countries students selected

to study, the t-score of 1.8103 was not statistically significant. Therefore, the data supported the null hypothesis of no significant difference between the two groups ($p > .05$).

The mean, standard deviation, variance, and t-score for each group are presented in Table 4.1. The mean refers to the percentage of the total number of countries students selected to study.

Table 4.1.--Results of comparisons between the 1981 sample and the 1974 sample in terms of students' selection of countries to study.

Study	Grade	Mean	S.D.	Variance	t-Score
1981	4	44.40	9.46	89.53	-1.0376
1974	4	40.27	12.19	148.50	
1981	8	17.12	7.01	49.20	1.3696
1974	8	20.13	4.84	23.41	
1981	12	20.72	7.92	62.72	1.8103
1974	12	22.53	7.03	49.41	

Student Interest in Visiting Foreign Countries

The second major hypothesis stated that:

Ho_2: There is no significant difference between fourth-, eighth-, and twelfth-grade Ingham Intermediate students' selections of countries to visit and those of students in the 1974 study.

Task Description

Given a list of 15 countries, students were asked to select all of those they wished to visit. The data are listed in terms of the percentage of the total number of countries students selected

to visit. Each subhypothesis is presented individually, followed by a discussion and interpretation of the results for that subhypothesis.

Fourth Graders

Ho_{2a}: There is no significant difference between the 1981 fourth-grade students' selections of countries to visit and those of the 1974 fourth-grade students.

Results:

For the scores of the 1981 fourth-grade sample and the 1974 sample on the question regarding the students' selection of countries to visit, the t-score of -1.8705 was not statistically significant. Therefore, the data did support the null hypothesis of no significant difference ($p > .05$).

Eighth Graders

Ho_{2b}: There is no significant difference between the 1981 eighth-grade students' selections of countries to visit and those of the 1974 eighth-grade students.

Results:

For the scores of the 1981 eighth-grade student sample and the 1974 sample on the question regarding the students' selection of countries to visit, the t-score of 0.3918 was not statistically significant. Hence the data did support the null hypothesis of no significant difference ($p > .05$).

Twelfth Graders

Ho_{2c}: There is no significant difference between the 1981 twelfth-grade students' selections of countries to visit and those of the 1974 twelfth-grade students.

Results:

For the scores of the 1981 twelfth-grade sample and the 1974 sample on the question regarding the students' selection of countries to visit, the t-score of 0.2329 was not statistically significant. Therefore, the data supported the null hypothesis of no significant difference ($p > .05$).

The mean, standard deviation, variance, and t-score for each group are presented in Table 4.2. The mean refers to the percentage of the total number of countries students selected to visit.

Table 4.2.--Results of comparisons between the 1981 sample and the 1974 sample in terms of students' selection of countries to visit.

Study	Grade	Mean	S.D.	Variance	t-Score
1981	4	47.74	12.12	146.88	-1.8705
1974	4	39.07	13.25	175.64	
1981	8	16.79	11.90	141.53	0.3918
1974	8	18.40	10.62	112.83	
1981	12	19.31	15.83	250.53	0.2329
1974	12	20.53	12.69	160.98	

Descriptive Overview of Student Interest in Studying and Visiting Foreign Countries

In this section of the test, students were asked to circle the names of all the countries they would most like to study. They were also asked to indicate the countries they would not like to visit, might like to visit, and would very much like to visit.

Fourth graders.--In the study/visit section of the test, fourth graders selected Mexico, France, England, and Japan as the countries they would most like to study. The USSR, Israel, and Liberia were chosen least often as countries to study. England, Mexico, France, and Spain were selected most frequently as places to visit. The least-often-selected nations to visit were Taiwan, the USSR, and Liberia.

At the fourth-grade level, the countries students selected to study were essentially the same as the ones they wanted to visit. In general, there were no great differences in the rank ordering of countries chosen in the study and visit categories.

Eighth graders.--Eighth graders preferred to study France, England, and Greece. China, India, and Liberia were selected less frequently as places to study. Eighth graders chose to visit England, France, and Italy. The least selected countries to visit were the USSR, India, and Liberia.

When comparing eighth graders' selections of countries to study and visit, the investigator found the greatest differences occurred in the following combinations: The USSR was ranked fifth for "would like to study" and fifteenth for "would like to visit." Italy was listed third in the visit category and seventh in the study category. Mexico was ranked sixth for visit and thirteenth for study.

Twelfth graders.--An examination of the twelfth graders' results revealed that these students ranked England as their first choice both to study and to visit. The second-most-selected country

to study was the USSR, although it was listed as eleventh in the visit section. France was the third choice in the study category and second in the visit section. Canada was ranked third in the visit section and fourth in the study section.

A corresponding relationship was found between the study and visit categories among most of the countries. The greatest differences were noted in the positions of the USSR, which was second in "like to study" and eleventh in "like to visit," and Greece, which was fifth in "like to visit" and eleventh in "like to study."

It appears that fourth-, eighth-, and twelfth-grade Ingham Intermediate students ranked England as their first choice of country to visit and ranked France as their second choice. Both England and France were also ranked in the top three positions of countries students would like to study. As students matured, their desire to study the USSR increased noticeably. However, there was no sign of an increased desire to visit that country.

A summary of the three countries most and least frequently selected to study and visit, as indicated by fourth-, eighth-, and twelfth-grade Ingham Intermediate students, is given in Table 4.3. A complete tabulation of the figures for all countries is included in Table B.2, Appendix B.

Conclusions on Countries Students Selected to Study and Visit

In this section of the test, differentiated results appeared at all grade levels, in that students chose different countries to study and to visit. As the grade level increased, the tendency to

distinguish between countries to study and to visit became more pronounced.

Table 4.3.--Ingham Intermediate students' selections of countries to study and to visit.

Fourth Graders	Eighth Graders	Twelfth Graders
Three Most Frequently Selected Countries to Study		
Mexico	France	England
France	England	USSR
tie {Japan	Greece	France
tie {England		
Three Least Frequently Selected Countries to Study		
USSR	China	Taiwan
Israel	India	India
Liberia	Liberia	Liberia
Three Most Frequently Selected Countries to Visit		
England	England	England
Mexico	France	France
France	Italy	Canada
Three Least Frequently Selected Countries to Visit		
USSR	USSR	E. Germany
Taiwan	India	China
Liberia	Liberia	tie {India
		tie {Liberia

The propensity to want to study and visit a greater number of foreign countries was significantly higher in the fourth grade than in the eighth and twelfth grades. This result was also found in the 1974 study. Students in the fourth grade appeared to have a

positive interest in learning about other countries. Interest declined in the eighth grade and increased again in the twelfth grade. These results are similar to those of the 1974 study.

The countries chosen as being the most desirable to visit were ones that appeared to have cultures similar to that of the United States. Canada and Western Europe were selected more frequently than Africa and Asia as being desirable places to visit.

The three major communist countries in the study--China, the USSR, and East Germany--were chosen by twelfth-grade students as being appealing places to study but not to visit. Eighth graders selected the USSR and East Germany as places they would like to study, but not as places they would like to visit. This finding was also evident in the 1974 results.

Resources Used by Students to Learn About Other Countries

The third major hypothesis stated that:

Ho_3: There is no significant difference between fourth-, eighth-, and twelfth-grade Ingham Intermediate students' choices of resources to learn about foreign countries and the resources chosen by students in the 1974 study.

Task Description

Given a list of resources, students selected the ones that provided them with the most information about other countries. Z-scores and chi-square tests were used to determine whether statistically significant differences existed between groups. In the following pages, each subhypothesis is presented, followed by a discussion and interpretation of the results for that subhypothesis.

Fourth Graders

Ho_{3a}: There is no significant difference between the 1981 fourth-grade students' selections of resources for learning about other countries and those of the 1974 fourth-grade students.

Results:

For the scores of the fourth-grade 1981 sample and the 1974 sample regarding the resources used by students, the chi-square of 20.22 was statistically significant. There was a statistically significant difference between the 1981 and the 1974 groups; therefore, the data failed to support the hypothesis ($p > .05$).

The Z-scores for fourth graders indicated significant differences ($p > .05$) between five of the seven possible items in this question. Significant differences were found for the choices of radio, books, travel, museums, and friends and relatives. A greater percentage of 1981 fourth graders selected these five items as being more influential in learning about other countries than did 1974 fourth graders. There was no significant difference between the two samples for the resources of television, movies, and church groups. A rank ordering of the top three resources, as seen by both the 1981 and the 1974 students, is given in Table 4.4.

Eighth Graders

Ho_{3b}: There is no significant difference between the 1981 eighth-grade students' selections of resources for learning about other countries and those of the 1974 eighth-grade students.

Results:

A chi-square of 33.57 indicated there was a statistically significant difference between the 1981 and the 1974 eighth graders

regarding resources selected to learn about foreign countries. The data did not support the null hypothesis ($p > .05$).

Table 4.4.--Rank ordering of resources that are influential in learning about other countries: top three choices.

Grade Level	1974 Sample	1981 Sample
4th	Television Books Travel	Travel Books Television
8th	Television Books Magazines, movies, teachers	Television Magazines Books
12th	Television Magazines Books	Television Magazines Books

Z-scores were computed for the 14 items to determine if any statistically significant differences existed. Significant differences were found between the items: radio, magazines, world fairs, and museums. A greater percentage of 1974 eighth graders selected world fairs and museums as being influential items than did 1981 students. A greater percentage of 1981 eighth graders selected radio and magazines as influential items than did 1974 students. No statistically significant differences ($p > .05$) were evidenced on the remaining items. Table 4.4 shows the three resources selected most frequently by both the 1981 and the 1974 eighth-grade groups.

Twelfth Graders

Ho_{3c}: There is no significant difference between the 1981 twelfth-grade students' selections of resources for learning about other countries and those of the 1974 twelfth-grade students.

Results:

A chi-square of 87.70 indicated there was a statistically significant difference between twelfth graders in the 1981 and the 1974 surveys on this item. Hence the data did not support the null hypothesis ($p > .05$).

Z-scores showed significant differences between the 1974 and 1981 groups for the items: world fairs and museums, parents, national events, and international events. A greater percentage of 1974 students selected world fairs and museums as being influential items than did 1981 students. A greater percentage of 1981 twelfth-grade students selected parents, national events, and international events as influential items than did their counterparts in the 1974 study. No significant differences were evidenced for the remaining items. See Table 4.4 for the three items selected most frequently by twelfth graders in both studies.

Summary

Both the 1981 and 1974 eighth- and twelfth-grade groups selected television most frequently as the most influential resource they used to learn about other countries. Magazines and books were the next most frequently selected resources for learning about other countries. Fourth graders in both studies differed only in the rank

ordering of their choices of resources. The items chosen were the same: television, books and travel.

Table B.3, Appendix B, lists the responses of the fourth-, eighth-, and twelfth-grade students in the 1981 sample to the item in the interest questionnaire concerning ways students learn about other countries.

The Status of Eighth- and Twelfth-Grade Ingham Intermediate Students' Global Knowledge: Item Analysis

Task Description

The global Knowledge Test assessed the students' attainment of basic information about the world and six selected countries. There were from three to nine questions per country, depending on the student's grade level. In the eighth-grade test, there were 52 items; in the twelfth grade test, there were 54 items. Item scores, which are based on the percentage of correct responses, are grouped by nations and include a mean and a standard deviation. T-tests were performed to determine whether statistically significant differences existed between students in the 1981 and 1974 samples and between males and females in the Ingham Intermediate study. Appendix Tables B.4 through B.8 list the results for the individual grade levels in both the 1981 and 1974 studies.

Eighth and Twelfth Graders' Knowledge About the United States

The fourth major hypothesis stated that:

Ho_4: There is no significant difference between eighth- and twelfth-grade Ingham Intermediate students' knowledge of the United States and that of students in the 1974 study.

Task Description

The Knowledge Test included approximately eight questions on various aspects of the United States. T-tests were used to analyze the data. The following subhypotheses delineate the secondary questions related to the major hypothesis regarding eighth- and twelfth-grade students' knowledge about the United States. Subhypotheses are stated according to grade level and sex. The results are presented after each subhypothesis. A summary is given at the end of each grade-level grouping of subhypotheses.

