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AN ASSESSMENT OF GLOBAL KNOWLEDGE
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# AN ASSESSMENT OF GLOBAL KNOWLEDGE OF K-12 TEACHERS IN AN AMERICAN-SPONSORED OVERSEAS SCHOOL

By

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ABSTRACT

AN ASSESSMENT OF GLOBAL KNOWLEDGE OF K-12 TEACHERS IN AN AMERICAN-SPONSORED OVERSEAS SCHOOL

By

Donald L. Wieber

The purpose of this study was to measure the global knowledge of K-12 teachers in an American-sponsored overseas school and to examine this knowledge relative to selected characteristics and background of the teachers. The global knowledge was measured by an instrument developed by Educational Testing Services, Princeton, New Jersey. It covered thirteen global issues and stressed the themes of interdependence among nations, the problems of developing nations, and such historical changes as necessary to understand the modern world. The test is not an in-depth assessment of global knowledge about each issue but rather a survey whose strength lies more in its breadth than in its depth.

Within the limitations of setting, population, and methodology, the major results of the study were:

1. Teachers assigned to teach mathematics or science scored higher on the knowledge test of global issues than teachers of elementary, foreign languages, or humanities including social sciences.

2. Education majors scored lowest when compared to teachers with majors in mathematics, science, social studies or foreign language.

3. There was no significant statistical relationship between the composite score on the global-knowledge test and the number of languages teachers know. Likewise, the scores of foreign language teachers were not significantly different from scores of teachers assigned to teach humanities, nor were foreign language majors' scores different from social science majors'.

4. A significant correlation, though slight, existed between both the number of countries a teacher visited or lived in and the length of time spent in such places, and their performance on the test of global knowledge.

5. With the variables of age, years teaching, years teaching overseas, highest degree earned, and the perceived training to teach about other cultures or countries, no statistically significant relationship existed with the composite scores on the global knowledge test.

6. When rank ordering the thirteen issues, teachers scored well on topics of geography, culture, health. With topics of religion, energy, and relations among nations, the respondents scored lowest.

An examination of current teacher-preparation practices as well as the need for inservice programs in global education for teachers appears in order if students are going to be instructed to a level of knowledge considered necessary for an adequate understanding of global situations today.

To Mary Jane, my wife,

and

Mary Lynn and John, my children.

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# THE PROBLEM

## Introduction

Global interrelatedness is a reality of today's world. The factors contributing to this complex interrelationship of nations and peoples of the world are many. Modern communications and transportation have revolutionized our lives, making far-away, exotic lands neighbors and troubled nations a worry or a threat. Further, space exploration, food shortages, international terrorism, and the knowledge that man possesses the capacity to annihilate man and render the world uninhabitable provide clear, daily evidence of a growing agenda of common problems. Competition for natural resources is keen. All realize that they are finite, although many disagree on the extent of certain resources. Regardless, the world could run out of certain minerals by the turn of the century.

Much is said about raising the poor out of misery, yet human misery goes on. The world is not feeding its people. Thousands are the children in the world who are not merely undernourished but literally starving to death. Quite apart from the massive human cost involved (a cost almost beyond our ability to comprehend), misery breeds instability, despair breeds violence, and no belief in the decency of democratic institutions can possibly hope to survive against the basic imperative to survive.

The litany of global problems is long, and while the problems in many instances are not new, the one outstanding difference is that no nation can any longer so easily dominate others or predetermine the outcomes. One nation's fate is bound up with the fate of others. Like it or not, nations are today quite interconnected and interdependent. No longer does one nation's problem exist as the problem of that particular nation. More often than not, it is or soon will evolve into a problem for many. We are all inhabitants of a single planet and share a common fate as members of a single species.

Granted, it is fashionable, and has been for a number of years, to suggest that the world is becoming increasingly complicated. But is not this an oversimplified view? The world is, indeed, complicated, but have we not cultivated a more complicated view of it? Power is limited and becoming more impractical today as greater participation in decision making gives more voices the power to be heard. As these voices are heard, many feel old sovereignties or loyalties. They may believe that the inculcation of "global" values, of a world view of things, will somehow weaken the national resolve of one's own nation. Lack of knowledge may on occasion make action or decision making easier, but it may also heighten the probability that that decision is the wrong one and prove self-defeating.

The realities of interdependence or interrelatedness are with us all. Interdependence is not an ideal; it is a simple fact. One may fear it, but it must be understood if for no other reason than to set limits to it. At issue is really whether we shall manage interdependence effectively.

## The Problem

As there are many global problems of increasing complexity, there are many possible solutions and paths to these solutions. Working on such solutions requires skills, sensitivity, innovation and understanding, and a perspective of the world that emphasizes the interconnections among cultures, species, and the planet. Also required is group decision making at various levels: local, national, and above all international. Yet the difficulty in seeking solutions together is that the answers that we "know" to be obvious, logical, and "right" cannot often be implemented because of the history, traditions, and customs of other people.

The situation requires that people develop their capacities to benefit from diversity, to communicate with others who do not share the same values, to recognize the need to identify with human beings everywhere, to manage conflict, and to tolerate ambiguity. Consensus and diversity--these two qualities appear to be the foundation of solutions to global issues.

Seemingly the two ideas are contradictory, yet upon analysis they are also complimentary. Through consensus common goals are agreed to. Specific areas of concern are decided upon. Through diversity different activities and directions can be developed that bring one closer to the goals.

Involved in this entire framework is the formation or education of persons to possess skills, sensitivity, innovation, and understanding for global awareness. There is need for global-education curricula. There is need for a school situation that strives for a

mature global perspective for its students. The many global issues force us all to confront our common needs and problems. As travelers together on "Spaceship Earth," we must plan for the future of our planet. The need for global education has never been greater. Reischauer (1973) argued:

> We need a profound reshaping of education if mankind is to survive in the sort of world that is fast evolving. . . . Before long humanity will face grave difficulties that can only be solved on a global scale. Education is not moving rapidly enough to provide the knowledge about the outside world and the attitudes toward other people that may be essential for human survival within a generation or two. (p. 4)

U Thant, former UN Secretary General, a teacher, when discussing these global issues and problems always came back to his fundamental belief that education held the keys to the future. Two statements, one from a rare speech he made on his beliefs in Toronto in 1966 and the other from his farewell address to the United Nations staff in December 1971, provide educators with the all-encompassing goal of education that transcends material and intellectual achievements and likewise reaches into the moral and spiritual spheres.

> The law of love and compassion for all living creatures is again a doctrine to which we are all too ready to pay lipservice. However, if it is to become a reality, it requires a process of education, a veritable mental renaissance. Once it has become a reality, national as well as international problems will fall into perspective and become easier to solve. Wars and conflicts, too, will then become a thing of the past, because wars begin in the minds of men, and in those minds love and compassion would have built the defences of peace.
>
> I have certain priorities in regard to virtues and human values. An ideal man, or an ideal woman, is one who is endowed with four attributes, four qualities--physical qualities, intellectual qualities, moral qualities, and spiritual qualities. Of course it is very rare to find a human being who is endowed with all these qualities but, as far as priorities are concerned, I would attach greater importance to intellectual qualities over

physical qualities. I would attach still greater importance to moral qualities over intellectual. It is far from my intention to denigrate intellectualism, but I would attach greater importance to moral qualities or moral virtues over intellectual qualities or virtues--moral qualities like love, compassion, understanding, tolerance, the philosophy of "live and let live," the ability to understand the other man's point of view, which are the key to all great religions, and above all I would attach the greatest importance to spiritual values, spiritual qualities. I deliberately avoid using the term "religion." I have in mind the spiritual virtues, faith in oneself, the purity of one's inner-self which to me is the greatest virtue of all. With this approach, with this philosophy, with this concept alone, will we be able to fashion the kind of society we want, the kind of society which was envisaged by the founding fathers of the United Nations 26 years ago.

Consider, however, to what extent American education has adapted to global realities. Educational statistics are worrisome--at every level. The teaching of foreign languages in elementary schools, an expanding aspect of the curriculum in the mid-1960s, has stopped altogether. The President's Commission on Foreign Languages and International Studies (1979) found high-school enrollment in foreign-language study falling to the 18 percent level in 1976 from a 24 percent level in 1965; college language courses fell by 17.7 percent between 1968 and 1977. Funding by the U.S. government of international studies at the university level has declined by 50 percent over a ten-year period.

Other negative aspects point to a decline in international affairs on the part of the U.S. public. There is a shortage of skilled experts in leading universities in particular fields and geographical areas. Another most-troublesome problem is the little attention given in the general education of schools to the international dimensions of life. The public is simply not informed of the nature and degree of

U.S. involvement in the world. In fact, Keller and Roel (1980) pointed out that "studies in television suggest that Americans receive less exposure to foreign countries than any other people in the world with the possible exception of China" (p. 81).

Two significant studies undertaken recently supported the extent of student illiteracy in world affairs and gave some indication of how far we have to go. The first study was initiated by the U.S. Office of Education's Institute of International Studies. Entitled Other Nations, Other Peoples: A Survey of Student Interests, Knowledge, Attitudes, and Perceptions, this national study done in 1974 surveyed a representative sample of public-school children at the fourth, eighth, and twelfth-grade levels. It dealt with the students' backgrounds and interests, knowledge, separate measures of attitudes toward and perceptions of other nations and peoples. The study's knowledge findings alone indicated that

> weaknesses in such a fundamental area as geography, the pervasive ignorance about the Middle East and Africa, the lack of knowledge about Western Europe, and the misunderstanding of key aspects of American history and government--all of these are serious matters by any standard. It is particularly so with deficiencies at the 12th grade level, for here the data reflects the cumulative effects of more than 11 years of formal schooling plus related gains from all out-of-school sources. . . . (p. xii)

One must note that the knowledge tests were not directed toward content in school texts or past history of the nations concerned, but basic information that the project team from Educational Testing Services believed students should know about the six nations involved--the United States, Mexico, France, Egypt, Communist China, and the Soviet Union.

In 1980 the Council on Learning contracted with Educational Testing Services to conduct a nationwide survey of freshmen and seniors in four-year colleges and two-year schools to determine their understanding of the world and world issues. Based on a sample of about 3,000 undergraduates at 185 institutions, it was found that the performance of these students displayed a considerable lack of knowledge of topics the experts in various fields felt were important. The average score of seniors was 50.5 out of 101 questions; for freshmen, 41.9; and for two-year students, 40.5. Scores ranged from 0 to 84.

Considering the performance of these students from a disciplinary point of view, one finds that all three groups performed more strongly on the questions having to do with social sciences than with the humanities. Students majoring in social sciences scored above the average (52.77) but were outperformed by engineering and mathematics majors. Foreign-language students were slightly below the average (50.22). But the lowest of all groups were education majors, whose scores averaged 39.83.