Eighth Graders

Ho_{4a}: There is no significant difference between eighth-grade males in the 1981 sample and those in the 1974 sample regarding their knowledge about the United States.

Results:

The Knowledge Test scores of eighth-grade males in the 1981 and 1974 samples were analyzed to determine if statistically significant differences existed between them regarding their knowledge of the United States. A t-score of -4.2020 was attained. A statistically significant difference did exist between the two samples of eighth-grade males. Those in the 1981 study performed significantly better than their counterparts in the 1974 study on questions concerning the United States. Thus the data did not support the null hypothesis of no significant difference ($p > .05$).

Ho_{4b}: There is no significant difference between eighth-grade females in the 1981 sample and those in the 1974 sample regarding their knowledge about the United States.

Results:

The Knowledge Test scores of eighth-grade females in the 1981 and 1974 samples were analyzed to determine if statistically significant differences existed between the two groups. The t-score of -4.4881 was statistically significant. A significant difference existed between the two samples of eighth-grade females. The 1981 sample performed significantly better than did the 1974 sample on questions concerning the United States. Hence the data did not support the null hypothesis of no significant difference ($p > .05$).

Ho_{4c}: There is no significant difference between eighth-grade males and females in the 1981 sample regarding their knowledge about the United States.

Results:

The scores of the eighth-grade male and female Ingham Intermediate students were analyzed to determine whether statistically significant differences existed between the two sexes. A t-score of 1.9367 was obtained. There was no statistically significant difference between eighth-grade males and females in the 1981 study in terms of their knowledge of the United States. Thus the data did support the null hypothesis ($p > .05$).

Summary of eighth-grade results.--A comparison of the results on the Knowledge Test for eighth-grade males in the 1981 and 1974 studies indicated statistically significant differences between the two groups. The 1981 males performed significantly better than did the 1974 males on questions concerning the United States.

A comparison of the Knowledge Test results of eighth-grade females in the 1981 and 1974 samples indicated statistically significant differences between the two groups. The 1981 females performed significantly better on questions concerning the United States than did the 1974 females.

A comparison of the 1981 males' and females' Knowledge Test results indicated no statistically significant difference between the two groups of eighth-grade Ingham Intermediate students.

Twelfth Graders

Ho_{4d}: There is no significant difference between twelfth-grade males in the 1981 sample and those in the 1974 sample regarding their knowledge about the United States.

Results:

The Knowledge Test scores of twelfth-grade males in the 1981 and 1974 samples were compared to determine whether statistically significant differences existed between the two groups. A t-score of -1.4591 was reached. There was no statistically significant difference between the twelfth-grade-male samples. Thus the data did support the null hypothesis of no significant difference ($p > .05$).

Ho_{4e}: There is no significant difference between twelfth-grade females in the 1981 sample and those in the 1974 sample regarding their knowledge about the United States.

Results:

The Knowledge Test scores of twelfth-grade females from both samples were analyzed to determine whether statistically significant differences existed between the two groups. A t-score of -2.2352 was reached. A statistically significant difference existed between

the two groups of twelfth-grade females. The 1981 females exhibited significantly greater knowledge about the United States than did their 1974 counterparts. The data did not support the null hypothesis ($p > .05$).

Ho_{4f}: There is no significant difference between twelfth-grade males and females in the 1981 sample regarding their knowledge about the United States.

Results:

The Knowledge Test scores of male and female twelfth-graders in the 1981 sample were analyzed to determine whether a statistically significant difference existed between the two groups. A t-score of 2.1345 was reached. A significant difference did exist between male and female twelfth graders concerning their knowledge about the United States. Twelfth-grade males performed significantly better than females on questions about the United States. Hence the data did not support the null hypothesis of no significant difference ($p > .05$).

Summary of twelfth-grade results.--A comparison of twelfth-grade males in the 1981 and 1974 samples regarding questions concerning the United States indicated no statistically significant difference between the two groups.

A statistically significant difference existed between twelfth-grade females in the 1981 and 1974 samples concerning their knowledge about the United States. The 1981 females attained higher scores on questions concerning the United States than did their counterparts in the 1974 sample.

An analysis of 1981 male and female twelfth graders' Knowledge Test scores indicated that males performed significantly better than females on questions concerning the United States.

Eighth and Twelfth Graders' Knowledge About the World and Five Selected Nations

The fifth major hypothesis stated that:

Ho_5: There is no significant difference between eighth- and twelfth-grade Ingham Intermediate students' knowledge of the world and five selected nations--Egypt, the USSR, China, France, and Mexico--and the knowledge of the 1974 students.

Task Description

The Knowledge Test sampled approximately five to nine questions per country. T-tests were used to analyze the data. The scores on the world and five selected nations were examined to determine whether statistically significant differences existed between the 1981 and 1974 groups and between males and females in the Ingham Intermediate study. The following subhypotheses delineate the secondary questions related to the major hypothesis regarding the eighth- and twelfth-grade students' knowledge about the world and five selected nations.

Eighth Graders

Ho_{5a}: There is no significant difference between eighth-grade males in the 1981 and 1974 samples in terms of their knowledge about the world and five selected nations--Egypt, the USSR, China, France, and Mexico.

Results:

The Knowledge Test results of eighth-grade males in the 1981 and 1974 studies, concerning the world and five selected nations,

were analyzed to determine if statistically significant differences existed between the two groups. T-scores were obtained, and the results indicated that there were no statistically significant differences between the two eighth-grade groups. The data did support the null hypothesis ($p > .05$).

Ho_{5b}: There is no significant difference between eighth-grade females in the 1981 and 1974 samples in terms of their knowledge about the world and five selected nations--Egypt, the USSR, China, France, and Mexico.

Results:

The Knowledge Test scores of eighth-grade females in both the 1981 and 1974 samples on the world and five selected nations were analyzed to determine if statistically significant differences existed between the two groups. The results were mixed.

An analysis of the Knowledge Test scores on Egypt revealed a t-score of -2.1129. This indicated a statistically significant difference between the two groups. Eighth-grade females in the 1981 sample performed significantly better on questions concerning Egypt than did their counterparts in the 1974 sample. Hence the data did not support the null hypothesis ($p > .05$).

An analysis of the Knowledge Test scores on the world and the countries of Mexico, France, the USSR, and China indicated no statistically significant differences between the two samples of eighth-grade females. Thus the data did support the null hypothesis in these areas ($p > .05$).

Ho_{5c}: There is no significant difference between eighth-grade males and females in the 1981 sample in terms of their knowledge about the world and five selected nations--Egypt, the USSR, China, France, and Mexico.

Results:

The Knowledge Test scores of eighth-grade males and females in the 1981 study were analyzed to determine whether statistically significant differences existed between the two groups. The results were mixed. T-scores indicated that there were statistically significant differences between the two groups on questions concerning the world (-3.1208), Egypt (3.0152), the USSR (3.7227), China (3.6432), and France (1.8453). The 1981 eighth-grade males performed significantly better in these areas than did the females. Hence the data did not support the null hypothesis ($p > .05$).

The results of the analysis of Knowledge Test scores on Mexico exhibited no statistically significant difference between eighth-grade Ingham Intermediate males and females. The data for this item did support the null hypothesis ($p > .05$).

Summary of eighth-grade results.--A comparison of eighth-grade males in the 1981 and 1974 samples indicated that there were no statistically significant differences between the two groups.

In comparing eighth-grade females in the 1981 and 1974 samples, a statistically significant difference was found between the two groups on Knowledge Test scores for Egypt; that is, 1981 females performed significantly better on questions concerning Egypt than did their 1974 counterparts. The two groups exhibited no significant differences in results on the remaining countries.

A comparison of the male and female eighth graders in the 1981 sample indicated that males performed significantly better than females on questions concerning the world, Egypt, the USSR, China, and France. There was no significant difference in performance on questions concerning Mexico.

Twelfth Graders

Ho_{5d}: There is no significant difference between twelfth-grade males in the 1981 and 1974 samples in terms of their knowledge about the world and five selected nations--Egypt, the USSR, China, France, and Mexico.

Results:

The Knowledge Test scores of twelfth-grade males in the 1981 and 1974 studies regarding the world and five selected nations were examined to determine if significant differences existed between the two samples. The results were mixed. T-scores indicated statistically significant differences in Knowledge Test results for the countries of France (-5.1669) and Egypt (-2.0525). Males in the 1981 sample performed significantly better on questions concerning these countries than did those in the 1974 sample. Hence the data did not support the null hypothesis for these items ($p > .05$).

No statistically significant differences existed for questions on the world, the USSR, China, and Mexico. The data did support the null hypothesis for these items ($p > .05$).

Ho_{5e}: There is no significant difference between twelfth-grade females in the 1981 and 1974 samples in terms of their knowledge about the world and five selected nations--Egypt, the USSR, China, France, and Mexico.

Results:

The Knowledge Test scores of twelfth-grade females in the 1981 and 1974 samples were analyzed to determine if significant differences existed between the two groups. The results were mixed. T-scores indicated that there was a statistically significant difference between the two samples' knowledge about France (-3.9368). Twelfth-grade females in the 1981 study performed significantly better on questions concerning France than did those in the 1974 sample. Thus the data did not support the null hypothesis ($p > .05$).

T-scores also indicated significant differences in knowledge about China (4.4363). In this instance, 1974 twelfth-grade females performed significantly better than 1981 females on the Knowledge Test section pertaining to China. The data did not support the null hypothesis for this item ($p > .05$).

T-scores indicated no significant difference in Knowledge Test scores for the USSR, Egypt, Mexico, and the world. The data did support the null hypothesis in these cases ($p > .05$).

Ho_{5f}: There is no significant difference between twelfth-grade males and females in the 1981 sample in terms of their knowledge about the world and five selected nations--Egypt, the USSR, China, France, and Mexico.

Results:

The Knowledge Test scores of twelfth-grade Ingham Intermediate males and females were analyzed to determine whether statistically significant differences existed between the two groups. The t-scores showed mixed results. The t-scores indicated significant differences existed between the groups concerning their knowledge of China

(2.3288), France (3.3106), Mexico (3.0681), the USSR (4.8335), and Egypt (3.7878). In each of these instances, the twelfth-grade males performed significantly better than did the females. The data did not support the null hypothesis for these items ($p > .05$).

T-scores indicated no significant difference between twelfth-grade Ingham Intermediate males and females regarding their knowledge of the world. The data did support the null hypothesis for this item ($p > .05$).

Summary of twelfth-grade results.--A comparison of the Knowledge Test results of twelfth-grade males in the 1981 and 1974 samples indicated that there were two statistically significant differences between the two groups. Twelfth-grade males in the 1981 study performed significantly better on questions concerning France and Egypt than did those in the 1974 sample. No significant differences between the two groups of males were evident on questions concerning the world and the remaining countries examined.

A comparison of twelfth-grade females in the 1981 and 1974 studies indicated some statistically significant differences between these groups. Females in the 1981 study performed significantly better on questions regarding France than did those in the 1974 study. The 1974 group performed significantly better on questions concerning China than did the 1981 group. No significant differences between these groups were evident on questions concerning the remaining countries and the world.

A comparison of Knowledge Test scores of twelfth-grade males and females in the 1981 study indicated statistically significant

differences between the two groups. Males achieved significantly higher scores than females on questions concerning China, France, Mexico, the USSR, and Egypt. No significant differences existed between the two groups on questions regarding the world.

The Status of Fourth-, Eighth-, and Twelfth-Grade Ingham Intermediate Students' Global Knowledge: Total Score Analysis

The sixth major hypothesis stated that:

Ho_6: There is no significant difference between the total-item Knowledge Test results of fourth-, eighth-, and twelfth-grade Ingham Intermediate students and the test results of students in the 1974 study.

Analysis Description

The results of the Knowledge Test can be examined by an item analysis, as in the previous section, or by a total-score analysis of all test items, as in this section. The number of items in the Knowledge Test varied according to the students' grade level. The fourth-grade Knowledge Test comprised 26 items; the eighth-grade test, 52 items; and the twelfth-grade test, 54 items.

The total score was based on the percentage of students responding correctly to the questions. Appendix Tables B.4 through B.8 list the results by individual grade levels. T-tests were used to determine whether statistically significant differences existed between groups in terms of their total scores on the Knowledge Test. The 1981 students' responses were compared to those of the 1974 students. Internal comparisons based on sex and grade level were

made to determine if statistically significant differences existed between groups.