The problem becomes evident in considering the studies that have been done relative to global education. The lack of awareness of international affairs, issues, and background coupled with a decline in international expertise is taking place at a time when the need is greatest. Education is not the only element needed in the adaptation of the U.S. to this new concept or view of the world, but it is certainly one of the most important. If educators do not take a lead in making the public more aware of the world and create a

sense of world responsibility and values, it is difficult to fathom where such leadership will come from. The place to start, then, is in school curricula, in the education of teachers, and in their prescriptions for their students.

## Background and Rationale for This Study

The educational needs of American children living overseas with parents are met through a variety of educational programs and types of schools. Children of military personnel attend schools established under the auspices and administration of the Department of Defense. On a tuition-paying basis, some civilian children attend these schools also. Most civilian children, however, attend nongovernment, private schools of various kinds. These schools may be religious, proprietary, or U.S.-company operated, but the largest number are nonprofit, nondenominational, independent, and established on a cooperative basis by the parents of a particular community.

Within this group of schools overseas, most receive some support--in many instances very negligible support--from the U.S. Government through the Office of Overseas Schools in the U.S. State Department. The designation given this group of schools because of receiving U.S. State Department assistance is "American-sponsored schools." This group of schools numbered 154 in 94 countries in the 1980/81 school year.

In the 1980/81 school year, these schools served a total of 83,861 children. Of these, 31.1 percent (26,084) were U.S. citizens. The balance of the student population (57,777) were from 90 other

countries and the particular host countries where the schools were situated. Of the total of 7,282 teachers and administrators employed by these American-sponsored schools, 53.02 percent or 3,861 were U.S. citizens. The balance of 3,421 were foreign nationals from 70 countries. (See Appendix A.)

The American International School in Vienna, Austria, is one such school. In the 1980/81 school year, that school had an enrollment of 681. This included 311 U.S. citizens (45.6 percent) and 370 students from other countries, including Austria. On staff there were 62 teachers, including 45 (72.5 percent) U.S. citizens, 14 teachers from Austria, and 3 from other countries. (See Appendix B.)

Although the curricular programs vary in these American-sponsored schools, "all the schools share the purpose of providing educational opportunities for American and other children which are generally comparable to educational programs in the U.S. and of demonstrating American educational philosophy and practice abroad to help further international understanding" (italics mine) (U.S. Department of State, 1981). (See Appendic C.) It is this international aspect of the curriculum in these schools that is of importance to this study. One of the stated goals of these schools is global education. Lubeke (1976) reported that increasing numbers of these schools are moving toward curricular activities and programs, developing instructional materials, and inservicing staff for purposes of achieving an international dimension--a dimension that he quoted Orr as defining: "not processing information [about other cultures] but also as the wisdom to recognize internationalism as a frame of mind, an attitude,

a concept of oneself as a member of an international community--it means behaving interdependently rather than dependently" (p. 44).

In summary, there exists a group of schools scattered throughout the world that appears to provide a unique opportunity to foster in its students a global perspective. The very composition of these schools, because of their international student body and staff along with the defined goal of developing a global attitude, seems to make these schools an ideal instrument to foster and achieve a program of global education. The question remains, however, as to whether success is being achieved in attaining the goal of global education. Studies are missing relative to the knowledge teachers should possess in order to assist students through the curriculum to develop a global perspective. Data need to be obtained to determine the current status of global knowledge of staff as well as students. Such information added to the existing body of information relative to global education should greatly assist schools in inservicing teachers, curriculum development, and materials production.

## Purpose of the Study

The purpose of this study was to explore the extent of the global knowledge of K-12 teachers in an American-sponsored overseas school and to examine this knowledge relative to selected characteristics and background of the teachers in the sample group. The global-knowledge test administered concerns itself with 13 topics or global problems identified by experts appointed by the Educational Testing Service, Princeton, New Jersey. An understanding of these issues is considered vital for educated citizens to understand the

interactions of nations in an interdependent world. These problems should be appreciated in their immense complexity of both the causes and effects and apprehended from a universal and multidisciplinary point of view. A citizen should perceive the extent to which individual lives, including one's own, are affected by global or international conditions and possess a historical perspective as a guide in one's understanding of today's world.

The global issues tested were environment, food, health, energy, religious issues, arts and cultures, distribution of natural characteristics, relations among nations, war and armaments, monetary and trade arrangements, human rights, racial and ethnic issues, and population. To the test scores on each of these global issues as well as to the composite score of the test the various teachers' characteristics and backgrounds were compared.

The characteristics of teachers that were compared and related to the scores received on the global-knowledge test were age; main subject area taught; number of areas of the world visited or lived in; length of time spent in a geographical area; years teaching; years teaching overseas; number of languages read, written, or spoken; highest university degree held; citizenship; perceived training for teaching about other countries and cultures; and, finally, degree major.

The test was originally used to survey a representative sample of more than 3,000 undergraduates across the country in some 185 institutions of learning. The test itself was not, nor is the present

study, an in-depth assessment of global knowledge about each issue, but rather a survey whose strength lies more in its breadth than in its depth.

## Hypotheses

The hypotheses for the study were formulated relative to the composite test scores on the global-knowledge test and also relative to the test scores on each of the 13 global issues.

### Hypotheses Relative to the Composite Test Scores

1. There will be no significant difference between the global-knowledge composite test scores of teachers teaching different subject areas in an American-sponsored overseas school.

2. There will be no significant difference between the global-knowledge composite test scores received by teachers who are U.S. or Canadian citizens and by teachers of other citizenship.

3. There will be no significant difference between the global-knowledge composite test scores received by teachers who speak, read, and/or write a foreign language and by those teachers who do not have another language.

4. There will be no significant difference in the global-knowledge composite test scores obtained by teachers having different college undergraduate and graduate majors.

5. There will be no significant difference in the global-knowledge composite test scores of teachers who have graduated and/or hold a teaching certificate from a U.S. university and those who have

not graduated and/or do not hold a teaching certificate from a U.S. university.

6. There will be no relationship between the number of countries traveled or lived in and the teachers' composite scores on the global-understanding test.

7. There will be no relationship between the amount of time teachers have spent in foreign countries and the teachers' composite test scores on the global-understanding test.

8. There will be no relationship between the number of years a teacher has taught and the teacher's composite test score on the global-knowledge test.

9. There will be no relationship between the number of years a teacher has taught in international schools and the teacher's composite test score.

10. There will be no relationship between the number of languages a teacher speaks, reads, or writes and the teacher's composite test score.

11. There will be no relationship between the ages of teachers and the composite test scores on the global-knowledge test.

12. There will be no relationship between the highest degree earned by teachers and the composite scores on the global-knowledge test.

13. There will be no relationship between the teachers' perceived degree of educational training for teaching about other nations and cultures and their scores on the global-knowledge test.

Hypotheses Relative to the Test Scores on the 13 Global Issues

1. There will be no significant difference between the scores on the 13 global issues of teachers teaching different subject areas in an American-sponsored overseas school.

2. There will be no significant difference between the scores of teachers who have U.S. or Canadian citizenship and the scores of teachers holding other citizenship.

3. There will be no significant difference in the scores on the 13 topics of the global-knowledge test for teachers who speak, read, and/or write a foreign language and for teachers who do not have another language.

4. There will be no significant difference in the test scores of teachers with different undergraduate and graduate majors relative to each of the 13 global issues.

5. There will be no significant difference in the scores on the 13 topics of the global-knowledge test of teachers who have a degree from a U.S. university or hold a teaching certificate from the U.S. and the scores of those who have not graduated from a U.S. institution.

6. There will be no relationship between the number of countries traveled or lived in and the teachers' scores on the 13 global issues of the test.

7. There will be no relationship between the amount of time teachers have spent in foreign countries other than their homeland and teachers' scores on the 13 topics of the test.

8. There will be no relationship between the number of years a teacher has taught and the teachers' scores on the 13 topics of the test.

9. There will be no relationship between the number of years a teacher has taught in American-sponsored overseas schools and the teachers' scores on the 13 topics of the test.

10. There will be no relationship between the number of languages a teacher speaks, reads, and/or writes and the teachers' scores on the 13 issues of the global-knowledge test.

11. There will be no relationship between the ages of the teachers and the teachers' scores on the 13 issues of the global-knowledge test.

12. There will be no relationship between the highest degrees earned by teachers and their scores relative to the 13 global issues on the test.

13. There will be no relationship between teachers' perceived degree of educational training for teaching about nations and cultures and teachers' scores on the 13 topics of the global-knowledge test.

## Delimitations

This study must be considered within the limits of the population and procedures used in the investigation.

### Population

The population from which the data were drawn for the study comprised the teaching staff of the American International School, Vienna, Austria. The total teaching staff numbered 62 faculty

members. Of these, 44 were U.S. citizens, 14 host-country nationals, and 4 persons of other nationalities.

## Definition of Terms

International school: Among schools that refer to themselves as international, one group numbering 154 receives financial assistance from the United States federal government through its State Department. This group of schools is referred to as American-sponsored schools. This study was concerned with a school from this group, and the terms "international" and "American-sponsored" schools are used interchangeably throughout this dissertation.

Global knowledge: There are two fundamentally different approaches to structuring global-knowledge aspects of a study. The first approach is based on the traditional curricular approach found in international-relations and area-studies courses. The second is based on global issues that transcend particular nations or regions. However, one realizes both approaches intersect one another. A knowledge of international relations certainly will consider and include knowledge of issues and vice-versa. Issues will include a knowledge of the international setting in which they are to be dealt with. However, the two approaches remain distinct and have different implications for teaching and testing, if only in reference to which are of primary importance.

The level of sophistication of the global knowledge to be tested in this study must be understood as one of breadth rather than depth on any issue. The actual number of questions is 65, allowing

for coverage on any issue to be very modest. The knowledge test is intended to measure what should be known at a criterion level or to measure what needs to be known if global situations and processes are to be fully understood.

Global issues: The questions contained in the survey instrument clustered around 13 worldwide issues:

1. Energy--Our industrial society has always been under the illusion of unlimited power and resources. However, the problem of finite resources, including energy, is one of the issues or themes that must be included in a global-education program. The world must take account of the problem of scarce resources in planning for present and future developments. Energy is one of these resources, and with the formation of the OPEC cartel and the Arab embargo of oil, the U.S. economy and the world economy have gone through startling changes.

2. Food--New advances in crop technology have raised yields dramatically, but little has been done to address the problems of food distribution. Much of agriculture has also been put at the mercy of machines and fossil fuels. While aid pours into many underdeveloped countries of Southeast Asia and Africa to ward off starvation for millions of people, one may find such paradoxes as infant formula being sold or distributed in such places that may actually contribute to infant mortality. We speak of raising the poor out of misery. Yet human misery goes on and this misery breeds instability, violence, and rejection of democratic institutions.

3. Health--Recent scientific and technological advances in the field of medicine have resulted in phenomenal discoveries for

mankind. Great epidemics that plagued humanity not long ago have been wiped out. Many diseases are on the retreat. The death rate has been reduced and life expectancy increased. The results of such efforts have been a major contributing factor to an increase in the world's population. However, far from reaching all, medical advances are still not available to vast numbers of the world's population. Yet health, as exemplified by the activities of the World Health Organization, has been the area of greatest success in achieving cross-cultural consensus on aims and policies.

4. Population--Length of life has increased, reaching more than 70 years in many of the developed countries. Even in less-affluent societies, such as India, life expectancy has increased from 40 to 50 years in two decades. Diseases such as smallpox are either being eradicated or controlled. People of our planet have increased from 2.5 billion in 1951 to more than 4 billion today. The figure may reach 6 billion in the year 2000, and a child being born today is likely to live in a world of 12 billion at the age of 60. With the population increases, especially in the poorer countries, and a consumption explosion greatest in developed countries, enormous pressures are being placed on the environment, resources, and energy, with crises in the area of food and urban settings (Mueller, n.d., p. 1).

5. Race and ethnicity--Van Til (1976), in his chapter "The Crucial Issues in Secondary Education Today," pointed to the problem of racism that persists worldwide. Racism reaches the pinnacle of ugliness and human devastation in South Africa, where it takes the

official form of apartheid. In the United States, racism, despite civil rights legislation, churches' condemnation of it, and attempts at school integration, takes on subtle and cynical forms. It is much in evidence in difficult economic times. We cannot be a humane society if we allow injustices to exist based on race and color.

It is also important but difficult to recognize the value of cultural diversity and differing personal roots. Historically, the U.S. society is assimilationist and integrationist--the melting pot of the world. The result has been the emphasis on American ideals and values, an Americal cultural homogeneity. Global education requires an understanding and fostering of mankind's commonalities but at the same time mankind's diversity. Americans will be obliged to deal with other peoples as equals--to learn how to become a partner rather than a dominant power.

6. Arts and culture--New nations today often feel intruded upon by the West (and particularly American). These nations resent this intrusion on their societies, which have their own values and ways of doing things. Many in the developing world feel that the flow of communications is all in one direction--from the developed to the developing world. With the West's, especially America's, dominance in communications technology, this is not surprising. Films and television series earn $200 million in exports annually for the U.S.; four of the five largest record distributors are American. Ways must be found to understand and share nations' arts and culture. Language studies alone would greatly assist in such sharing, but in the U.S. it has fallen to a dismal low. Nor do the statistics show a rise in

interest in other apsects of international studies. The negative effects are several: A shortage of skilled experts, a public less conscious of the complexities of the world about them, and a relative lack of attention to the world in the mass media tend to reinforce and compound the problem.

Arts--Anderson (1968) saw another dimension to this issue. Modernized, mass societies (such as the U.S. Japan, European countries, and even the Soviet Union), while reflecting the influence of their own peculiar histories and ideologies, are beginning to reflect increasing similarity in their economic, political, and social structures. In addition, before the century is over we may begin to witness a cultural diffusion--a two-way street, bringing many elements of traditional Eastern culture to the West as well as West to East (p. 641).

7. Distribution of natural characteristics--Geographical features of an area where man lives have been a major factor in forging a people's history, culture, and religion, as well as having an immediate effect on living conditions. Knowledge and appreciation of the physical constraints placed on a people are essential to have for the global citizen if solutions are to be found for many global issues.

8. International monetary and trade arrangements--The integration of national economics today is inextricably binding nations and peoples together. The very science and technology that has brought the U.S. and countries in the West to their present level of the "good life" have also brought the world into one economy. Consider what has happened to national economics. Between 1960 and 1977,

direct foreign investment in the U.S. rose 77 percent and our investment abroad by 123 percent. Imports of goods and services went up 246 percent and exports 202 percent. In addition, the industrialized nations are often in competition for finite natural resources. To what extent has American education adapted to these new realities? (Tonkin & Edwards, 1981, p. 695).

9. Human rights--Metcalf (1976) identified the "violation of human rights" as one of five global problems that need to be addressed in the global-education curriculum. Many of the national governments today are authoritarian, denying a voice in decision making that affects their lives, and to object to the situation leads to loss of life and property, torture, and death. Not only political rights are trampled on, but for many children the most fundamental rights are nonexistent. The aim of any new international economic and social order must be a world in which all children can grow in health and freedom, with access to adequate nutrition, shelter, clothing, education, and training for employment. These rights have been recognized under the Declaration of the Rights of the Child, adopted unanimously by the United Nations General Assembly in 1959 (Vickers, 1978, p. 7).

10. War and armaments--For every dollar spent today on education, 60 are spent on armaments. Nuclear confrontation continues, as well as nuclear proliferation. Dozens of local wars are fed by the manufacture and sale of conventional weapons from the so-called developed nations. In 1975, 5.5 percent of the world's gross national product was devoted to military expenditures. While the ratio is

dropping slightly in the developed countries, it is rising in the developing countries, which can least afford to do so. War is simply an outmoded instrument to settle disputes among nations, yet no international agreement exists or is being sought.

11. Environment--The environment, we are coming to realize, is a most delicate system. The acid rain that falls on Scandinavia is primarily produced in industrial plants of Britain and the Low Countries. In the Baltic Sea, residual discharges by the bordering countries have already come close to destroying the sea's ecology. It will take a massive effort to prevent the Mediterranean Sea from dying. No international agreement has been formulated for nuclear waste, yet such multiplies daily. It appears, as Van Til (1976) remarked, that the higher the civilization, the more the air is fouled, the earth gouged, and the seas poisoned.

Deteriorating biological systems around the world pose a grave threat to the global economy. A report by the World Watch Institute warned that excessive pressure on the world's support systems, including crop and grazing lands, forests, and fisheries, combined with rapid population growth, spell inevitable decline in living standards in many nations and regions (Shabecoff, 1982, p. 6). Nations must quickly discover that it is in their own interest as well as others' if mutual instruments, institutions, and agreements are made rather than going one's own way to the eventual risk of confrontation as in the past.

12. Relations among states--The United States, like all other nations in various ways, can no longer so easily call the shots or

predetermine the outcomes. Our fate is wrapped up with the fate of others. Over the past 30 years, the increase of international contact has resulted in an unprecedented growth in scope and impact of international institutions. Furthermore, the East-West rivalry may be a constant in the world arena of power, but neither grouping of nations in this struggle is monolithic. A new pluralism, a new polycentrism, is entering the relations among nations. It is important to understand the peoples involved and their motives. To cultivate in students an understanding of the motives of other people and of the social, psychological, and historical settings that cause them to think and act as they do and to understand our own motivations and their consequences is one of the greatest challenges of education today.

13. Religious issues--Threading its way throughout the turmoil, complexities, and perplexities on the global scene is a concern that not only man's material fate is at stake but also his mental and spiritual welfare. The solution to many problems will tax historical and diversified religious beliefs but may also demand and result in the formulation of new codes of behavior and ethics. Global education will have to transcend material and intellectual achievements and reach also into the moral and spiritual spheres.

## Summary and Overview

In this chapter the problem, background, rationale, and purpose of the study were presented. Two major groups of hypotheses were constructed, one group relating to the composite scores and the

other group relating to the scores on the individual global issues. This list of delimitations included population and terminology.

In Chapter II, literature related to the meaning and component parts of global education, curriculum implications and difficulties, as well as staff-development aspects required for global-education implementation in schools is reviewed. In Chapter III, the design and methodology of the study are discussed. The data are reported, analyzed, and discussed in Chapter IV. Chapter V contains a presentation of the summary, conclusions, and recommendations for further study.

# CHAPTER II

## REVIEW OF THE LITERATURE

The literature reviewed for this study was selected to answer the following questions:

1. What is global education, its meaning and distinguishing elements, and the concepts of a global perspective and of the world as a system?

2. What are the curriculum issues for global education; its goals, objectives, organization, materials selection, and obstacles for implementation; and the readiness age for the program?

3. For staff development to implement global education in schools, what is involved in the educational change required?

### The Meaning of Global Education: A Definition and Its Component Parts

An immediate issue confronting an educator involved with global-education curriculum is the need to identify a clear and succinct definition of the term. What is so unique and different about global education that it should command our attention? Have not and are not schools already involved in global education or international affairs or area studies? Is not the term "global education" a mere reinvention of the wheel, so to speak?

This writer discovered quickly in his efforts of working with staff and board of education that it takes a great deal of doing to explain adequately the meaning of global education and the distinction that exists between it and other curriculum forms closely aligned to it. Statements or attitudes such as "We're already dealing with international affairs." and "I've teen teaching about the world in my fifth-grade current-events class for a number of years now." and "I think Mrs. Walker does a terrific job in teaching about cultures of children in her class."

Problems inevitably arise when introducing global education to a group of seasoned veterans in a school setting. This is understandable, considering that as one reads the literature on the subject it is not always easy to pin down the precise meaning of this new curricular trend. Burrows, Klein, and Clark (1981) reinforced the difficulty in dealing with a clear understanding of the term. When constructing a major survey test of global understanding by a committee of experts to be administered to 3,000 undergraduates in 185 institutions, a precise definition of global education was nonexistent. They stated:

> The notion of global understanding . . . is a relatively modern one. Moreover it is not well understood; little has been done to define the concept. . . . One of the more difficult tasks the project staff grappled with in designing the survey instruments was to decide on an approach to take in constructing the knowledge test. Without a clear definition of global understanding, how does one decide what specific knowledge it consists of? Does global knowledge mean an understanding of the kind of content taught in traditional college courses in international relations and area studies? Or does it mean a grasp of global issues, such as human rights or world government, that transcends particular nations and regions? (p. 7)

The idea of international education, of course, has been around for years. Its goal is to contribute to understanding between peoples and nations as well as to promote peace among nations. Becker (1979) found international/intercultural education falling into three different categories over the past 30 years. There was the period of the 1950s--the era of the Cold War, the Korean War, and McCarthyism--when the major emphasis was on military and diplomatic relations. The 1960s experienced the inclusion and emphasis on cultural and geographic-area studies. In the 1970s the educational scene switched to the expansion of the world-centered or global studies.

The reasons for America's impetus for international education since 1946 are many. Case (1979) listed four primary reasons. Although World War I brought the United States into military involvement in Europe, the concept of isolation dominated national thought until World War II. It was not until then that the U.S.'s inward-looking security was shattered. The second World War compelled citizens of many different nations to fight side by side: persons who spoke different languages, were of different races, practiced different customs, but paradoxically were all fighting against persons who had the same cultural mix of language, skin color, and custom. In addition, the battlefield was nearly the entire world. Neutral countries were few.

With the war, the invention and use of atomic weapons awakened in nations the realization that self-dstruction was indeed possible at the hands of some. The peril of the atomic age was upon us. It called for mutual understanding and efforts on the part of all to relate to each other. The establishment of the United Nations, along with the

sincere desire for peace on the part of many, further compelled educators to initiate programs of international education.