The following subhypotheses delineate the secondary questions related to the major research hypothesis regarding the global knowledge of fourth-, eighth-, and twelfth-grade Ingham Intermediate students.

Fourth Graders

Ho_{6a}: There is no significant difference between fourth-grade males in the 1981 and 1974 samples in terms of their total Knowledge Test results.

Results:

The 26-item total Knowledge Test score of fourth-grade 1981 males was compared with that of 1974 males to determine if a significant difference existed between the two groups. A t-score of -5.2976 was attained, indicating that a significant difference existed between the two fourth-grade-male groups. Males in the 1981 group achieved significantly higher scores on the Knowledge Test than did those in the 1974 sample. The data did not support the null hypothesis of no significant difference ($p > .05$).

Ho_{6b}: There is no significant difference between fourth-grade females in the 1981 and 1974 samples in terms of their total Knowledge Test results.

Results:

The total Knowledge Test scores of fourth-grade females in both the 1981 and 1974 samples were compared to determine whether statistically significant differences existed between the two groups.

A t-score of -4.8926 was attained, indicating that there was a statistically significant difference between the two fourth-grade female samples. The 1981 group achieved significantly higher scores on the Knowledge Test than did the 1974 group. Therefore, the data did not support the null hypothesis ($p > .05$).

Ho_{6c}: There is no significant difference between fourth-grade males and females in the 1981 sample in terms of their total Knowledge Test scores.

Results:

The total Knowledge Test scores of fourth-grade males and females in the 1981 study were analyzed to determine whether a statistically significant difference existed between the two groups. A t-score of 5.2758 was reached. This means there was a statistically significant difference between the two groups of students. Fourth-grade males performed significantly better on the Knowledge Test than did their female counterparts. The data did not support the null hypothesis ($p > .05$).

Summary of fourth-grade results.--A comparison of the total Knowledge Test scores of fourth-grade males in the 1981 and 1974 groups indicated that males in the 1981 study had significantly higher scores on the Knowledge Test than did those in the 1974 study.

A comparison of the total Knowledge Test scores of fourth-grade females in the 1981 and 1974 studies indicated a statistically significant difference existed between the two groups. The 1981 group performed significantly better on the Knowledge Test than did the 1974 group.

An analysis of the scores of the fourth-grade males and females in the 1981 study indicated statistically significant differences existed between the two groups. T-scores illustrated that fourth-grade males performed significantly better than their female counterparts on the Knowledge Test.

Eighth Graders

Ho_{6d}: There is no significant difference between eighth-grade males in the 1981 and 1974 samples in terms of their total Knowledge Test scores.

Results:

The total Knowledge Test scores of the eighth-grade males in the 1981 and 1974 samples were compared to determine whether a statistically significant difference existed between the two groups. T-scores indicated no statistically significant difference between the two male samples. Hence the data did support the null hypothesis ($p > .05$).

Ho_{6e}: There is no significant difference between eighth-grade females in the 1981 and 1974 samples in terms of their total Knowledge Test scores.

Results:

The total Knowledge Test scores of eighth-grade females in the 1981 and 1974 samples were compared to determine if a statistically significant difference existed between the two groups. T-scores indicated no significant difference between the two female groups. Thus the data did support the null hypothesis ($p > .05$).

Ho_{6f}: There is no significant difference between eighth-grade males and females in the 1981 sample in terms of their total Knowledge Test scores.

Results:

The total Knowledge Test scores of eighth-grade males and females in the 1981 sample were analyzed to determine whether significant differences existed between the two groups. A t-score of 4.1834 was attained. There was a statistically significant difference between the males and females' Knowledge Test scores. Males performed significantly better than females. The data did not support the null hypothesis ($p > .05$).

Summary of eighth-grade results.--A comparison of eighth-grade males in the 1981 and 1974 samples indicated no statistically significant differences existed between the two groups in terms of their total Knowledge Test scores.

No significant difference was found between eighth-grade females in the 1981 and 1974 samples in terms of their total Knowledge Test results.

A comparison of eighth-grade Ingham Intermediate males and females indicated a statistically significant difference between the two groups. The males achieved significantly higher scores on the Knowledge Test than did the females.

Twelfth Graders

Ho_{6g}: There is no significant difference between twelfth-grade males in the 1981 and 1974 samples in terms of their total Knowledge Test scores.

Results:

The total Knowledge Test scores of twelfth-grade males were analyzed to determine whether statistically significant differences existed between the 1981 and 1974 samples. T-scores indicated no significant difference between the two groups. Hence the data did support the null hypothesis ($p > .05$).

Ho_{6h}: There is no significant difference between twelfth-grade females in the 1981 and 1974 samples in terms of their total Knowledge Test scores.

Results:

The total Knowledge Test scores for twelfth-grade females were analyzed to determine if statistically significant differences existed between the 1981 and 1974 groups. T-scores indicated no significant difference between the two female samples. Thus the data did support the null hypothesis ($p > .05$).

Ho_{6i}: There is no significant difference between twelfth-grade males and females in the 1981 sample in terms of their total Knowledge Test scores.

Results:

The total Knowledge Test scores of twelfth-grade males and females in the 1981 sample were analyzed to determine whether statistically significant differences existed between the two groups. A t-score of 5.5578 was attained, indicating that there was a statistically significant difference between the males and females. The males performed significantly better on the Knowledge Test than did the females. Therefore, the data did not support the null hypothesis ($p > .05$).

Summary of twelfth-grade results.--A comparison of twelfth-grade males in the 1981 and 1974 samples indicated no statistically significant difference between the two groups in terms of their total Knowledge Test scores.

Likewise, no statistically significant difference was found between the twelfth-grade females in the 1981 and 1974 samples in terms of their total Knowledge Test scores.

A comparison of twelfth-grade Ingham Intermediate males and females indicated a statistically significant difference between the groups in terms of their total Knowledge Test scores. The males achieved significantly higher scores on the Knowledge Test than did the females.

Ingham Intermediate Students' Knowledge Test Results Across Grade Levels: Total Item Score Analysis

The seventh major hypothesis stated that:

Ho_7: There is no significant difference across the fourth-, eighth-, and twelfth-grade levels in the Ingham Intermediate study, in terms of students' Knowledge Test results.

Analysis Description

The total Knowledge Test scores of fourth-, eighth-, and twelfth-grade Ingham Intermediate students were compared across grade levels to determine whether statistically significant differences existed. T-tests were used to analyze the data. The following sub-hypotheses delineate the secondary research questions related to the major hypothesis concerning the global knowledge of Ingham Intermediate students across grade levels.

Ho_{7a}: There is no significant difference between Ingham Intermediate twelfth- and eighth-grade males in terms of their total Knowledge Test scores.

Results:

The total Knowledge Test scores of twelfth- and eighth-grade Ingham Intermediate male students were compared to determine if statistically significant differences existed between the two groups. A t-score of 5.5286 was reached, indicating there was a statistically significant difference between the two groups of males. Twelfth graders performed significantly better on the Knowledge Test than did eighth graders. Hence the data did not support the null hypothesis ($p > .05$).

Ho_{7b}: There is no significant difference between Ingham Intermediate twelfth- and fourth-grade males in terms of their total Knowledge Test scores.

Results:

The total Knowledge Test scores of Ingham Intermediate twelfth- and fourth-grade males were compared to determine if statistically significant differences existed between the two groups. A t-score of 8.0906 was attained. A statistically significant difference was found to exist between the two groups of male students. Twelfth graders achieved significantly higher scores on the Knowledge Test than did fourth graders. Thus the data did not support the null hypothesis ($p > .05$).

Ho_{7c}: There is no significant difference between Ingham Intermediate eighth- and fourth-grade males in terms of their total Knowledge Test scores.

Results:

The total Knowledge Test scores of eighth- and fourth-grade Ingham Intermediate males were compared to determine if a statistically significant difference existed between the two groups. A t-score of 3.1862 was obtained, indicating that there was a statistically significant difference between the eighth- and fourth-grade males' performance on the Knowledge Test. Eighth graders performed significantly better than fourth graders. The data did not support the null hypothesis ($p > .05$).

Ho_{7d}: There is no significant difference between Ingham Intermediate twelfth- and eighth-grade females in terms of their total Knowledge Test scores.

Results:

The total Knowledge Test scores of twelfth- and eighth-grade Ingham Intermediate females were compared to determine whether a statistically significant difference existed between the two groups. A t-score of 3.9334 was reached, showing there was a statistically significant difference between the two groups of females. Twelfth graders performed significantly better on the Knowledge Test than did eighth graders. The data did not support the null hypothesis ($p > .05$).

Ho_{7e}: There is no significant difference between Ingham Intermediate twelfth- and fourth-grade females in terms of their total Knowledge Test scores.

Results:

The total Knowledge Test scores of twelfth- and fourth-grade Ingham Intermediate females were compared to determine if a

statistically significant difference existed between the two groups. A t-score of 7.6599 was reached. A statistically significant difference existed between the Knowledge Test scores of twelfth- and fourth-grade females. Twelfth graders performed significantly better on the Knowledge Test than did fourth graders. The data did not support the null hypothesis ($p > .05$).

Ho_{7f}: There is no significant difference between Ingham Intermediate eighth- and fourth-grade females in terms of their total Knowledge Test scores.

Results:

The total Knowledge Test scores of eighth-grade Ingham Intermediate females were compared with those of fourth-grade females to determine if a statistically significant difference existed between the two groups. A t-score of 4.2768 was reached, indicating there was a statistically significant difference between the groups in terms of their total Knowledge Test scores. Eighth-graders performed significantly better on the Knowledge Test than did fourth graders. The data did not support the null hypothesis ($p > .05$).

Summary of results across grade levels.--The total Knowledge Test scores of fourth-, eighth-, and twelfth-grade male Ingham Intermediate students were compared to determine if statistically significant differences existed among students in the three grade levels. The results indicated that there were statistically significant differences at all grade levels. Twelfth-grade males performed significantly better on the Knowledge Test than did eighth- and fourth-grade males. Eighth-grade males performed significantly better on the Knowledge Test than did their fourth-grade counterparts.

The total Knowledge Test scores of fourth-, eighth-, and twelfth-grade female Ingham Intermediate students were compared to determine if statistically significant differences existed among students in the three grade levels. The results indicated that there were statistically significant differences at all grade levels. Twelfth-grade females performed significantly better on the Knowledge Test than did their eighth- and fourth-grade counterparts. Eighth-grade females performed significantly better than fourth graders on the Knowledge Test.

The results indicated that the higher the grade level, the better the students' results on the Knowledge Test. Older students exhibited more knowledge about the world than did younger students.

The Knowledge Test: An Examination of the Areas of Strength and Weakness--Fourth-, Eighth-, and Twelfth-Grade Ingham Intermediate Students

Task Description

The Knowledge Test assessed the students' attainment of basic information concerning the world and six selected nations. Each area of the Knowledge Test--map location, the world, and the six selected nations--was examined for strengths and weaknesses as determined by correct responses by the fourth-, eighth-, and twelfth-grade Ingham Intermediate students. T-tests were used to analyze the data.

Percentages of students who answered the multiple-choice questions correctly were listed for each of the individual items at each of the three grade levels. The 1981 results were compared with the 1974 results to discover whether there were statistically significant

differences between the two groups. Ingham Intermediate males and females were compared to determine whether there were statistically significant differences on the basis of sex.

Results

Map location.--Students were asked to locate six countries on a world map. The six countries and their item statistics are presented in Table 4.5. The results are presented in the following paragraphs by individual grade levels.

Table 4.5.--Percentage of Ingham Intermediate students correctly identifying six countries on a map.

Country	Fourth Graders	Eighth Graders	Twelfth Graders
United States	77.0%	88.6%	91.4%
Mexico	49.2	77.2	78.0
France	37.8	68.0	82.3
Russia/USSR	32.8	79.1	89.9
China	37.5	70.5	79.8
Egypt	27.7	59.3	63.9

Fourth graders: The United States was correctly located on a world map by 77% of the Ingham Intermediate fourth graders. Fewer than half of the fourth-grade students located the remaining countries correctly, as follows: Mexico (49.2%), France (37.8%), China (37.5%), the USSR (32.8%), and Egypt (27.7%). There was no statistically significant difference between the 1981 and 1974 samples in terms of their map-location scores.