This brief summary of the historical rationale for international programs is an oversimplification because, to a degree, these approaches exist in schools today. Nevertheless, the growing realization that we live in a world of growing interdependence forces people of good will to respond in an appropriate curricular fashion. To date, it appears that we are in a lag situation. Taylor (1967) criticized as too narrow those international-education efforts that focus only on bilateral studies or exchange studies. Instead, he advocated world education, using the world as a unit of analysis and viewing problems as common to all or many social systems. The objective of learning about the world system is to gain insight into the shared heritage of humanity and to find ways to promote peace and cooperation.

In a later work, Taylor (1969) criticized today's educational system and believed education must, above all, seek to assist the student to learn to understand the nature and character of contemporary life. He added:

> In order to be truly educated, each must have a full sense of the nature of modern man and of the world he lives in, and I do not see how that sense can be achieved by the kind of education now being provided by most of the schools, colleges, universities, and educational systems of the world. They have fallen behind the reality of world society and are presenting conceptions of man and his world comparable to the pre-Copernican system of ideas in the post-Copernican period. (p. 3)

King (1970) was equally strong in pointing out the need to correct the current teaching situation in providing children with the opportunities to develop a global perspective. Although efforts have

been made to correct the parochial nature of teaching, they have fallen short. King felt the current-events approach fails because it is

> in the context of U.S. foreign policy on certain issues of the world as perceived from a nation--a very large one. And the rationale for area studies seems to be to grant "equal time" to non-western cultures, but usually only serves to reinforce the impression of the world as separate patches of real estate.
>
> A major difficulty with both these approaches is that they prevent the student from seeing the world as a system, because he is concentrating only on the individual parts. (p. 9)

Efforts to meet these challenges are emerging and are increasing. Global education is definitely one curricular approach and trend. As one studies the concept of global education, terminology becomes a problem. The literature uses a number of terms, sometimes interchangeably. Various terms are "international education," "world-mindedness education," "pluralistic education," "world citizenship education," "global awareness," and "world studies." Collins (1977), in his Report to the Council of Chief State School Officers, cited four terms as generally used when reference is made to formal course-work or structured learning experience: "world," "cross-cultural," "international," and "global," with "global citizenship" the most recent term in use. Collins selected two terms for his purposes: (1) "global education" to describe the field in its broadest, most universal sense, and (2) "global studies" to describe those activities and programs normally associated with formal study in the schools (p. ii).

The National Endowment for the Humanities defined global education using the broad, universal term "global perspective." Case (1979) differentiated between international and global education. He

saw international education as a study of all that global education studies for the purpose of understanding the problems, but global education requires an interdependent perspective to the study and a development of a sense of world community (p. 40).

Marker (1977) described global education as a way of thinking about the world that is characterized by the notion of "Spaceship Earth"--that we are all in this thing together and that the fate of some of us is quickly becoming the fate of all of us (p. 13). Strasheim (1978) saw global education as an emerging philosophy; the definitive rationale will not be written for some time (p. 3).

The British use the term "world studies." UNESCO recommends the term "international education," whereas the Canadians use "development studies" to include most of what global-studies advocates in the United States are recommending. All of these terms seem to suffer from a common problem: each means virtually whatever one chooses (Collins, 1977, p. 10).

One term that no longer seems appropriate and only serves to confuse the understanding of the meaning of global education is the term "international education." The term "international," used to describe activities between nations, is subject to cultural lag, according to Becker and Mehlinger (1968). These authors argued that enormous and important changes are taking place--changes in the essence of relations among individuals and nations in the world. The use of the word "international" to describe exchanges throughout the world is outmoded because the reality the word describes has changed vastly. The authors argued for either a new word to describe the

transactions between nations and cultures or a change in the meaning of the word "international" to accommodate a changing reality (pp. 2-11).

King (1970) stated that the word "international" reinforces our concept of a world splintered into separate pieces of real estate, and it also tends to become a "giant trashcan in which some place everything that goes on outside their nation. . . . It encompasses so much that it virtually means nothing at all" (p. 16).

The Michigan Department of Education, in its Guidelines for Global Education (1978), used the terminology "global education" and defined it as

> 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)

Cervantes (1979) remarked that one is struck by this definition's all-encompassing aspects--study of the interdependence of sociocultural, ethnolinguistic, economic, political, technological, and ecological systems. The definition is formidable and frightening. It has a tendency to receive nods of approval, but at a distance of noninvolvement. Cervantes offered an alternative definition:

> Global education is the multi-disciplinary study of the interdependence of world communities, their peoples and systems, for the purpose of understanding and resolving world and national economic, political, technological, ecological, sociocultural and ethnolinguistic issues. (p. 21)

The emphasis of this modified definition focuses on the multidisciplinary aspect of meeting global problems.

Hanvey (1975) described global education in terms of dimensions or goals. Five of Hanvey's dimensions for global education are awareness of the state of the earth, knowledge of global dynamics, awareness of human choices, perspective consciousness (i.e., others have views different from one's own), and, finally, cross-cultural awareness.

Anderson (1968) saw global education organized around three principles. Students should be educated about the world in ways that illustrate it as a world system: they as individuals are participants, and their competencies, therefore, must be developed and trained so they are effective and responsible participants.

From the teachers' point of view, global education is primarily philosophical (Swift, 1980). Global education is an attitude toward daily living, not a new course, a new program, or a new content.

> 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 multi-cultural 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. (Swift, 1980, pp. 46-47)

King (1970) defined global education as "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).

For education, it means that schools must help children and young people to develop "international understanding" but not in the traditional meaning of the word--a sort of strange-lands-and-friendly-people approach. Intead, 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 (King, 1970, p. 71).

The Minnesota Department of Education's Task Force (1979) dealing with global education employed the term "contemporary world studies." It was seen as an effort to communicate the awareness that humanity is interdependent. All people are world citizens, and every school subject and discipline should include a global dimension.

> Specifically, contemporary world studies should include: student materials which are sensitive to the worldwide implications of humankind's interdependence; learning the concepts, skills, values and attitudes which will enable humankind to cope with, modify, and improve a world in the constant process of change; developing a "world view" in lieu of western view; understanding one's own culture in order to appreciate the contributions of other cultures and peoples; an awareness that no one nation can successfully deal alone with today's world problems--food, energy, resources, population, pollution and peace. (p. 4)

In 1967, Kentworthy, although not using the term "global," indicated what some educators believe international understanding to be--primarily a point of view rather than a subject. It must begin with young children while they are forming attitudes and points of view that will have an influence in their adult years (p. 204).

Hickman and Price (1980) saw global education as a misnomer and referred to it as the newest bandwagon. They claimed the proponents are merely seeking shortcuts to a new objective, global

perspective. These authors believed the global problem or global awareness cannot be taught. You teach the parts, but it is the individual who constructs the concept comprising the parts. They stated, "We would be foolish to assume we could teach a global problem, or global awareness, or global perspective without reference to at least a representative number of its parts or pieces" (p. 209).

There appears to be no single summary of global education that will please all because of the intrinsic complexities of the main areas of concern and the relationships between and among them (Leetsma, 1978). Different schools of thought make different elements or combinations in the central organizing theme. For the purposes of this study, "global education" is used to describe those activities and programs normally associated with formal study in classrooms that promote global understanding as defined by the Michigan Department of Education.

## Distinguishing Elements or Component Parts of Global Education

Examining global education further, global education, to be such, must comprise a number of component parts intrinsic to it. Leetsma (1978) identified five component parts in a global-education program:

1. Unity and diversity of mankind. Global education is concerned with the commonalities among mankind and the differences with the family of man. The earth's peoples are a single species endowed and enriched by diversity. Global education seeks to correct cultural myopia and to reduce ethnocentrism.

2. International human rights. A proper concern for human rights at home and abroad needs to become part of the shared commitment in the minds of citizens everywhere.

3. Global interdependence. The world is seen as a planetary ecosystem, an interconnected global web of subsystems. Leestma quoted the American historian Cyril Black, who saw the present era in time as the third great revolutionary transformation in human affairs. We live in the third stage of history--the emergence of a world society.

4. Intergenerational responsibility. Simply stated, each person has an obligation for the maintenance of the health of the earth during one's lifetime.

5. International cooperation. Solutions to common problems of the world can be found only in international cooperation. Mankind has a common destiny. Because of this common destiny, each person must possess a global perspective. Intrinsic to this perspective are:

a. An understanding of the earth and its inhabitants as parts of an interrelated network;

b. An awareness that there are alternatives facing individuals and nations and that choices will shape our future world; and

c. An ability to recognize that others may have different perceptions and may prefer different choices (pp. 6-13).

Case (1979) identified five themes for a global-education curriculum along with illustrative performance-based objectives. The five themes were:

1. Interdependence--peoples of the world should know that they are dependent on each other through the use of natural resources, through industry and commerce, and through ecological structures.

2. Systems Theory--people can seek solutions to complex problems by viewing the immediate problem as connected with and part of a large network or system that has interrelated parts.

3. Worldmindedness--people ought to be aware that they are a part of a global society, and they ought to have knowledge of some significant aspects of that society.

4. Finite Resources--the world's resources are exhaustible, limited, and in a condition of scarcity.

5. A New Economic Order--the economics structure throughout the world will shift and, due to the dynamics of change, new patterns will form, such as the wealthy countries of the Middle East (pp. 66-77).

Becker (1972) outlined four cornerstones for a global-education program. The four are:

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

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

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 et al. (1978) likewise developed themes threading through a global-education curriculum. Children should be taught the value of diversity. This can be achieved by identifying alternative beliefs and understanding that there are many different life styles in existence. A second theme is that of interdependence. This is accomplished by the perception of finite resources and identifying international linkages that already exist in the community. The third theme is the development of an effective working relationship with others. Specifically, a person must acquire the ability to engage in transnational communications. Finally, these authors saw the necessity of understanding world conditions and emerging trends as a fourth element in a global-education program (pp. 10-11).

Interdependence is a recurring theme in global education. Wood (1974) argued that the idea of interdependence should be included in all courses and argued that knowledge of this theme is needed at both the affective and the cognitive levels in order to develop a global consciousness. She added that behavioral objectives, appropriate for a given course, are needed to reflect the concept of interdependence (p. 665).

Hanvey (1979) stated this interdependence in different terms, seeing it as part of the more complex idea of systems theory. He said,

> The emergent global cognition 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)

Organization of a global-education curriculum must be organized around three fundamental principles, according to Anderson (n.d.):

1. The world is a system.

2. Highlighting the fact that individuals are participants in this world system.

3. Promotion of the development of competencies necessary to effective and responsible participation in the world system.

## The Global Perspective

The one dominant and recurring concept in dicussions and readings on global education is education for a global perspective. What is global perspective? What elements does it encompass? What is the rationale?

The Task Force of the U.S. Commissioner of Education on Global Education (1979) submitted that:

> In our contemporary world, global perspectives are essential to good citizenship and quality education. New perspectives on our own lives and our environment are necessary to assist us to identify alternative actions and to extend more control over matters that directly affect our daily lives. (p. 3)

Hanvey (1976) attempted to describe the modes of thought, sensitivities, intellectual skills, and explanatory capacities that contribute to the formation of a global perspective. He defined it

operationally as consisting partly of modes of thought and skills that provide the individual with:

1. Perspective Consciousness--the recognition or awareness on the part of the individual that he/she has a view of the world that is not universally shared, that this view of the world has been and continues to be shaped by influences that often escape conscious detection, and that others have views of the world that are profoundly different from one's own.

2. "State of the Planet" Awareness--awareness of prevailing world conditions and developments, including emergent conditions and trends, e.g., population growth, migrations, economic conditions, resources and physical environment, political development, science and technology, law, health, internation and intranation conflicts, and so on.

3. Cross-cultural Awareness--awareness of the diversity of ideas and practices to be found in human societies around the world, of how such ideas and practices compare, and including some limited recognition of how the ideas and ways of one's own society might be viewed from other vantage points.

4. Knowledge of Global Dynamics--some modest comprehension of key traits and mechanisms of the world system, with emphasis on theories and concepts that may increase intelligent consciousness of global change.

5. Awareness of Human Choices--some awareness of the problems of choice confronting individuals, nations, and the human species as consciousness and knowledge of the global system expands.

Hanvey did not conceive of global perspective as

> a quantum, something you either have or don't have. It is a blend of many things and any given individual may be rich in certain elements and relatively lacking in others. The educational goal broadly seen may be to socialize significant collectivities of people so that the important elements of a global perspective are represented in the group. Viewed in this way a global perspective may be a variable trait possessed in some form and degree by a population, with the precise character of that perspective determined by the specialized capacities, predispositions, and attitudes of the group's members. The implication of this notion, of course, is that diversified talents and inclinations can be encouraged and that standardized educational effects are not required. Every individual does not have to be brought to the same level of intellectual and moral development in order for a population to be moving in the direction of a more global perspective. (p. 2)

Anderson and Rivlin (1980) viewed a curriculum that embodies a global perspective as treating individual nations and regions as parts of a larger whole but a curriculum that highlights the interconnections between nations and among world regions. It treats all mankind as the main unit of analysis--not a group--and encourages students to tolerate and appreciate cultural differences. Global perspective does not view mankind as standing apart from and acting as supreme lord and sovereign over the earth but views man as belonging to the earth rather than the earth to us. A global perspective treats time as an interactive system of past, present, and future, mutually influencing one another as parts of a single human history. Dealing with information, global perspective emphasizes not the passive memorization of facts but rather the active use of factual information in conceptual, ethical, and policy analysis of global problems. Likewise, the world is portrayed as an arena in which the individual participates through personal, social, and political action (p. 65).

The Report of the Committee for International and World Education (n.d.) stated that with global perspective the concept of totality must be conveyed, and in the global-studies field, the total is more than the sum of the parts--a synergistic principle is involved, a belief in the validity and necessity of dealing with contemporary issues from a standpoint of global consciousness (p. 17). In summary, the report listed seven principles of global perspective. These are:

1. It is value-oriented: aimed at value clarification and realization of the existence of a world community.

2. It emphasizes the future and present--an initiative perspective. It encourages a positive conception of the future.

3. It is a species-oriented perspective, considering humankind as a single species.

4. Global studies considers issues as interdependent: world versus nationalist perspective.

5. Its orientation involves alternative systems or preferred world models.

6. It asserts that violence is an illegitimate method of dispute resolution.

7. The possibility of drastic system change is accepted.

King (1970) viewed the development of a global perspective as a pragmatic thing. It does not have to involve intricate theories or affect the loyalty of the citizen to his nation. Instead, it means developing citizens who are capable of looking beyond the nation-state for the solution of certain problems.

The Task Force on Global Education of the U.S. Commissioner of Education (1979), while not defining global perspective, spoke to it at length. A worthwhile global-perspectives program ordinarily would not consist of introducing a single subject or module called "global education." To do this would tend to fragment and trivialize the broad approach that is central to global perspectives. Both formal and informal learning experiences contribute to the formation of a global perspective. To acquire such a perspective, the formal study of nations, cultures, and peoples is needed, but with a focus on understanding how these are interconnected, how they change, and what the individual's responsibility is in the process. The opportunity must be provided to develop realistic perspectives on world issues, problems, and prospects; an awareness of the relationships between enlightened self-interest and the concerns of people throughout the world; and the basic knowledge and skills essential for life in a global age.

Collins (n.d.), in discussing terminology relative to global education, referred to "global perspectives" and/or "global interdependence" as terms that can further complicate things. The two terms are generally but not exclusively used by educators to refer to developing in students a particular attitude or mind-set, whereas terms such as "world," "international," and "global" tend to be associated with formal coursework or other structured learning experiences. However, educators using the former two terms advocate crossing traditional scholarly disciplines and formal course

structures, thus infusing the entire curriculum with a global dimension or perspective.

Joyce (1972) explained what global perspectives will mean for the student in the social sciences:

> Geographically it means that he [the student] sees the network of world interdependence and influence. He learns that the exploitation and conservation of resources is not simply a local or regional affair, but a global affair as well. Economically he sees not only the progresses of community and national economic interchange, but the networks of international interchange as well, and perhaps more critical, the moral and practical consequences of the actions of man everywhere on man everywhere else. . . . Anthropologically our young citizen begins to see interplay of the earth's cultures. He notes the processes of cultural conflict and interchange. He sees too the gradual formation of world culture. . . . Sociologically he sees the processes of assimilation and accommodation in the institutions and behavior patterns of the people around him, and he is able to identify the processes by which people are absorbed into the perspectives of their time and place and the processes by which this time of theirs socializes them to the global. Historically, our citizen sees the sweep of time as peoples all over the world have formed and reformed their heritages; mingled them, suppressed them, and found identity in them. (p. 333)

Torney and Morris (1972) addressed the extensive changes in the curriculum content and the process of teaching for an international perspective.

> In contrast with its major competitor (a view of the world as a static collection of nation-states), this new perspective demands that even on an unconscious and nonverbalized level we shift our image of the world, from that of a map of neatly colored and demarked countries to a picture of the earth as the totality which the astronauts saw from outer space. From this vantage point, we are able to see the world as a system whose parts are dynamically interrelated by their very nature, demanding that we focus on process rather than structure. If the earth is not a static set of structures but rather a constantly interrelated dynamic system, the function of international education must go beyond the rote acquisition of the facts of political geography.

Hickman and Price (1980) believed that no global perspective can be achieved by a teacher on a purely disciplinary basis. The rationale for this is the fact that the world is a complex of economic, political, religious, and individual interactions and conflicts. It is an interdisciplinary world, and the teacher must not only have a depth of interdisciplinary understanding but must approach global education from that point. The student will need to build a global perspective in much the same manner that he/she develops a concept (p. 210).

Morris and King (1968) developed four cornerstones for bringing a global perspective into the classroom. They believed the curriculum must

1. develop both a capacity for empathetic recognition of commonalities in human beings as they respond to basic needs, and a sense of involvement in the sensitivity to the reality of the human condition with reference to those needs.

2. develop an awareness of the national ethnocentric bias in the way people perceive each other.

3. develop the capacity to cope emotionally and intellectually with change, complexity, and ambiguity as they appear on the international scene.

4. develop the capacity to experience multiple loyalties and identifications.

Hickman and Price (1980) found, when drawing up a list of concepts essential for a global perspective or global awareness, that the list included only seven concepts that were not included in a

list of 34 major concepts for social studies drawn up in 1965. The conclusion they reached is that attempts to "teach concepts" are nothing new, and they appear to be receiving new emphasis with global education but in doing so have come full circle since 1965 (p. 210).

Anderson and Rivlin (1980) realized the scope and rate of change toward a global perspective has not been great. But there has been change, and "this is encouraging if we are optimistic who judge glasses as half full rather than half empty. . . . As nations become increasingly interrelated, citizenship education must include development of a global perspective" (p. 64).

Also to quote a working paper on the Glens Falls Project, "Glens Falls teachers over a decade have learned that a global concept can be taught as a point of view in all grades, K-12, and in all subjects, without offering it as a separate course or subject. This concept is broad enough to include instruction about nations and nature" (p. 2).

The Task Force on Global Education of the U.S. Commissioner of Education (1979) noted

> what it felt global perspective is not--
> . a new curriculum,
> . a new course to be added to the precollegiate curriculum,
> . a political movement,
> . an ideology,
> . a form of world government,
> . a blurring of cultural or value distinctions,
> . an ivory tower concept, or
> . a panacea for social injustices.
> Concern for global perspectives does not diminish or devalue patriotism or national independence. Indeed, the Task Force perceives education for global perspectives as strengthening national well-being by developing the ability to recognize and cope with changing world realities. (p. 6)

The World-as-a-System Concept

Among scholars involved with global education, the current view of the world is that of a single, dynamic, interrelating system (Becker, 1969). Anderson (1968) specifically mentioned the need to understand today the concept of a world system. The concept of a world system involves two assertions concerning world affairs. The first assertion is that there is a growing world system, a global social system that is an object of educational studies and research. The second assertion is that the growth of this system is the cutting edge of a deep innovation for the condition of humanity. This profound change, while still little understood, will expand humanity's conscious image (p. 78).

The world as a system, Hanvey (1979) stated, is not well understood. Industrial societies, for example, are raised to believe that almost anything can be engineered, including the world's destiny. A simple push of the cause-effect button, and world inflation or famine in South Asia is averted. This is simply not the world as it exists. Some view the world as a machine, but the idea of a machine suggests an assembly of parts that interconnect in a very positive fashion, so positive that when you manipulate one part you get immediate, predictable, and quantifiable response in other parts. That does not seem to describe the world as we know it. How, then, does the world work? As a system. What does that mean? "It means we must put aside simple notions of cause and effect. Things interact, in complex and surprising ways. 'Effects' loop back and become 'causes' which have

'effects' which loop back. . . . It means that simple events ramify--unbelievably" (p. 13).

Remy, Nathan, and Becker (1975), in discussing the world as an "emerging" social system or society, felt that previous international education missed the "systemness" that is the essence of world change (p. 59). Anderson (1968) stated the system's aspect of global education in different terminology, but the meaning remained the same:

> Admittedly the picture of the world as a planetary society is not the best of all possible photographs of man's contemporary condition, and hopefully, it will not be long before our conceptual lenses become much more refined. But in the meantime this picture provides a comparatively better image of "the real world" than does our inherited image of the world as a mosaic of different lands and peoples or as a pool table on whose surface are arrayed self-contained balls called nation-states. (p. 640)

Harper (1968) talked of two distinct cultures in existence today: the traditionally locally based culture and the new worldwide interconnected system. This new system uses resources from the entire earth and is becoming a different culture (p. 565).

Schools must help students gain a global perspective, a difficult idea to get used to and an even more difficult one to implement. Alger (1976) argued that this will require a curriculum that views the <u>total system</u>--not merely from the vantage point of an individual nation but from a vantage point outside the nation-system itself. In doing this, however, Boulding (1980) cautioned that teachers and researchers must have an image of the future that does not involve either total catastrophe or a reversal of the developmental process or the destruction of existing national states with an absorption

into a universal world culture and politics. He believed both a national system and stable peace are possible in the context of an international system.