Eighth graders: Eighth graders scored relatively higher on the map-location part of the Knowledge Test than did fourth graders. About 89% of the Ingham Intermediate eighth graders correctly identified the United States on a world map. More than half of the eighth graders correctly located the remaining five countries: the USSR (79.1%), Mexico (77.2%), China (70.5%), France (68.0%), and Egypt (59.3%). No statistically significant difference existed between the 1981 and 1974 samples in terms of their map-location scores.

Twelfth graders: More than 60% of the twelfth-grade Ingham Intermediate students could correctly locate all six countries on a world map. The United States was located correctly by 91.4% of the twelfth graders, the USSR by 89.9%, France by 82.3%, China by 79.8%, Mexico by 78.0%, and Egypt by 63.9%. No statistically significant difference was discovered between the 1981 and 1974 samples in terms of their map-location scores.

Summary: The results on the map-location section of the Knowledge Test indicated that students' ability to locate particular nations on a map increased as the students progressed through the grades. In both the 1981 and the 1974 studies, the range of correct responses for identifying foreign countries was lower at the fourth-grade level than at the eighth- and twelfth-grade levels.

A consistency was apparent in the types of errors across the three grade levels. The most frequently selected distractor for the United States was Canada; for Mexico, Colombia; for France, Sweden; for the USSR, China; and for Egypt, Algeria. The only exception to

this pattern was China, which was placed in India by fourth and twelfth graders and in Japan by eighth graders.

The results were consistent with those of the 1974 study. A comparison of the 1981 and 1974 map-location results did not indicate any statistically significant differences in correct responses, except for the eighth graders' location of Egypt. A greater percentage of 1981 eighth graders correctly identified Egypt on a map than did those in the 1974 study.

The scores of the 1981 fourth-, eighth-, and twelfth-grade students, in comparison with those of students in the 1974 study, did exhibit differences in percentage points. This occurred for all of the countries except Mexico, in which a slight decrease was noted. The difference was not statistically significant. Overall, map-location skills of the students in the 1981 study were better than those of students in the 1974 study, but not to any statistically significant degree.

The United States.--The Knowledge Test included three questions on the United States for fourth graders, six for eighth graders, and seven for twelfth graders. The results are listed in the following paragraphs in terms of the percentage of students at each grade level who answered the questions correctly.

Fourth graders: Of the three questions on the United States, the one a large percentage (77.1%) of the 1981 fourth graders answered correctly concerned the raising of revenue by the United States government through the collection of taxes. Less than half of them (37.5%)

knew that Congress makes the laws, yet significantly more students in the 1981 study responded correctly than did 1974 fourth graders (24.0%). More than half (50.9%) of the 1981 fourth-grade students knew that the people in the United States speak the same language as the people in England.

Eighth graders: More than half of the 1981 eighth graders responded correctly to the six questions on the United States. Significantly more 1981 eighth graders (64.5%) than 1974 eighth graders (30.0%) recognized that defense has been the major source of expenditures for the United States. A large percentage of 1981 eighth graders (82.1%) as well as 1974 eighth graders (82.0%) knew that the United States collects most of its money through taxes.

Twelfth graders: Significantly more 1981 twelfth graders (64.8%) than those in the 1974 sample (46.0%) recognized defense as the major source of United States expenditures. Individual item analyses did not reveal any other statistically significant differences between twelfth graders in the 1981 and 1974 groups. More than 60% of the 1981 twelfth graders correctly answered the seven questions on the United States, with the exception of the question that dealt with authority in regional governments. About 35% of the students thought the USSR had the most authority in regional governments, as compared to 33% who correctly chose the United States.

Summary: Responses of students in both the 1981 and the 1974 studies indicated a limited knowledge of governmental functioning in the United States. The major exception was the recognition of defense

as a major source of public expenditures. Eighth and twelfth graders in the 1981 study answered significantly more questions correctly than did their counterparts in the 1974 study.

Mexico.--The fourth-grade form of the Knowledge Test contained two questions on Mexico; the eighth- and twelfth-grade forms each contained six questions. The results are listed in the following paragraphs in terms of the percentage of students at each grade level who answered the questions correctly.

Fourth graders: More than 60% of the fourth-grade students in the 1981 sample answered the two questions on Mexico correctly. Almost 70% knew the peso is Mexican money, and 75.2% knew that Mexico has a warmer climate than Canada, England, and China. No significant difference existed between the test results of fourth graders in the 1981 and the 1974 studies.

Eighth and twelfth graders: A large percentage of both eighth (88.8%) and twelfth (93.6%) graders in the 1981 study knew Mexico has a warmer climate than Canada, England, and China and that the peso is the term for Mexican money (eighth graders--89.2%; twelfth graders--94.2%). The students did not do as well on the remaining questions on Mexico. Seventy percent of the twelfth graders knew that Mexico has an elected president, but only 44.1% of the eighth graders were aware of this fact. Neither eighth (15.3%) nor twelfth (28.4%) graders realized that Mexico has had the same political party since 1939. Eighth graders were also ill informed about the predominant religion of Mexico. About 38% thought it was Mayan, and 29%

selected Roman Catholic. Fifty percent of the twelfth graders selected the correct answer--Roman Catholic. No statistically significant differences existed between the scores of eighth and twelfth graders in the 1981 and 1974 samples on this portion of the Knowledge Test.

Summary: The results indicated no statistically significant difference in knowledge about Mexico between students in the 1981 and 1974 studies. Climate and money appeared to be the areas in which students knew the most about Mexico. Government and religion were the areas in which pupils demonstrated the least knowledge.

France.--The fourth-grade form of the Knowledge Test contained one question on France, the eighth-grade test included five questions, and the twelfth-grade test had five items. The results are listed in the following paragraphs in terms of the percentage of correct responses at each grade level.

Fourth graders: A statistically significant difference was noted between the 1981 and 1974 fourth graders' response regarding the major product of France. About 34% of the 1981 fourth graders selected the correct foil, perfume, compared to 22% of the 1974 fourth graders.

Eighth and twelfth graders: No significant difference was evident between eighth and twelfth graders in the 1981 and 1974 studies in terms of their knowledge of France. More of the twelfth grade students in the 1981 sample (59.6%) knew the climatic characteristics of France than did the 1974 eighth graders (36.4%); the major product of France (twelfth--79.5%; eighth--66.2%); and the eastern

boundary location with Germany (twelfth--45%; eighth--30.8%). However, a greater percentage of 1981 eighth graders (20.2%) than twelfth graders (14.1%) knew that the head of government in France is the President. Nearly 40% of the twelfth graders thought it was Parliament, and 36.8% of the eighth graders selected the foil, Prime Minister.

Summary: No significant difference existed between eighth- and twelfth-grade students in the 1981 and 1974 studies regarding their knowledge of France. There was a significant difference in the eighth graders' responses. However, the results seemed to indicate limited knowledge about France on the part of students at all three grade levels in the Ingham Intermediate study.

The USSR.--The fourth-grade form of the Knowledge Test contained two questions on the USSR; the eighth- and twelfth-grade forms both had eight items on the USSR. The results are listed in the following paragraphs according to the percentage of correct responses by students at each grade level.

Fourth graders: No significant difference existed between fourth graders in the 1981 and 1974 studies in terms of knowledge about the USSR. Thirty-two percent of the 1981 fourth graders knew that the USSR is located in the continents of both Europe and Asia, and only 28.7% knew it has a communist government. A majority (54.1%) of them thought the United States had a communist government.

Eighth and twelfth graders: A significant difference was found between eighth graders in the 1981 and 1974 samples on the question concerning the USSR's foreign trade. Forty-eight percent of

1981 eighth graders knew the USSR's foreign trade is with communist countries, as compared to 36% of the 1974 eighth graders. A greater percentage of 1981 twelfth graders than eighth graders answered questions correctly. Both groups were unsure of the correct response regarding the formation of the republics of the Soviet Union. A large number of eighth (48.4%) and twelfth (40.7%) graders incorrectly answered that political orientations of the people form the basis of the USSR's republics, rather than the correct response of ethnic groups (eighth--21.5%; twelfth--22.6%). No significant differences existed between groups on the remaining questions regarding the USSR.

Summary: Ingham Intermediate students' knowledge about the USSR appeared to be limited. A statistically significant difference existed between eighth graders in the 1981 and 1974 studies regarding their knowledge about the USSR's foreign trade. However, there was no significant difference between 1981 fourth and twelfth graders and their counterparts in the 1974 study in terms of their knowledge about the USSR.

China.--The fourth-grade form of the Knowledge Test contained four questions on China; the eighth- and twelfth-grade tests each contained six items on China. The results are reported in the following paragraphs in the form of percentage of correct responses by students in each grade level.

Fourth graders: No statistically significant difference existed between the 1974 fourth graders' results on China and the 1981 students' results. A greater percentage of 1981 fourth graders

(52.6%) thought the United States had more people than China (15.5%). Only 40.9% knew the United States is becoming friendlier with China, and 52.7% knew that most of the Chinese people are farmers. About 30% chose the correct answer of the bicycle as the primary means of transportation in China, whereas 40.2% selected the automobile.

Eighth and twelfth graders: More than 50% of the Ingham Intermediate eighth and twelfth graders knew that China has the largest population (eighth--50.7%; twelfth--64.5%). About 63% of the eighth graders knew that the United States is becoming friendlier with China. This question was not asked in the twelfth-grade test. About half (51.8%) of the eighth graders recognized that the Chinese are mainly farmers, and 52.3% knew that the bicycle is the main form of transportation in China. Of the twelfth graders, 66.2% knew that bicycles are the main form of transportation in China, but only 46.8% knew that the Chinese are primarily farmers. About one-third of the 1981 eighth graders responded correctly to questions describing the culture of China, which is not a caste system (32.9%), and recognized that the language has many dialects (30.3%). Thirty-two percent of the 1981 twelfth graders were informed about the Chinese language, and 42.8% knew about the Chinese culture. Only 10.4% were knowledgeable about China's establishment of "workers' colleges." Overall, no statistically significant difference was noted between 1981 and 1974 eighth and twelfth graders regarding their knowledge of China.

Summary: No statistically significant difference was found between students in the 1981 and 1974 studies in regard to their

knowledge of China. Ingham Intermediate students' results demonstrated a need for more information on China.

Egypt.--The fourth-grade Knowledge Test contained three questions on Egypt; the eighth- and twelfth-grade forms contained six and seven items, respectively. Results are reported in the following paragraphs in the form of percentage of correct responses by grade level.

Fourth graders: More 1981 fourth graders (64.8%) than their 1974 counterparts (52%) knew that Egypt is made up primarily of deserts. This indicated a significant difference between the two groups. Only 43.3% of the 1981 fourth graders knew that Egypt is an Arab country, and 18% knew that cotton is an important product of Egypt.

Eighth and twelfth graders: No statistically significant difference existed between eighth and twelfth graders in the 1981 and 1974 studies on the items about Egypt. A greater percentage of Ingham Intermediate twelfth graders answered more questions correctly than did eighth graders. Almost 74% of the 1981 eighth graders knew that Egypt is made up of deserts, and 80.7% of the twelfth graders responded correctly to this question. Only 37.8% of the eighth graders knew that Egypt is an Arab country, whereas 47.9% of them thought Isreal was an Arab country. Twelfth graders' responses indicated that 37.3% thought that Egypt was an Arab country and 49.8% thought Israel was an Arab country.

The 1981 ONOP test was given shortly after President Sadat was assassinated. Only 19.4% of the eighth graders and 30% of the twelfth graders knew the new president of Egypt was Mubarek. Eighth and twelfth graders were also ill informed about the purpose of the Aswan Dam. Only 16.6% of the eighth graders and 22.3% of the twelfth graders chose the correct response to this question. More than 55% of the twelfth graders thought Kuwait produced the least crude oil, compared to 27.5% selecting the appropriate response, which was Egypt.

Summary: The results of the 1981 eighth and twelfth graders did not differ significantly from those of their 1974 counterparts. Despite the Middle East's increased exposure in the media over the last eight years, the 1981 students' scores were slightly lower than those of the 1974 sample.

The world.--Four questions on the world were included in the fourth-grade Knowledge Test, and eight in the eighth- and twelfth-grade tests. The results are discussed in the following pages in terms of the percentage of correct responses by grade level.

Fourth graders: More than 50% (56.3%) of the 1981 fourth graders knew that all people have a language, and 72.1% knew that most of the world is made up of oceans. Nearly 45% knew the purpose of the United Nations, and 74.4% knew that the United States and Russia had sent rockets to the moon. Most fourth graders did not know the number of people in the world; 70.6% selected a response that indicated more people than there actually are. No statistically

significant difference existed between the 1981 and 1974 samples of fourth graders on this test.

Eighth and twelfth graders: Ingham Intermediate twelfth graders had a greater percentage of correct responses on this test than did eighth graders. Questions that stood out in importance concerned the members of the Common Market, the number of people in the world, the continent with the most people per square mile, and the reason for the world's changing population. Only 15.7% of eighth graders and 30% of twelfth graders knew that England and France are Common Market members. Neither eighth nor twelfth graders could identify the number of people in the world. Correct responses to this item were given by only 26.5% of the eighth graders and 38.5% of the twelfth graders.

About one-third (32.9%) of the eighth graders and 33.3% of the twelfth graders knew that Europe has the most people per square mile. A greater percentage of students selected Asia. Just 13.8% of the eighth graders and 31.2% of the twelfth graders thought a decreasing death rate accounted for a change in the world's population. A greater percentage of students incorrectly selected an increasing birth rate (eighth graders--66.4%; twelfth graders--47.7%).

Nearly all of the 1981 eighth and twelfth graders (93.6% and 98.2%, respectively) were aware that the United States and Russia had sent rockets to the moon. In addition, 76.1% of the eighth graders and 84.1% of the twelfth graders knew that the world is mainly made up of oceans; and 67.9% of the eighth graders and 82.6% of the twelfth graders recognized the purpose of the United Nations. No statistically

significant differences existed between eighth and twelfth graders in the 1981 and 1974 studies on questions concerning the world.

Summary: No statistically significant differences were found between the 1981 fourth, eighth, and twelfth graders and their 1974 counterparts on questions concerning the world. The Ingham Intermediate students exhibited the most knowledge about the make-up of the earth's surface, the purpose of the United Nations, and the countries involved in space programs. Their responses indicated they were not well informed about the number of people in the world, where the largest concentrations of people are located, the reason the number of people in the world has changed, or the membership of world organizations such as the Common Market.

A Comparison Between Ingham Intermediate Students' Interest in Visiting Foreign Countries and Their Knowledge of Those Countries

The eighth major hypothesis stated that:

Ho_8: There is no significant relationship between fourth-, eighth-, and twelfth-grade Ingham Intermediate students' knowledge about a particular country and their interest in visiting that country.

Analysis Description

The fourth-, eighth-, and twelfth-grade Ingham Intermediate students' responses on the Knowledge Test were compared to their answers to the Student Interest Questionnaire item regarding the countries they desired to visit. The Knowledge Test sampled from three to nine questions for each of the five countries. The data from those items were compared with the student responses regarding their

interest in visiting each of those countries. An ANOVA test was performed to determine whether there was a statistically significant relationship between interest in visiting a particular country and knowledge of that country.

The following subhypotheses delineate the secondary research questions related to the major hypothesis concerning the possible relationship between students' knowledge about a particular country and their desire to visit that country. The results for each grade level are presented and interpreted for significance.

Fourth Graders

Ho_{8a}: There is no significant relationship between fourth graders' knowledge of a particular country and their interest in visiting that country.

Results:

No significant relationship was found between fourth graders' knowledge about and interest in visiting France, the Soviet Union, China, and Egypt. The data did support the null hypothesis for these items ($p > .05$).

A statistically significant relationship existed between students' knowledge about and interest in visiting Mexico. However, it was an inverse relationship. About 70% of the students who had correct responses on the Knowledge Test did not desire to visit Mexico. The data for this item did not support the null hypothesis ($p > .05$). (See Table 4.6.)

Table 4.6.--Comparison of Knowledge Test results and interest in visiting other countries--fourth graders.

Nation		Percent Correct	S.D.	F-Ratio
Mexico	would not	69.4	30.2	6.8
	would	63.0	30.8	
France	would not	34.0	35.9	1.8
	would	38.1	38.3	
Soviet Union	would not	55.8	24.5	0.2
	would	54.8	25 0	
China	would not	27.9	20.9	3.5
	would	25.0	18.9	
Egypt	would not	38.1	24.6	1.1
	would	40.0	23.3	

Eighth Graders

Ho_{8b}: There is no significant relationship between eighth graders' knowledge of a particular country and their interest in visiting that country.

Results:

No significant relationship was found between eighth graders' knowledge of and interest in visiting Mexico, the USSR, and Egypt. The data did support the null hypothesis for these items ($p > .05$).

A statistically significant relationship was found between students' knowledge of and interest in visiting France and China. About 51% of the students who correctly responded to questions about France and about 60% of those who correctly answered items on China selected "very much like to visit" on the Interest Inventory. There appeared to be a statistically significant relationship between an

interest in visiting these two countries and the students' knowledge of the countries. The data for these items did not support the null hypothesis ($p > .05$). (See Table 4.7.)

Table 4.7.--Comparison of Knowledge Test results and interest in visiting other countries--eighth graders.

Nation		Percent Correct	S.D.	F-Ratio
Mexico	wouldn't	56.6	18.9	2.5
	might	59.1	17.4	
	like to	53.7	21.5	
France	wouldn't	41.6	24.3	7.6
	might	43.2	22.8	
	like to	51.2	24.7	
Soviet Union	wouldn't	51.6	18.0	0.7
	might	48.7	19.8	
	like to	53.1	23.9	
China	wouldn't	50.6	23.1	3.4
	might	53.1	23.0	
	like to	60.9	24.2	
Egypt	wouldn't	40.4	19.7	0.9
	might	41.2	18.3	
	like to	36.9	18.5	

Twelfth Graders

Ho_{8c}: There is no significant relationship between twelfth graders' knowledge of a particular country and their interest in visiting that country.

Results:

No statistically significant relationship existed between any of the countries twelfth-grade students were interested in visiting

and their knowledge of those countries. Hence the data did support the null hypothesis ($p > .05$). (See Table 4.8.)

Table 4.8.--Comparison of Knowledge Test results and interest in visiting other countries--twelfth graders.

Nation		Percent Correct	S.D.	F-Ratio
Mexico	wouldn't	67.2	20.1	0.4
	might	68.8	19.2	
	like to	70.1	22.0	
France	wouldn't	57.8	28.2	3.0
	might	64.4	29.1	
	like to	69.3	25.1	
Soviet Union	wouldn't	62.2	19.0	3.0
	might	62.0	24.3	
	like to	72.2	16.3	
China	wouldn't	48.4	19.6	2.9
	might	50.3	19.7	
	like to	60.7	21.8	
Egypt	wouldn't	47.9	25.3	0.7
	might	49.9	23.3	
	like to	53.3	22.8	

A Comparison of Ingham Intermediate Students' Interest in Studying Foreign Countries and Their Knowledge of Those Countries

The ninth major hypothesis stated that:

Ho_9: There is no significant relationship between fourth-, eighth-, and twelfth-grade Ingham Intermediate students' knowledge about a particular country and their interest in studying that country.

Analysis Description

Ingham Intermediate fourth-, eighth-, and twelfth-grade students' Knowledge Test scores on selected countries were compared

with their interest in studying those countries. The Knowledge Test contained three to nine questions per country. The Interest Inventory item requested the student to mark either "would like to" or "would not like to" study for each of the 15 countries in the Inventory. The data from the two tests were analyzed by an ANOVA procedure.

The following subhypotheses delineate the secondary research questions related to the major hypothesis concerning the possible relationship between students' knowledge about a particular country and their desire to study that country. The results for each grade level are presented and interpreted for significance.

Fourth Graders

Ho_{9a}: There is no significant relationship between fourth graders' knowledge of a particular country and their interest in studying that country.

Results:

The results for fourth graders indicated a statistically significant relationship between students' knowledge of a particular country and their interest in studying that country. Fourth graders who responded that they did not want to study Mexico averaged 69% on questions concerning Mexico in the Knowledge Test. A statistically significant relationship existed between knowledge and interest. However, it was an inverse relationship. Fourth graders who exhibited greater knowledge about Mexico showed less interest in studying that country. The data did not support the null hypothesis for this item ($p > .05$).

Fourth graders who wanted to study Egypt averaged 41.2% on the Knowledge Test. This relationship was statistically significant. Students who did not want to study Egypt averaged 24.9% on the Knowledge Test. In this instance, students who exhibited more knowledge about Egypt also showed a greater interest in studying that country. The data for this item did not support the null hypothesis ($p > .05$).

No statistically significant relationship existed for France, the USSR, and China. The data for these items did support the null hypothesis ($p > .05$). (See Table 4.9.)

Table 4.9.--Comparison of Knowledge Test results and interest in studying other countries--fourth graders.

Nation		Percent Correct	S.D.	F-Ratio
Mexico	would not	69.0	30.6	7.10
	would	62.6	30.5	
France	would not	36.1	36.4	.072
	would	36.9	38.3	
Soviet Union	would not	56.8	24.6	3.80
	would	52.7	24.6	
China	would not	26.5	20.6	.069
	would	27.0	19.3	
Egypt	would not	37.1	24.9	4.70
	would	41.2	22.9	

Eighth Graders

Ho_{9b}: There is no significant relationship between eighth graders' knowledge of a particular country and their interest in studying that country.

Results:

A statistically significant relationship was found between eighth graders' desire to study Mexico, France, the USSR, and China and their knowledge of those countries. In these cases, the data did not support the null hypothesis ($p > .05$).

An inverse relationship existed between students' knowledge of and interest in studying Mexico. Eighth graders who did not want to study Mexico averaged 57.3% on the Knowledge Test, whereas those who did want to study that country averaged 50.4% on the Knowledge Test. It appeared that students who demonstrated less interest in studying Mexico exhibited a greater knowledge of that country.

The analysis of responses for France, the USSR, and China revealed the opposite results. Students who averaged higher scores on the Knowledge Test for these three countries (France--49.9%, the USSR--56.4%, China--59.9%) showed a greater interest in studying the countries. The data did not support the null hypothesis ($p > .05$).

Egypt was the only country for which no statistically significant relationship was noted at the eighth-grade level. In this instance, the data did support the null hypothesis ($p > .05$). (See Table 4.10.)

Twelfth Graders

Ho_{9c}: There is no significant relationship between twelfth graders' knowledge of a particular country and their interest in studying that country.

Table 4.10.--Comparison of Knowledge Test results and interest in studying other countries--eighth graders.

Nation		Percent Correct	S.D.	F-Ratio
Mexico	desiring	50.4	19.3	7.2
	not desiring	57.3	16.6	
France	desiring	49.9	23.2	7.3
	not desiring	43.8	24.8	
Soviet Union	desiring	56.4	19.2	12.4
	not desiring	49.4	18.2	
China	desiring	59.9	18.3	7.7
	not desiring	50.1	23.5	
Egypt	desiring	38.0	20.4	1.2
	not desiring	40.5	19.1	

Results:

Twelfth graders who desired to study the USSR (67.3%), China (56.8%), and Egypt (56%) averaged higher scores on the relevant Knowledge Test items than those who were not interested in studying those countries. A statistically significant relationship was found between knowledge of those countries and an interest in studying them. Hence, the data did not support the null hypothesis ($p > .05$).

The analysis for Mexico and France exhibited no statistically significant relationship between knowledge and interest. For these items, the data did support the null hypothesis ($p > .05$). (See Table 4.11.)

Table 4.11.--Comparison of Knowledge Test results and interest in studying other countries--twelfth graders.

Nation		Percent Correct	S.D.	F-Ratio
Mexico	desiring	68.6	22.6	0.12
	not desiring	67.6	19.7	
France	desiring	66.6	24.6	0.11
	not desiring	65.4	27.7	
Soviet Union	desiring	67.3	17.4	7.20
	not desiring	61.1	19.8	
China	desiring	56.8	21.9	10.30
	not desiring	47.4	19.4	
Egypt	desiring	56.0	25.7	4.70
	not desiring	47.8	23.9	

Summary of Relationship Between Knowledge of a Country and Interest in Studying and Visiting It

The possibility of a statistically significant relationship between knowledge of a particular country and interest in studying and visiting it was explored. The data indicated mixed results. In some instances, there was a significant relationship between knowledge of a particular country and student interest in visiting or studying that country. This was evident in the case of fourth graders who correctly answered more questions on the Knowledge Test about Egypt and who exhibited an interest in studying it.