Remy et al. (1975) believed that educators who do subscribe to the global-system view in order to broaden the area of children's loyalty and concern will find that loyalty to the emerging global system comes about when people find the institutions of the existing state to be inadequate. But even then the authors warned that a person's emotional commitment to the nation-state is so strong that only through a massive effort at propagandization can loyalties be shifted to a new global focus (p. 59).

## Curriculum Issues

To fulfill the need to implement curriculum for global education, the most difficult task ahead for a school system is a specific, well-planned program. The concern for global education is growing, and the need for children and youths to develop a global perspective is well established. What is needed most to realize success is a well-thought-out total program. Developing curricula is a difficult task at best, and global-education curriculum poses some particularly troublesome dilemmas.

Klein and Tye (1980) presented basic curricular questions that can serve as a guide for planning and implementing global education in a school system. They suggested that before any specific curriculum can be planned, the educator must set the educational priorities and develop a rationale to guide subsequent work. In

setting priorities, all possibilities must be considered in relation to needs--students, community (local), national, and global. Second, one must examine what the existing situation is in order to delete, clarify, augment, or cut back. Global education cannot simply be tacked on to an existing program. Modifications to existing curricula will be required, and this demands hard decisions but based on well-defined priorities. These authors also believed a critical step often overlooked by curriculum planners is the development and explicit statement of a rationale for their decisions and actions. "If curriculum planning is viewed as a formative process, never ending, always open to new information, new needs, and new priorities, then we can see the usefulness of explicit statements about why decisions are made or why actions are taken" (p. 210).

Representative of the kinds of statements that might become significant parts of an explicit rationale designed to guide curriculum development is a statement of rationale found in the publication by the Task Force on Global Education of the U.S. Commissioner of Education (1979):

> The Task Force submits that education for global perspectives (or global education) contributes significantly to fundamental competence in a world context, to educational excellence, and to the nation's vital interests. It helps advance the formation of responsible leadership and an informed citizenry. In our contemporary world, global perspectives are essential to good citizenship and quality education. New perspectives on our own lives and our environment are necessary to assist us to identify alternative actions and to extend more control over matters that directly affect our daily lives.
>
> Education for global perspectives in one sense is an outgrowth of the basic American philosophy that useful and practical education should be provided within the framework of U.S. democratic traditions in order to develop intelligent, effective, and responsible participation by citizens.

> Thus, education for global perspectives is an effort to equip all citizens with the variety of skills and the range of knowledge needed to cope with worldwide economic, scientific, political, and intercultural realities and opportunities. Decisions related to each of these factors affect economic growth, individual employment and careers, standard of living, and domestic and international stability.
>
> Global perspectives can contribute to the development of mutual respect for the human dignity inherent in all peoples, cultures, and civilizations, at home and abroad. They also can lead to the survival of a planet on which humans can flourish.
>
> In Section 603, Title VI, of the National Defense Education Act of 1958, the Congress in 1976 recognized the importance of having a citizenry well informed concerning other countries and their actions.
>
> The preamble to Section 603 states:
>
> ... the well-being of the United States and its citizens is affected by policies adopted and actions taken by, or with respect to, other nations and areas. . . .
>
> ... The United States must afford its citizens adequate access to the information which will enable them to make informed judgments with respect to the international policies and actions of the United States. . . .
>
> A global perspective contemplates those policies and actions that, whether local or global, are worldwide in impact, reaching across and beyond regions and continents. (pp. 3-4)

Joyce and Nicholson (1979), in "Imperatives for Global Education," defined a set of imperatives for global education that can greatly assist the educator in constructing a rationale for a school curriculum. They offered five imperatives that compare a philosophical basis for the generation of new curricula to promote international citizenship and global society. Although the future is certainly unknown to us, two characteristics are certain: order with progress and cultural pluralism. Along with these, promotion of global citizenship and political action and cross-cultural involvement are necessitated. From this conception an individual must see him/herself in four dimensions--as an individual, a member of the human race, inhabitant of the planet earth, and a citizen of a global

society. To accomplish this understanding, one must know and understand the immensely complex global scene.

Inherent in the global scene is the need to promote pluralism, to allow individual cultures to flourish, and to enrich each other. This, in turn, leads to the development of moral empathy with those different in culture, forming, as it were, an international citizenry. The conclusion of this process is the belief that one's own efforts can contribute to world improvement (Joyce & Nicholson, 1979, pp. 101-108).

Rationale for global-education curriculum is threaded throughout the literature relating to the problem. The Michigan Department of Education's Guidelines for Global Education (1978) used two authors' (Rene Dubos, 1969 Pulitzer Prize recipient, and Barbara Ward) statements for rationale. The Department insisted that "a viable rationale for global education should place an emphasis on the personal behavior of all world-minded persons. This behavior should reflect a concern for the person's immediate environment as well as a more distant environment" (p. 4).

The Report of the Presidential Commission on Foreign Languages and International Studies (1979), as well as books like Reischauer's (1974) Toward the 21st Century, Anderson's (1979) Schooling and Citizenship in a Global Age, and Becker's (1979) Schooling for a Global Age, are source materials for the case of global education in the curriculum. The need is apparent that a more appropriate educational response to the shrinking of time and space and the increase in man's interrelatedness must be devised. Becker (1978) stated,

> Global education seeks to help people, whereever they live and whatever they do for a living, understand how their lives are shaped and affected by world links and ties including how actions they take may affect the lives of others. . . . Interdependence is a reality--bad or good--helpful to some, harmful to others though it be. We need to help our students to develop knowledge, understanding, and skills needed for responsible participation in an interdependent world. (p. 4)

Responding to those having concerns for global education for all children and realizing such a program is an imperative, a successful program must follow the regular process of planning a curriculum. Identification of goals and objectives should be done early in the program, realizing that others become clear as work progresses. Decisions about goals and objectives are never final. They are always subject to review as the curriculum evolves.

Remy et al. (1975) suggested a useful exercise for program planners as being the listing of goals and objectives in international education or to consider some goals suggested by others. Such lists can be used to note preferences and priorities as well as to check the extent to which present programs are geared to those preferences (p. 72).

Smart (1971) suggested eight kinds of orientations for international education:

1. Introducing new ideas.
2. Developing a synthesis of value systems related to an emerging world culture.
3. Tracing national development.
4. Studying and promoting national political power.
5. Fostering mutual understanding and cooperation.

6. Preparing students for life in a global context.

7. Developing a creative attitude toward diversity.

8. Furthering discovery of truth (pp. 442-64).

Statements of possible goals for global education are scattered throughout the literature. Case's (1979) five identified themes provide a basis from which goals and objectives can be developed. King (1970) made a similar listing, summarizing some of the ideas of Anderson and Becker:

1. A curriculum that will give students the ability to look at the world as a "planetwide society," one of a number of types of human societies.

2. The teaching of a set of skills that will enable the individual to learn inside and outside of school and to continue learning after formal education is concluded.

3. The development of programs that "avoid the ethnocentrism inherent in sharp divisions between the study of American and non-American societies."

4. The integration of international studies with the trends and discoveries of other disciplines.

5. A curriculum that stresses the interrelatedness of man rather than simply cataloging points of difference or uniqueness.

6. A curriculum that is oriented toward the exploration of future alternatives.

7. The selection of subject matter and methods that are relevant for people who will be living in a global society that will

be characterized by change, ambiguity, growing interrelatedness, and continued conflict (pp. 20-21).

When consideration was given to the development of goals, Kenworthy (1967) felt that the program must foster the discovery of concepts, generalizations, or "Big Ideas." The field of knowledge about the world is so vast that it can be overwhelming to curriculum planners and teachers. The process of selection, therefore, becomes highly important, and clarity on the basis of selection of content is imperative.

Kenworthy pointed out that "the bull's-eye of the teaching target would be the central idea of a discipline." He cited the example from economics of man's unlimited needs and wants and the limited resources at his disposal. In anthropology and sociology it would be people or people in groups. In geography the central concept would be earth as the home of man or space relations or the "personality of place." In history the target could be time or continuity and change. In political science it might be power.

Around the bull's-eye would be various major concepts that emanate from the central ideas or ideas. In anthropology and sociology one could place the ideas of families, tribes, communities, national groups, cultures, and intercultural groupings or the international community. According to Kenworthy,

> Each discipline can be treated the same. From the concepts flow certain generalizations. In the field of anthropology a typical generalization would be that human beings are alike and different, with similar basic needs but different ways of meeting them. . . . Numerous lists of such suggested generalizations already exist. (p. 31)

Certainly, one singular pervasive goal in the program must be to assist the learner in understanding the unity or oneness of the world. Becker (1969) stated it this way:

> To see the world as one is a necessary starting point and goal of international education. Such a view will not solve all of man's problems, but it may provide the vision and insight needed if man is to survive.

Remy (1980) viewed this process of learning about and visualizing the world as one as a two-way venture:

> If the expanding scope and scale of global interdependence is eradicating the boundaries that once separated foreign and domestic affairs, the same forces are eroding the boundaries that once separated education about U.S. society from education about the rest of the world. (p. 67)

Goals must also promote affective learnings as well as cognitive learnings. Collins (n.d.) spoke to the need in the development of global-studies curricula to make affective objectives the central building blocks.

> Discussions of global education exclusively center on topics, issues, concerns or problems. That is, content in the cognitive domain. Yet we know if global education is to be effective, the affective domain is absolutely crucial. . . . The vast bulk of what anyone hears or reads in this field is devoted almost exclusively to a consideration of what content is most relevant and needs to be "covered." This approach fails to place sufficient importance on values, motives, and feelings associated with how people view the global arena. It is the affective domain that motivates our actions and, therefore, must be given equal emphasis with the content of global studies. (p. 8)

As Taylor (1967) pointed out, the problem in education is primarily one of developing empathy since the study of foreign cultures, whether on a professional or a personal basis, does not necessarily yield a sympathy for a world point of view or a tolerance of cultural differences (p. 8).

To achieve the empathy of which Taylor spoke, it seems necessary that a focal point be relationships with people rather than an emphasis on materials or projects. Moyer (1970) added that the beginning of human-relations education is interpersonal education, accepting oneself as a basis for accepting others. Interpersonal education for the very young begins with the building of a positive self-concept. Each child must first feel good about him/herself. It is very unlikely that a person will extend him/herself to others unless the person accepts self. Further, intergroup education includes the acceptance and understanding of other children of similar cultural backgrounds, whereas in other groups children may represent various cultural backgrounds.