A statistically significant relationship between knowledge about a country and interest in studying and visiting the country was also evident in eighth graders who correctly answered more questions about France and China on the Knowledge Test and also showed an

interest in visiting and studying those countries. Eighth graders who achieved higher scores on the Knowledge Test regarding the USSR also demonstrated an interest in studying that country.

Twelfth graders displayed an interest in studying the countries about which they were knowledgeable, specifically, the USSR, China, and Egypt.

The analysis also revealed that an inverse relationship between knowledge of a particular country and student interest in visiting or studying it was possible. Fourth graders who correctly answered more questions about Mexico on the Knowledge Test chose not to study or visit it. Eighth graders who correctly answered more questions about Mexico chose not to study it.

It was also possible for no significant relationship to exist between knowledge of and interest in visiting or studying a particular country. Such a condition was evident in the fourth graders' responses for Egypt, the USSR, and China. Their interest in visiting those countries was not significantly related to their knowledge about the countries.

Eighth graders' results indicated no significant relationship between knowledge of and interest in studying Mexico and France. No significant relationship was found between knowledge about and interest in visiting Mexico, France, the USSR, China, and Egypt.

No statistically significant relationship existed between the twelfth graders knowledge of and interest in visiting the USSR, China, Egypt, or their knowledge of and interest in studying and visiting Mexico and France.

Teachers' Travel Experience

Task Description

The 53 Ingham Intermediate teachers who participated in the 1981 study were asked to complete a Teacher Background and Interest Questionnaire. These teachers' responses to one item regarding the extent of travel to foreign countries were compared with those of teachers in the 1974 sample to determine if a statistically significant difference existed between the groups in terms of the number of countries visited or the length of time spent in each country. The Kolomogrov-Smirnov Test was performed to analyze the data.

The Ingham Intermediate teachers' travel experiences were also compared with the fourth-, eighth-, and twelfth-grade students' interest in studying and visiting foreign countries to determine whether a statistically significant relationship existed between the two factors. The percentage of students who desired to study or visit a foreign country and the percentage of teachers who had visited a foreign country were compared to determine if a statistically significant relationship existed.

The tenth major hypothesis stated that:

Ho_{10}: There is no significant difference between Ingham Intermediate teachers and teachers in the 1974 study in terms of the number of countries they have visited.

Results:

According to the results of the Kolomogrov-Smirnov Test, there was a statistically significant difference between the 1981 and 1974 teacher groups in terms of the number of foreign countries to

which they had traveled. The 1981 teachers had traveled to a significantly greater number of foreign countries than had teachers in the 1974 sample. The data did not support the null hypothesis ($p > .05$).

The eleventh major hypothesis stated that:

Ho_{11}: There is no significant difference between the amount of time Ingham Intermediate teachers have spent in foreign countries and the amount of time spent by teachers in the 1974 study.

Results:

According to the results of the Kolomogrov-Smirnov Test, no statistically significant difference existed between the 1981 and the 1974 teacher groups in terms of the amount of time teachers had spent traveling in foreign countries. The data did support the null hypothesis ($p > .05$).

Comparison of Teachers' Travel Experience With Students' Interest in Studying and Visiting Foreign Countries

The investigator also attempted to determine whether a relationship existed between Ingham Intermediate teachers' travel experience and their students' interest in studying and visiting foreign countries. The possibility of this relationship was explored to determine whether teachers who had traveled to certain countries had students who would be interested in visiting or studying those countries. The investigation did not reveal any discernible patterns between teachers' travel experience and their students' interest in

studying or visiting the same countries. The data were not analyzed further.

Summary of Teachers' Travel Experience

The 1981 teachers had traveled to a greater number of foreign countries than had teachers in the 1974 sample. No statistically significant difference existed between the two teacher groups in terms of the length of time they had spent in each foreign country. Students' interest in visiting or studying foreign countries did not appear to be affected by their teachers' travel experience to foreign countries. Students seemed to base their interest in studying or visiting a foreign country on reasons other than their teachers' travel experience.

Chapter Summary

Not all of the hypotheses constructed for comparing the 1981 Ingham Intermediate study and the 1974 national study showed statistically significant differences. For example, no significant differences existed between the two studies in terms of student interest in studying and visiting foreign countries.

The hypothesis constructed for comparing the 1981 and the 1974 studies, concerning the resources students used to learn about foreign countries, did indicate statistically significant differences among certain items at each of the three grade levels. The most frequently selected items in all grades, in both studies, were television, books, magazines, and travel.

In comparing fourth, eighth, and twelfth graders in the 1981 and the 1974 studies in terms of their global knowledge, some statistically significant differences were noted. Eighth-grade males and females in the 1981 study performed significantly better than their 1974 counterparts on the portion of the Knowledge Test concerning the United States. Ingham Intermediate eighth-grade females performed significantly better on items regarding Egypt than did 1974 females.

Twelfth-grade females in the 1981 study performed significantly better on items concerning the United States and France than did 1974 females. However, 1974 females performed significantly better on items about China than did 1981 females. Twelfth-grade males in the 1981 sample performed significantly better on questions concerning France and Egypt than did their counterparts in the 1974 study.

An analysis of total scores on the Knowledge Test indicated statistically significant differences between fourth graders in the 1981 and the 1974 samples. The 1981 students performed significantly better than the 1974 students. No statistically significant differences were noted between eighth and twelfth graders in the two studies. Males performed significantly better than females at all grade levels. An analysis across grade levels indicated that older students performed significantly better than younger students on the Knowledge Test.

An examination of a possible relationship between student interest in studying or visiting a foreign country and knowledge of that country yielded mixed results. At times, a statistically

significant relationship existed between interest in studying or visiting a foreign country and knowledge about that country. Students who correctly answered more questions about a particular country did exhibit an interest in studying or visiting it. The analysis also revealed that in some cases an inverse relationship between interest and knowledge existed. It was shown that students could be knowledgeable about a country and yet not desire to study or visit it. In certain instances, there was no statistically significant relationship between knowledge and interest.

In comparing the travel experiences of teachers in the 1981 and the 1974 studies, a statistically significant difference was found in the number of countries to which teachers had traveled. Ingham Intermediate teachers had traveled to a greater number of countries than had teachers in the 1974 study. No statistically significant difference existed between the two teacher groups in terms of the length of time they had spent in each foreign country.

Chapter V contains a summary of the research, findings and conclusions based on the data gathered in the study, and recommendations for future research.

CHAPTER V

FINDINGS, IMPLICATIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to obtain, analyze, and compare data regarding fourth-, eighth-, and twelfth-grade Ingham Intermediate students' global knowledge as well as their attitudes toward and interest in other nations and other peoples. The results of the study are intended to help school districts in the Ingham Intermediate area plan a global-education curriculum.

Ingham, Eaton, Ionia, and Clinton Counties constitute the Ingham Intermediate School District area. The study sample was drawn from four school districts in that area. Three of the school districts that volunteered to participate in the study were suburban; one was rural. A total sample of 53 teachers and approximately 1,600 students participated in the study.

Previous chapters described the background, related research, setting, population, data-collection instruments, methodology, and statistical analyses of the hypotheses. In this chapter, the major findings of the study, discussion and implications of the findings, projected outcomes of the study, and recommendations for future research are presented.

Major Results

In the following sections, the major results of the study are discussed within the limitations of the setting, population, and methodology.

Student Interest in Studying and Visiting Foreign Countries

On this section of the test, diverse results appeared at all grade levels, in that students chose different countries to study and to visit. As the grade level increased, the tendency to distinguish between countries to study and to visit became more pronounced.

The propensity to want to study and to visit a greater number of foreign countries was significantly higher in the fourth grade than in the eighth and twelfth grades. This result was also found in the 1974 study. Based on the number of countries students in the fourth grade selected to study and to visit, it appeared that they had a positive interest in learning about other countries. Interest declined in the eighth grade and increased again in the twelfth grade. These results are similar to those of the 1974 study.

The countries chosen as being the most desirable ones to visit were ones that appeared to have cultures similar to that of the United States. Canada and Western Europe were selected more frequently than Africa and Asia as being desirable places to visit.

The three major communist countries in the study--China, the USSR, and East Germany--were chosen by twelfth-grade students as being appealing places to study but not to visit. Eighth graders selected the USSR and East Germany as places they would like to study,

but not as places they would like to visit. This finding was also evident in the 1974 study.

Resources Selected to Learn About Other Countries

The results of the study indicated that students learned about other countries and world events largely through the communications media. In the present study, the most important sources of information at all three grade levels were television, magazines, books, and travel. These findings were also similar to the 1974 findings.

According to the Ingham Intermediate fourth and eighth graders, the radio appeared to be a more important means of learning about other countries than was evident in the 1974 study. In contrast, world fairs and museums appeared to be more influential in learning about other nations to 1974 students than to Ingham Intermediate eighth and twelfth graders.

Knowledge Test Results

An examination of the data revealed that the 1981 fourth-, eighth-, and twelfth-grade students' Knowledge Test scores were slightly higher than those of students in the 1974 study. However, the only statistically significant difference occurred between the two fourth-grade groups on total Knowledge Test scores. The 1981 students performed significantly better than the 1974 students. No statistically significant differences were noted between eighth and twelfth graders in the two studies.

In comparing eighth and twelfth graders in the 1981 and the 1974 studies in terms of their global knowledge, some statistically significant differences were found. Eighth-grade males and females in the 1981 study performed significantly better on the portion of the Knowledge Test concerning the United States than did their counterparts in the 1974 study. Females in the 1981 study performed significantly better on items concerning Egypt than did 1974 females.

Twelfth-grade 1981 females performed significantly better on items concerning the United States and France than did the 1974 females. However, the 1974 females performed significantly better on items about China than did 1981 females. Twelfth-grade males in the 1981 study performed significantly better on questions concerning France and Egypt than did their counterparts in the 1974 study.

Ingham Intermediate males' performance on the Knowledge Test was significantly different from that of females at all grade levels. Males achieved significantly higher scores on the Knowledge Test than did females. This finding was also evident in the 1974 study.

An examination of the Knowledge Test results across grade levels indicated that as students progressed through the grades, the number of correct responses increased. Twelfth-grade students appeared to have significantly greater knowledge of world events than did eighth or fourth graders. This finding was also evident in the 1974 study.

The data provided evidence that the global knowledge the Ingham Intermediate students demonstrated was inadequate. The major gaps in global knowledge occurred at all grade levels in the areas

of map location, the Middle East, Western Europe, and American government. Similar areas of weakness appeared in the 1974 study.

On map location, students misidentified the United States, the USSR, Mexico, China, France, and Egypt on a world map. The range of correct responses for identification of foreign countries and the United States was higher in the twelfth grade than in the fourth grade. This finding was similar to the findings of the 1974 study.

Responses of students in both the 1981 and the 1974 studies indicated a limited knowledge of governmental functioning in the United States. The major exception was the recognition of defense as a major source of public expenditures. Eighth and twelfth graders in the 1981 study answered significantly more questions correctly than did their counterparts in the 1974 study.

Ingham Intermediate students exhibited a lack of knowledge about the Middle East, despite its exposure in the media over the last few years. Students were ill informed about who the leader of Egypt was, which countries were Arab nations, and which were oil-producing nations.

Students reported a great interest in studying and visiting Western Europe but also demonstrated a lack of knowledge about that area. A majority of the students did not correctly answer questions about the products, climate, location, governmental leaders, and form of government of countries in Western Europe.

The USSR and China, both world leaders and highly publicized nations, were also countries about which students showed a lack of knowledge. The locations, type of government, and cultures of the

two countries were areas in which students had difficulty answering questions correctly.

Current events, geography, and American government appeared to be the areas of weakness for fourth-, eighth-, and twelfth-grade students in the Ingham Intermediate study. The level of 1981 eighth- and twelfth-grade students' global knowledge was not significantly different from that of students in the 1974 study.