> The groundwork for international education is laid as children, as well as parents and teachers, from different cultures interact, work and play together. (p. 5)
>
> Direct acquaintance with people of varying racial and ethnic backgrounds is the most effective method to introduce world education to young children. Margaret Mead has said you can promote knowledge about, but not real understanding of other people without persons from those countries. (p. 29)

Throughout the global-education program the value of diversity in the human community must be stressed in a positive manner. A balance should be achieved between man's commonality and man's diversity. What is needed, according to Becker (1968), is the development of new techniques and new attitudes that enable us to assist children in recognizing their own culture as one among many cultures, each with its own validity and virtue (p. 503). Children must be led to realize that people who live by a different set of values, with different customs, dress, and institutions are to be valued for their

diversity but are at bottom like oneself and one's own people. As Redfield (1947) stated,

> The alien culture at first appears to us as a mask, enigmatic or repugnant. On closer acquaintance we see it as a garment for the spirit; we understand its harmonies and appreciate them. Finally, as acquaintance goes deeper still, we do not see, or for a time forget, the culture, but look only to the common humanity of the men and women beneath. (p. 262)

Cleveland (1976) believed that in conjunction with the goals of mankind's diversity and the goal of mankind's commonality, teachers must bear in mind when preparing students to involve themselves in their country's international involvement that they come to understand the relativity of American values.

Underlying the educational goals of diversity, commonality, and relativity is the concept and goal of community. Kenworthy (1970) described the attributes of community at the international level. These characteristics can be seen as the commonalities we all share while, at the same time, possessing differences. The common attributes are:

1. A common turf--that turf being a tiny planet, but there remains for the international community the task of deciding on the control of the land surface and waters of the world. He makes no mention of space, but such can certainly be added.

2. Common ideals--a beginning has been made. He sees our values not being the same but there is enough agreement on ideals, purposes, goals to bring about vast changes. A beginning has been made.

3. Common symbols--although every nation has its national flag, anthem, heroes, holidays, and shrines, all important to

its members, Kenworthy listed the same on the international scene.

4. Common contacts or interplay--physical contact is not necessary, although many have face-to-face relationships. A large part of the world has contact with other people through the mass media and international trade. "In our dealings with others, we usually judge them by our own standards. Consciously or unconsciously we want to remake them in our own image. We want them to be like us. Almost always we forget what the American anthropologist, Margaret Mead, has pointed out pertinently that 'If we want others to be like us, then we must be ready to be like them.'"

5. Common institutions--these abound; most are voluntary.

6. Internationally minded individuals--a small corps of such individuals already exists. In all times and places there have been a few persons who were internationally oriented individuals or persons with world horizons (pp. 17-26).

## Organization of Curriculum

One of the major difficulties facing the educator relative to global education is the very practical problem of how the curriculum should be organized. It is a problem because, as Klein and Tye (1979) suggested, we do not know much about organizing curricula for global education. Is global education to be an add-on, a specific course, to be infused? How should it be treated?

Interdisciplinary approach.--Collins (n.d.) commented that most curriculum directors and classroom teachers hold that it is

solely the concern of the social studies, particularly area studies, world history, and world geography. Although some react to it as a clear threat to their own self-interests or, in some extreme cases, to their very teaching existence, others will point to present courses such as area studies, world history, or world geography to prove that global studies are already a part of the school's offerings; thus little or nothing more needs to be done. Collins stated, however,

> Not enough or these courses--as they are now being taught--deal in a serious way with the concepts and ideas included in global studies. One has only to look at the teaching/learning materials in use to verify this conclusion. The absence of references to key topics such as human rights, the sea-bed, conflict theory, energy depletion, interdependence, development issues, ethnicity, nuclear control, population issues, etc., forces one to the conclusion that these topics, if treated at all, are of only tangential concern. These topics are the kinds of issues confronting humankind, however.
>
> Too many courses stress accumulation of facts about specific places, usually taught in a chronological framework. Often an area of study is treated as unique and little attempt is made to relate one area of the world to another or to generalize from the unique facts being presented to broader concepts which may be useful in explaining new phenomena students encounter in their daily lives. This is not to say that no teacher is teaching in this manner or that teachers cannot do so. It is only to note that in many schools such teaching is too frequently encountered. A "compartmentalization" approach to studying the world has resulted in a generation of young people unaccustomed and untrained to think either systemically or comparatively. In turn, such modes of thinking are prerequisite if students are ever to learn to think, act or feel "globally." (p. 13)

It is obvious when studying global education that many disciplines are involved because each contributes to the perspective to be gained. The Task Force on Global Education of the U.S. Commissioner of Education (1979) concluded that developing global perspectives requires intellectual contributions from many sources. It draws on

the various disciplines and expands them to meet changing circumstances. It requires intellectual contributions from many sources. Global perspectives must be grounded broadly in the various disciplines--the natural sciences, the humanities, and the social sciences--and the Task Force believed it must also draw upon a fresh analysis of systems and other concepts.

> Education for global perspectives must depend on the study of foreign languages, other nations, and other cultures, geographic regions, the U.S. pluralistic society and ethnic awareness, and such transnational concerns as the environment and energy resources. It is likely to be interdisciplinary and cross-disciplinary. (p. 4)

Klein and Tye (1979) discussed organization of curriculum when done in an interdisciplinary approach as having the important quality of integration. Learning is not pigeon-holed or compartmentalized but is viewed holistically. These authors also insisted, as did Morris, that the curriculum in schools and experiences out of school work effectively.

> The messages which students receive about the interrelationships among the peoples of the world at school ideally should not conflict with what they hear discussed at home, read about, and hear over the radio and television. Where discrepancies in messages do exist from different educational sources, the student should be helped to examine each message carefully for the value positions being expressed, basic assumptions, accuracy, and extent to which vested interests are being served, and other such criteria. By such efforts, students will be helped to integrate their learnings into a meaningful, consistent, holistic view of our world. (p. 218)

The Guidelines of the State of Michigan (Michigan State Department of Education, 1978) also encouraged the interdisciplinary approach. The Guidelines concluded that the emphasis on the development of global-education programs is to foster an interdisciplinary approach

at each building level among teachers. There should also be vertical articulation from one building to another. For implementation, the Guidelines insisted that provisions be made for review of current curricula in light of the interdisciplinary implications of global education (p. 9).

Olson (1981), in his study, provided documentation of the historical development of global education in Michigan and provided some curricular analysis of that program. The researcher pointed out that the Michigan program to develop global perspective is in the infusion stage, and, as such, "an ideal relation might have infusion as the central purpose running through the curriculum model. After the model is completely implemented, infusion would have occurred" (p. 107).

Morris (1979) suggested that the curriculum should be organized around concepts--those that will serve to indicate relationships, organize knowledge, and guide further inquiry. Another possibility is to select key concepts from a content area to be the organizing elements--pollution, population, and justice are examples (quoted in Decker, 1979, p. 217).

Integration approach.--The Glen Falls experiment in curriculum development is an example of integrating international affairs. In this project, teaching units were constructed that included instruction in value systems, ways of life of people in other lands, the causes of war, means of peace, international organizations, and the U.S. in a world setting. These units were threaded throughout the various curricula. Other avenues for the instructional program

resulted in an emphasis on comparative art, literature, music, and business, all with the aim of making the student become sensitive to other cultures, conscious of the complexities of intercultural relations, and humane in his/her outlook (Long & King, 1964, pp. 2-5).

The Center for Global Perspectives (formerly the Center for War/Peace Studies) concentrates on curriculum development in four broad concepts--interdependence, conflict, communication, and change. The key concern of the Center is to develop a conceptual framework for global studies that includes clearly articulated goals, grade-level competencies, and model lessons that can be "plugged" in to ongoing programs and present courses. No attempt is being made either to design a new global curriculum or even to develop new courses. The intention is to take the present curriculum and add a global dimension to it (Collins, n.d., pp. 21-22).

Alger (1968) argued more along the line of organizing curriculum on problems and avoiding the approach of teaching institutions. A community government, national government, and the United Nations should be replaced by a curriculum organized around problems. These problems may reflect the institutions' inability to provide solutions, and it may also show problems where no institution exists. By using the problem-solving approach, students may recognize solutions that go beyond present institutional capacity (p. 660).

Moyer (1970) believed it is essential for the curriculum to be organized around the concept of process skills. Each process skill is explained, followed by appropriate generalizations. Action proposals are suggested for each process skill. She explained that

process skills refer to the procedures for acquiring and applying knowledge needed first to understand one's self and then to understanding others with the ultimate purpose of achieving satisfactory human relations.

> Process skills involve a synthesis of the child's feelings and emotions with his ability to process and utilize information. Importance is placed on the procedures or methods utilized to arrive at the end product, world understanding and cooperation; for as skills in the procedures increase, the level of understanding deepens. Process skills have relevance for any age group and can permeate all areas of the curriculum and the daily schedule. . . . To achieve the goals of human relations education, process skills of perceiving, communicating, loving, decision making, knowing, perceiving, creating, valuing must be fostered. (pp. 8-9)

The Task Force on Global Education (1979) did not stress any single global or international content. The rationale for this position was that local, state, and regional educational bodies make decisions relative to what is taught and how it is taught. However, the Task Force did list what it felt were the necessary component parts:

- increased language learning;
- foreign area studies;
- learning about the concepts of culture and how cultural perceptions affect lives and choices;
- knowledge about all forms of communication and ways in which psychological or cultural perceptions can influence communication;
- experience with a wide variety of interdependent relationships, such as those at home, in school, and in the community, nation, and world, thus leading to more familiarity with the potential benefits and costs of different forms of interdependence.
- examination of critical global problems--ecological, scientific, and socioeconomic--to understand the U.S. stake in interdependent relationships; and
- learning how to project and weigh the broad future consequences of decisions made in the present. (p. 5)

Kenworthy (1970) provided 15 characteristics he believed are basic and fundamental for developing the international dimension of education. These 15 principles serve as a guide or checklist for the curriculum director in organizing and later for evaluating a total program. The 15 guidelines are:

1. The program begins early and is based on self-respect.

2. The program fosters the discovery of concepts, generalizations, or "big ideas."

3. The program introduces students to selected segments of the entire world.

4. The program stresses people, their similarities and differences, and concern for others.

5. The program depicts the local and national scene in relation to the world.

6. The program accents changed behavior through concentration and skills as well as through knowledge.

7. The program emphasizes feelings as well as facts.

8. The program helps to develop a philosophy of life that can be universalized.

9. The program is continuous and cumulative and permeates almost every part of the curriculum.

10. Social studies and language arts form the center of the curriculum.

11. The international dimension is fostered by a wide variety of methods and materials.

12. The program is carried on by internationally minded teachers.

13. The program is supported by educational authorities with community support.

14. The program is experimental, with evaluation built in.

15. The program is supplemented by the efforts of other agencies serving society (pp. 29-45).

Materials Selection and Development

The problem related to selection of materials is not necessarily and primarily a problem of unavailability of suitable materials to be used in the instructional program for a global perspective but rather a problem of identification and acquisition. Schools waste a great deal of time, money, and effort if they approach this important curricular task with the position that little or nothing is available and therefore must develop all their material. The task relative to materials is first one of searching out what is already available and completed (Swift, 1980, p. 50).

Collins (n.d.) reinforced the notion that the problem with suitable materials is not a lack but rather a problem of identification.