An examination of a possible relationship between student interest in studying or visiting a foreign country and knowledge of that country yielded mixed results. At times, a statistically significant relationship existed between interest in studying or visiting a foreign country and knowledge about that country. That is, students who correctly answered more questions about a particular country did exhibit an interest in studying or visiting it. The analysis also revealed that in some cases an inverse relationship existed between interest and knowledge. It was shown that students could be knowledgeable about a country and yet not desire to study or to visit it. In certain instances, there was no statistically significant relationship between knowledge and interest.

Teacher Travel Experience

In comparing the travel experience of teachers in the 1981 and the 1974 studies, a statistically significant difference was found in the number of countries to which teachers had traveled. Ingham Intermediate teachers had traveled to a significantly greater number of countries than had teachers in the 1974 sample. Fourth-grade

Ingham Intermediate teachers had traveled more extensively than eighth- or twelfth-grade teachers in the same sample. No statistically significant difference existed between the 1981 and the 1974 teacher groups in terms of the length of time spent in each foreign country.

Differences in teacher travel experience did not appear to affect student interest in studying or visiting foreign countries. Student interest in foreign countries appeared to have been influenced by factors that were not examined in this study.

Discussion and Implications of the Findings

Student Interest in Other Nations and Other Peoples

One of the important findings of this study was that fourth-, eighth-, and twelfth-grade Ingham Intermediate students evidenced an interest in studying and visiting foreign countries. This interest was significantly higher among fourth graders than among eighth and twelfth graders. The countries most frequently selected by fourth graders to study were Mexico, the Western European countries, and Canada. Fourth graders also desired to visit Japan as well as the aforementioned countries.

The fourth graders' range of responses was varied and unlimited. This finding was also confirmed in other research studies. Torney and Morris (1972) wrote that children in the early grades are ready for a global curriculum. Lambert and Klineberg (1967) indicated that children around ten years of age are particularly receptive to foreign people. Leestma (1974) corroborated this finding in the Other Nations,

Other Peoples study. He stated that fourth graders are interested in learning about other nations and other peoples.

Besides their openness toward different peoples, fourth graders in this study may have been affected by their teachers' travel experience. Although no significant relationship existed between student interest in particular foreign countries and teacher travel experience to those countries, it may be noted that the fourth-grade teachers in the sample were the most highly traveled. Perhaps the teachers' interest in different countries stimulated an interest in their students to study and visit foreign countries.

Eighth graders in the present study were more selective than fourth graders in their choices of countries to study and to visit. They ranked the Western European countries, Canada, Mexico, Japan, and Israel in the top ten positions as desirable places to visit. Eighth graders chose to study the Western European countries, Canada, the USSR, Egypt, and East Germany.

The range of responses was not as great for eighth graders as it was for fourth and twelfth graders. This finding was also evident in the 1974 study. A review of Lambert and Klineberg's study by Torney and Morris (1972) suggested that, by the age of 14, students appeared less receptive to positive opinions about foreign peoples and nations. In another research study, conducted by the International Association for the Evaluation of Educational Achievement (Abramowitz et al., 1978), it was reported that 14 year olds and adolescents appeared more interested in national than international events.

Twelfth graders in the Ingham Intermediate study also elected to visit the Western European nations more frequently than the other nations listed in the interest questionnaire. They were also interested in visiting Japan, Mexico, and Egypt. The twelfth graders wanted to study the Western European countries, the USSR, Japan, Mexico, and China.

Twelfth graders displayed an interest in studying and visiting more countries with a wider range of cultural differences than did eighth graders. They also exhibited a more positive interest in studying and visiting foreign countries than did eighth graders.

All of the school districts reported having a student exchange program in the high school. They also provided language courses and a variety of social studies offerings. These factors might have influenced student attitudes toward other nations and other peoples and developed an interest in foreign countries in the twelfth graders.

At the time this study was conducted, certain newsworthy events occurred that must be mentioned because they might be considered factors that could have influenced student interest in certain countries. In the summer of 1981, England was highly publicized because of the marriage of Prince Charles and Lady Diana. Hence it is not surprising that England was subsequently chosen as the first place fourth-, eighth-, and twelfth-grade Ingham Intermediate students selected to visit.

Israel and Egypt were also in the news, although not in as positive a light as England. Research by Abramowitz et al. (1978) indicated that American children tend to reject people and countries

that have recently been involved in a war. The low rankings of Israel and Egypt by the Ingham Intermediate students appeared to confirm this assertion.

Despite the great amount of publicity surrounding the USSR and China, neither of these countries appeared as places the students would most like to visit. However, the USSR was rated as a place the older students would like to study. Perhaps the language differences, the form of government, the perceived different customs of the people in these countries, and the type of presentation the USSR and China receive in the media are reasons for the students' lack of interest in visiting them.

As a result of a study they conducted in the 1950s, Lambert and Klineberg (1967) reported that American children identified the Chinese, Indians from India, Russians, and African Negroes as being different from themselves. It appears that many such attitudes about foreign peoples are still prevalent in the United States and influence students' opinions of people whom they perceive as being different. Ingham Intermediate students designated Liberia, India, Taiwan, China, East Germany, and Egypt as low-interest countries. The results of this study indicated that, 30 years after Lambert and Klineberg's study, certain peoples are still considered "different."

Interestingly, the Japanese seem to have broken through the barriers of disinterest. Perhaps their influence in the high-technology world of automobiles, video games, and computers is strong enough to remove cultural barriers or at least to awaken an interest in and acceptance of another culture.

The Influence of the Media on Student Learning

Another finding in this study concerned the resources students used to learn about foreign countries and world events. The communications media--television, magazines, and books--appeared to be the most influential sources of knowledge for fourth-, eighth-, and twelfth-grade Ingham Intermediate students. Travel was also highly rated as an influential resource for learning about foreign countries.

These findings were corroborated in the 1974 national study. Becker (1974) also found that television was the major source of information for young people. Lambert and Klineberg (1967) reported that television was selected more frequently as a major source of information about foreign peoples than any other resource. Hanvey (in Morehouse, 1978) commented that the media concentrate on an event and ignore the relationship between occurrences and facts. The media provide a vast amount of information about world affairs, and at the same time they influence the way world affairs are taught. Educators need to examine the present use of the media and either develop new ways of using these powerful resources or refine and improve existing techniques and strategies. Students must be able to discern the difference between factual information and biased opinions. Their critical-thinking skills must be developed so they can formulate unprejudiced viewpoints about other nations and other peoples.

An Examination of Student Global Knowledge

The results of the Knowledge Test revealed a number of interesting findings. Males in the 1981 study performed significantly better than females on the Knowledge Test. This finding was also present in the 1974 study. Males' Knowledge Test scores were significantly higher than those of females across the three grade levels.

Educators and parents need to reflect on an unintentional message they may be delivering to children. Are males expected to perform better than females in social studies? Are males given more opportunities than females to develop map skills and an interest in current affairs?

Although the 1981 females' scores were significantly higher in certain areas on the Knowledge Test in comparison to 1974 females, there is still room for improvement. Females need to appreciate the importance of being informed citizens and active participants in world events.

Another finding of this study was that older students performed significantly better on the Knowledge Test than did younger students. The propensity to answer correctly increased as the students progressed through the grades. This was also true in the 1974 study. It is reassuring that twelfth graders are better informed about world events than eighth or fourth graders.

A statistically significant difference existed between fourth graders in the 1981 and the 1974 studies on the Knowledge Test. The 1981 students attained significantly higher scores on the Knowledge

Test than did their counterparts in the 1974 study. No significant difference was found between the eighth graders and the twelfth graders in the two study groups.

Despite curricular changes, revised social studies programs, and the promotion of global and multicultural education in the schools, the Ingham Intermediate students did not perform as well as expected or desired. Whether future generations see more informed and better prepared students and citizens is questionable. Educators and parents need to assume a more active role in positively influencing children's attitudes toward other nations and other peoples. Understanding, acceptance, and recognition of differences and similarities between cultures and peoples are vital to world prosperity and growth. The results of this study indicated that there is a need for a renewed effort in striving toward the goal of global understanding.

Projected Outcomes of the Study

The results of the data analysis have been dispersed to the volunteer school districts that participated in the study. According to Garry Michaels, Assistant Superintendent for Instruction, Ingham Intermediate School District, the volunteer districts have been encouraged to use the data in terms of the following four questions:

1. Within limited terms of reference employed in the measures, what is it that students should know about other nations and other peoples? What questions were not asked or subjects not probed that are at least equally essential? What was included that was non-essential?

2. As one moves beyond the easier kinds of factual questions involving a small number of major nations and toward more complex world issues, it becomes apparent that a broader and more sophisticated frame of reference than that traditionally employed in the schools is required for learning about the world. What are the basics of global perspectives in the implications for various curriculum areas?

3. Realizing that knowledge of individual nations and peoples, bilateral relations, regional relationships, and global problems and issues are all involved in international understanding, what international knowledge, skills, and sensibilities should every student acquire as part of his/her basic preparation for American citizenship, and how can these best be taught?

4. What are the implications of the foregoing for cooperation between educational institutions and the community?

The Division of Instructional Services and the Department of Planning and Evaluation in the Ingham Intermediate School District have made themselves available to the four volunteer school districts as resources and are prepared to assist the school districts in any way possible.

The Michigan Department of Education intends to examine the results of this study in terms of the following questions:

1. How do the global Knowledge Test results of students in the Ingham Intermediate study compare with those of students in the 1974 national study? Are there significant differences in the test results between students in the two studies?

2. If significant differences exist, is there any evidence to indicate that these differences might be attributed to the Michigan Department of Education's global guidelines that were adopted in 1977?

3. How do the results of the 1981 study compare with those of other population types, such as students in military and international schools and in school districts in other parts of Michigan?

4. Do significant differences exist between students in the four volunteer school districts in this study, in terms of the school districts' locations, i.e., suburban versus rural?

5. Was the test instrument adequate in terms of its suitability for the students in this study? Are modifications or revisions in the instrument warranted?

6. What in-service programs or teacher-training activities are desirable for teachers in Michigan schools that will improve their skills in the area of global education?

Based on the findings and conclusions of this study, appropriate measures will be designed to improve Michigan's social studies curriculum in the area of global education.

Recommendations for Future Study

1. The possibility of a relationship between students' attitudes toward other peoples and nations and their knowledge of other countries should be investigated. Is it important for educators to know how students' perceptions of foreign peoples influence their desire to study, visit, or learn about foreign peoples and nations? If it is, curriculum changes can be designed accordingly.

2. More information is needed about the study of foreign languages and students' knowledge of foreign countries. It would be interesting to explore the possibility of a relationship between students' knowledge of foreign languages and their interest in and knowledge of foreign countries.

3. The study should be replicated in a more heterogeneous school district with a greater percentage of minority students to determine whether a relationship exists between students' ethnicity and their interest in studying or visiting foreign countries or their attitudes toward foreign nations.

4. Would research in the area of different curriculum programs determine what experiences would best contribute to children's global understanding? This is a possibility that might be explored.

5. Possible reasons for the better performance in social studies of males over females should be analyzed. An examination of teachers' attitudes toward the social studies course content and their expectations for male and female students in their classes is a possible topic for future research.

6. Parental and societal expectations of males and females' roles outside of school need to be explored. Dr. John Chapman, Social Studies Specialist with the Michigan Department of Education, suggested that perhaps boys are more apt than girls to be given globes, puzzles, maps, history and geography books, and subscriptions to magazines such as National Geographic. Bestowing or not bestowing gifts such as these conveys a message. This topic warrants future research.

7. Programs that expose parents and students to people of different cultural backgrounds should be developed. Research could then be conducted to determine whether interest in different cultures affects the knowledge and attitudes toward these cultures.

APPENDICES

APPENDIX A

LETTER OF SUPPORT BY PHILLIP E. RUNKEL, SUPERINTENDENT OF PUBLIC INSTRUCTION, STATE OF MICHIGAN

STATE OF MICHIGAN

DEPARTMENT OF EDUCATION

Lansing, Michigan 48909

PHILLIP E. RUNKEL
Superintendent
of Public Instruction

January 21, 1982

Ms. Mary Wyniemko
5848 Bois Ile
Haslett, Michigan 48840

Dear Ms. Wyniemko:

This letter is a response to your December 19, 1981 request for a letter of support from me in regard to your doctoral research project.

Unquestionably, it is of critical importance that all Michigan schools should, within their educational programs, give appropriate consideration to the topic of global education. Our schools must provide opportunities for all students to acquire knowledge, skills and attitudes about the global society which will enable them to be effective world citizens both now and in the twenty-first century.

I am pleased to learn of your cooperation with the Ingham Intermediate School District to assess Ingham area students' levels of global understanding. The data which you obtain, as well as your subsequent conclusions and recommendations, will be of particular use for curriculum coordinators, administrators and teachers within a large number of Michigan school districts.

Also, the State Board of Education has recently approved revised objectives for social studies education within Michigan. The objectives included a special curriculum strand at each educational level in regard to global issues. Thus, the survey now being conducted at Ingham, including the methodology and survey instruments utilized, can be used by the state social studies specialist and other appropriate Department staff in their work with local school districts to enhance global education.

Sincerely,

Phillip E. Runkel

APPENDIX B

TABULATION OF STUDENT RESPONSES TO SELECTED ITEMS ON THE BACKGROUND AND INTEREST QUESTIONNAIRE AND KNOWLEDGE TEST RESULTS FOR THE 1981 AND 1974 STUDIES

Table B-1.--Birthplace of 1981 Ingham Intermediate sample population (in percent).

Country	Student			Father			Mother		
	4th Grade	8th Grade	12th Grade	4th Grade	8th Grade	12th Grade	4th Grade	8th Grade	12th Grade
Canada	0.0%	0.4%	0.0%	0.8%	0.4%	0.3%	0.7%	0.6%	0.3%
China	0.2	0.0	0.0	0.3	0.8	0.0	0.2	0.8	0.0
Colombia	0.2	0.2	0.3	0.0	0.4	0.3	0.2	0.4	0.6
Cuba	0.0	0.0	0.0	0.3	0.0	0.0	0.2	0.0	0.3
Dominican Republic	0.0	0.2	0.0	0.0	0.4	0.0	0.0	0.2	0.0
East Germany	0.0	0.0	0.0	0.2	0.4	0.0	0.3	0.2	0.0
England	0.2	0.2	0.0	0.3	0.2	0.3	0.3	0.2	0.3
Greece	0.0	0.0	0.0	0.5	0.2	0.3	0.3	0.2	0.0
Italy	0.0	0.0	0.0	0.2	0.4	0.3	0.2	0.6	0.0
Mexico	0.2	0.2	0.3	0.7	1.7	0.6	0.5	0.4	0.3
Philippines	0.2	0.4	0.0	0.2	0.2	0.0	0.3	0.4	0.6
Poland	0.0	0.2	0.0	0.0	0.2	0.3	0.0	0.0	0.0
Puerto Rico	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Taiwan	0.3	0.4	0.0	0.2	0.9	0.0	0.3	0.6	0.3
United States	93.2	93.5	94.7	87.1	89.3	94.1	90.7	90.5	91.7
West Germany	0.5	0.8	0.9	0.3	0.4	0.0	0.5	0.6	1.2
Other	0.5	3.3	3.1	5.1	4.2	3.1	3.8	4.4	4.3

Table B-2.--Nations students would like to study/visit: 1981 Ingham Intermediate study (in percent and rank order).

Country	Fourth Graders				Eighth Graders				Twelfth Graders			
	Study		Visit		Study		Visit		Study		Visit	
	Pct.	Rank Order	Pct.	Rank Order	Pct.	Rank Order	Pct.	Rank Order	Pct.	Rank Order	Pct.	Rank Order
Greece	47.5%	6	47.2%	8	24.8%	3	24.6%	4	16.9%	11	26.2%	5
Mexico	57.0	1	63.0	2	12.5	13.5	18.3	6	18.6	8	14.1	9
Canada	47.2	7	58.4	5	21.6	4	22.2	5	28.4	4	36.9	3
England	54.8	3.5	63.6	1	29.6	2	43.4	1	34.5	1	50.2	1
France	56.7	2	62.5	3	32.7	1	40.2	2	29.4	3	49.5	2
Spain	53.0	5	59.0	4	13.9	10	14.3	8	16.9	11	20.0	7
Italy	46.1	8	51.9	7	17.9	7	26.6	3	23.3	6	32.2	4
W. Germany	43.6	10	41.6	11	18.7	6	17.0	7	24.3	5	22.1	6
E. Germany	35.5	13.5	36.6	14	15.5	9	7.8	13	16.9	11	6.2	14
USSR	30.9	15	27.2	16	21.4	5	4.8	15	31.8	2	8.4	11
Taiwan	39.5	11	35.5	15	13.7	11.5	9.9	12	11.1	15	8.2	12
China	35.5	13.5	42.1	10	9.3	15	7.5	15	18.2	9	5.4	15
Japan	54.8	3.5	57.3	6	13.7	11.5	13.9	9	22.0	7	17.3	8
India	37.0	12	37.9	12	6.7	16	4.6	16	7.4	16	3.1	16.5
Israel	29.5	16	37.0	13	12.5	13.5	11.2	10	11.8	14	6.9	13
Egypt	44.9	9	42.5	9	17.1	8	10.1	11	16.2	13	9.2	10
Liberia	20.4	17	21.2	17	4.8	17	2.3	17	2.4	17	3.1	16.5

Table B-3.--Ways of learning about other countries: Ingham Intermediate Study, 1981 (in percent).

Ways of Learning	4th Grade	8th Grade	12th Grade
Television	73.3%	46.5%	58.5%
Radio	41.2	27.5	22.2
Movies	56.3	35.3	35.8
Books	80.3	39.6	44.0
Magazines	..	42.9	56.1
Travel	80.5	32.3	28.5
Fairs/museums	62.2	17.5	7.3
Collections	27.4	12.7	6.7
Shops	..	16.3	11.1
Parents	..	37.1	32.6
Teachers	..	34.8	35.3
Friends/relatives	71.5	36.7	29.1
National events	..	24.4	36.5
International events	..	23.8	39.4
Local events	..	9.1	7.7
Church groups	17.1	9.9	7.6
School groups	..	9.1	7.7
School clubs	..	10.3	6.1

Table B-4.--Knowledge levels by nation--Grade 4: Ingham Intermediate study, 1981.

Items Group by Nation: Subscore	Number of Items	Male		Female		Group	
		Mean	S.D.	Mean	S.D.	Mean	S.D.
USA	4	64.2	25.9	58.6	27.2	61.1	26.7
Mexico	3	68.3	30.4	62.8	30.7	65.4	30.7
France	2	40.1	37.0	33.0	37.4	36.5	37.4
USSR	3	58.0	25.9	53.3	23.4	55.5	24.6
China	5	28.9	21.2	24.4	28.8	26.7	20.2
Egypt	4	42.0	23.9	36.3	24.0	39.0	24.1
World	5	56.4	22.1	49.1	23.5	52.6	23.1
All Items:							
Total	26	50.4	14.4	44.6	13.6	47.4	14.3
(N)		309		342		656	

Table B-5.--Knowledge levels by nation--Grade 8: Ingham Intermediate Study, 1981.

Items Group by Nation: Subscore	Number of Items	Male Mean	Male S.D.	Female Mean	Female S.D.	Group Mean	Group S.D.
USA	8	72.5	21.1	69.0	20.5	70.8	20.8
Mexico	7	58.0	18.9	55.2	19.2	56.5	19.1
France	5	47.8	25.1	43.9	23.5	45.7	24.5
USSR	9	53.7	19.1	47.8	17.3	50.8	18.6
China	7	54.5	23.3	47.3	22.5	51.0	23.2
Egypt	7	42.5	19.9	37.5	18.2	40.1	19.3
World	9	47.6	18.0	42.8	17.4	45.4	17.9
All Items:							
Total	52	54.1	13.5	49.3	12.9	51.7	13.4
(N)		275		258		537	

Table B-6.--Knowledge levels by nation--Grade 12: Ingham Intermediate Study, 1981.

Items Group by Nation: Subscore	Number of Items	Male Mean	Male S.D.	Female Mean	Female S.D.	Group Mean	Group S.D.
USA	8	75.2	18.5	70.6	20.2	72.9	19.4
Mexico	7	70.5	19.6	64.8	20.5	67.7	20.2
France	6	70.6	27.4	60.8	25.6	65.7	26.9
USSR	9	67.9	17.8	57.8	19.6	62.9	19.3
China	7	53.8	20.7	44.1	18.4	49.0	20.1
Egypt	8	53.9	25.1	43.8	22.6	49.0	24.3
World	9	56.3	17.9	52.6	18.9	54.5	18.5
All Items:							
Total	54	61.6	14.0	54.4	12.9	58.1	13.9
(N)		163		162		327	

Table B-7.--Knowledge levels by nation--Grade 8: ONOP study, 1974.

Items Group by Nation: Subscore	Number of Items	Male Mean	Male S.D.	Female Mean	Female S.D.
USA	8	5.2	1.7	4.9	1.6
Mexico	7	4.1	1.4	3.9	1.3
France	5	2.2	1.1	2.2	1.1
USSR	9	4.5	1.8	4.2	1.6
China	7	3.5	1.4	3.3	1.4
Egypt	7	2.8	1.5	2.4	1.3
World	9	4.1	1.5	3.8	1.5

Note: No group score was listed in Table 41 of the ONOP book.

Table B-8.--Knowledge levels by nation--Grade 12: ONOP study, 1974.

Items Group by Nation: Subscore	Number of Items	Male		Female	
		Mean	S.D.	Mean	S.D.
USA	8	5.8	1.5	5.3	1.5
Mexico	7	5.1	1.3	4.7	1.4
France	6	3.5	1.3	3.1	1.3
USSR	9	5.8	1.7	5.0	1.7
China	7	3.8	1.3	3.4	1.4
Egypt	8	3.9	2.0	3.2	1.5
World	9	5.2	1.4	4.7	1.5

Note: No group score was listed in Table 43 of the ONOP book.

APPENDIX C

COPY OF A LETTER OF PERMISSION GIVEN BY THE EDUCATIONAL TESTING SERVICE RELEASING THE TEST MATERIALS--OTHER NATIONS, OTHER PEOPLES

EDUCATIONAL TESTING SERVICE PRINCETON, N.J. 08541

609-921-9000
CABLE-EDUCTESTSVC

July 2, 1982

Dr. Lois Bader
Dr. John M. Chapman
State of Michigan
Department of Education
Lansing, Michigan 48909

Dear Dr. Bader and Dr. Chapman:

Educational Testing Service is pleased to grant your request to use the test materials listed below for purposes of research studies described in your letter of May 21, 1982.

The materials you wish to use are as follows:

> Parts of the instruments from Measures of Global Understanding, and parts of the Other Nations, Other Peoples survey instruments.

Your use of these materials and any relevant documentation ETS may supply is subject to the following conditions:

1. Use of the materials is restricted to the research purpose described in your request to ETS, and you will not provide or otherwise make them available to others without ETS's express written permission. Where publication of your research findings requires reproduction of ETS authored items, acknowledgments similar to those below should be given. Please let us know when any such publication is planned.

2. You will assume responsibility for the analyses and conclusions of your study and, other than acknowledgment that ETS supplied the test materials, you will not use ETS's or a test sponsor's name in such a way as to imply participation in or responsibility for your study, nor may you use the materials for any commercial purposes.

3. Unless otherwise specified by ETS, the results of your study will be shared with ETS. Please send a copy of your findings directly to Dr. Thomas Barrows.

4. This permission is nonexclusive and royalty-free.

5. Each reproduced copy of the Global Understanding instrument shall carry the following copyright notice:

> Copyright © 1980 by Educational Testing Service.
> All rights reserved. Reproduced by permission.

The instrument containing Other Nations portions should carry appropriate acknowledgment of ETS as the developer of the study and instruments, and of Office of Education (HEW) funding.

If these arrangements are satisfactory, please sign both copies of this letter and return one copy to us.

Sincerely,

Helen C. Weidenmiller

Helen C. Weidenmiller
Rights and Permissions
Administrator

cc: Dr. Barrows

ACCEPTED AND AGREED TO:

Dr. Lois Bader

John M. Chapman

Dr. John M. Chapman

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BIBLIOGRAPHY

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