> Contrary to the opinion held by a significant number of educators, as well as state education department personnel, suitable teaching/learning materials now exist at most grade levels. . . . The problem is access to sufficient information of a reliable enough nature for persons responsible for providing leadership to act. (p. 12)

He suggested several teaching units representative of global topics such as food/hunger, population, cultural awareness developed at the Center for Global Perspectives in New York. Some of the finest

material available exists at the Middle America Program for Global Perspectives in Education (MAP), Social Studies Development Center, Indiana University.

But it is in selecting an item that care and sensitivity of the teacher must be had. From the perspective of the selector, the person may view the world primarily in terms of a nation-state pursuing foreign policies. The teacher may select materials that foster national self-interest rather than a world view. On the other hand, the objectives of a teacher who views the world in terms of a global society will be careful to select and point out materials that help students develop a sensitivity to the political implications of mankind's increasing interdependence (Remy et al., 1975, p. 2).

Morris (1979) pointed out that some materials selected will actually work against the formation of global perspectives, many times quite subtly. The program may have objectives purposefully planned to develop global education, but the supporting material actually can create an unintended impression in students. Morris indicated that subtle differences between chapter headings, such as "Why Is America an Important Country?" and "What Do the People of Mexico Need?," can create an unintended impression in students. Often major global issues that are studied at a grade level or in a unit are placed in a national context or stated as a national problem. For example, national inflation should not or cannot be dealt with unless one points out how such is directly related to international trade (p. 135).

Torney (1979) pointed out that many materials used, such as maps, carry a nationalistic message. The field simply lacks symbols for global entities, and in this respect materials must be developed (p. 59).

The truth of the matter is that it is not an easy task to find high-quality materials for children. When a situation like this exists, the conclusion may be drawn to make do with what is available. Pellowski (1972), Director-Librarian of the Information Center on Children's Cultures, warned:

> The popular adage "Every little bit helps" simply cannot apply when one is concerned about introducing children to other cultures. If the material is derogatory instead of objective, or vivid but totally inaccurate, chances are it will hinder rather than help. It would be better not to attempt an introduction to another people if it cannot be done with sensitivity and care. (p. 757)

Where materials are missing or not of a quality desired, one way to get around the problem might be for children to produce them in the classroom with children. The same care, criteria, and questions used to evaluate commercial materials can serve as guidelines in the production process.

## Difficulties and Obstacles

A number of difficulties face the educator relative to global education and the curriculum. Problems are both inherent in the concept itself and external, as it were, to the determination of a global-education curriculum. Another set of barriers lies within the learner, related to the developmental processes.

All subject areas must resolve certain problems relative to curriculum planning and implementation. However, global education has a particularly difficult time of it. Joyce and Nicholson (1979) pointed out that not only is the content of global education an object of controversy, but there is a real question that such should be a part of the curriculum (p. 95). Marvelous and exemplary curricula have been developed over the past 15 to 20 years. However, much of it has simply not influenced the classroom. Gross et al. (1971) offered the following structural elements before any innovation is going to be implemented successfully:

1. Clarity on the part of the staff about the innovation.
2. Capability of the staff to perform a new role model.
3. Availability of necessary resources.
4. Compatible organizational arrangements.
5. Staff motivation.

These various factors must be considered if an educator is going to succeed in the change.

Basic to all the difficulties and obstacles facing the implementation of global education is the issue of change. Change is difficult for most individuals and for institutions particularly. Becker (1969) said that schools do not really respond well to change, especially changes that may involve political issues. He said that the response of schools is a difficult organizational enterprise because the school is such a complex organization. Changes are made in small increments and are disjointed (p. 10).

Approaching the problem in a different vein, King (1970) pointed out that schools have not been able to maintain a pace in keeping with what children need for the future. They, in turn, are far ahead of what is being taught. He stated,

> Education has always been a conservative force, more concerned with the exploration of future alternatives. That didn't matter much in the past--in fact it served to maintain a certain cultural continuity. But now the gap between the real world and the world we teach about in our schools has become so wide that much of what we teach has become meaningless. Perhaps the younger generation has leaped ahead of the older in this regard. (p. 8)

Strategizing for change will need to be a main concern for the global educationist. In general, a district planning to initiate or strengthen a global-education program is faced with the same kinds of considerations and decisions that underlie its total program and any change to it. In the Michigan Guidelines for Global Education (Michigan State Department of Education, 1978), it was pointed out that one must work for the commitment, cooperation, support, and involvement of all components of the educational system. It encourages the decision making to be a process of openly arrived at participation by all concerned--school-board members, administrators, staff, students, and community. The Guidelines also provided a list of suggestions for implementing any program (pp. 9-11).

> Students, in turn, daily face a series of economic, political and social realities that remain largely unexplained to them and far too often, not closely related to what they have "learned" in school. (p. 5)

Part of this attitude is due to the fact that the concept of education for world understanding is not new. An emphasis on international education began immediately following World War II, with the

realization that countries could no longer be isolated from the rest of the world. However, much of the programming to achieve this end is shallow and cursory. Programs lack depth, solidity, and comprehensiveness. Moyer (1970) summarized much of current programming:

> Many programs were of a superficial nature, quite often consisting of an annual assembly program or the celebration of United Nations Week, combined with whatever incidental teaching arose in the classroom. An approach of this type to world understanding and cooperation no longer even pretends to meet the demands of living in a global society. (p. 1)

Another difficulty exists when inservicing teachers or for teachers dealing with the subject. This complication is the lack of a specific scholarly base for the field. It is difficult for a teacher to identify an expert on interdependence or ethnicity. Yet these are the kinds of topics on which global studies focus. And most teachers do need help in dealing with them (Collins, n.d., p. 10).

School systems are not now staffed with persons sufficiently trained to deal with topics such as global interdependence, world economic disparities, urbanization issues, pollution, development problems, energy concerns, ethnicity, population problems, or other global topics. Unless a teacher feels comfortable with skills and competencies for a program, that program will not achieve success. The same is true for administrators, who must understand and feel comfortable with a program.

There exists real administrative hesitation regarding additional new content and programs for their schools. Too often, past innovations have proved costly and ineffective. In addition to this situation, global educationists have not provided the solid rationale

necessary to gain and maintain public support for their ideas. Administrators need defensible reasons for making this curriculum innovation a priority in education. With the "back-to-basics" movement, the decrease in electives, declining enrollments, public disenchantment with foreign affairs, and other current issues facing school districts, the global-education-program rationale becomes even more imperative (Collins, n.d., pp. 1-3). Collins also mentioned that although education generally faces fiscal problems, global education is unique in that it operates with virtually no resources.

One of the most volatile issues of a global-education program is the issue of nationalism. Leach (1969) stated:

> However bitter is racial strife, however harsh economic conflict (both in colonial areas and between so-called capitalists and socialist blocs), however intolerant is religious and ideological opinion, it is nationalism which claims the primary loyalty of man today. In doing so, nationalism serves as the greatest divider of human kind. To some, this is surprising, unconsciously conditioned as they are by a Hobbesian-like logic, which fears that without the nation state, mankind would slide back into tribalism or something equivalently chaotic. (p. 5)

Kenworthy (1970) looked at the problem of nationalism in a different light--from the point of view of the conclusions that can or might be drawn if global education were a reality. What, in relation to the nation-state, would be an outcome of global education at the political level? He asked,

> What, then, lies ahead? A world state? A world society? An international community?
>
> People disagree, at least on the terms they use. Perhaps this is merely a matter of semantics. If those terms are synonymous in the minds of people, then there is no problem. However, the connotations of those words seem to mean different things to different persons. They are probably arranged above in the order of the degree of control on a global scale.

> The world state connotes to many people strong control, probably exercised by a centralized world government. The phrase "a world society" means to most people a little less control, either with or without some centralized world government. The term "international community" is a little less forbidding. It suggests a world of nations, cooperating together without giving up their sovereignty to a supergovernment. (p. 16)

Conjuring up these ideas of a "world state," a "world society," and an "international community," one can readily understand with certain persons the repercussions that will take place. After all, the nation or national-community concept is instilled in each one of us very early in life. It is part and parcel of a person's fiber--one that cannot be taken lightly when developing a global curriculum in a community.

Boulding (1980) found that this fear of global education moving in the direction of the destruction of existing national sovereignty is a total misconception. This fear is ingrained in folk cultures, and, unfortunately, it prevents thinking about the future.

Positive attachment to a national community is established early, largely with the aid of national symbols. Elementary schoolchildren's sense of belonging to a national political community is established and reinforced by many symbols (Torney, 1979, p. 69). This factor, however, has a positive aspect: It offers identity and unity to large groups of people with otherwise divergent interests. By so doing, however, it also alienates one people from another and leads to the creation of stereotypes. However, national loyalty need not have this effect. As Preston (1955) stated years ago relative to issues in teaching world understanding:

> The present period is not the first one in history in which circumstances have prodded men to broaden their loyalties. In 1776, for example, our forefathers found it necessary to extend their loyalty from Colony to Confederation. Yet it is clear this enlargement of loyalty did not impair their pride in, or love for, their own respective Colonies. They simply recognized, with Benjamin Franklin, that "We must all hang together, or assuredly we shall all hang separately."
>
> This is a blunt fact which, we are gradually learning, faces us again today in a new guise. The values of patriotism remain as vital as ever, and it is for the very purpose of protecting them that teachers should actively search out paths which lead to increased world understanding.
>
> "The world is my country, all mankind are my brethren," wrote the eloquent American patriot, Thomas Paine. And countless loyal Americans since his time also have been swept by feelings of world citizenship. Yet teachers who emphasize the world view are sometimes accused of damaging their pupils' patriotism. The antagonism and suspicion of groups and individuals in this country who criticize the teaching of world understanding are probably often an emotional reaction to the poisoning and exploiting of a number of international movements by the Soviet Union to further its doctrinaire and nationalistic aims. (p. 6)

Global education is not designed to foster a sense of world citizenship that competes with the nation-state for an individual's loyalty but rather to develop citizens who are capable of seeing that the nation is not the only basis of organizing to carry out the functions of society. This researcher feels that a global society and global citizenship are natural patterns of growth and of the evolutionary element of man.

Thompson (1951) pointed out that patriotism is actually the basis of internationalism. "Patriotism is a feeling that binds mankind and because I love my country I appreciate the love of others for <u>their</u> countries. . . . I do not have to share their love for an allegiance to their particular object. But I am compelled to respect it" (p. 14). The author reminded us that those who have achieved worldwide acclaim--such as Shakespeare, Dante, Goethe, Dostoevsky,

and Mark Twain--are precisely those who are most deeply rooted and immersed in their own culture (p. 14).

The question is not patriotism versus world citizenship. The issue is how we can teach patriotism and, at the same time, develop responsible attitudes toward other peoples. The danger is always that some make a "pagan worship" of national sovereignty, as Toynbee (1947) wrote (p. 552). The problem on the global level is how to foster true citizenship among the world's peoples. The strategy is to find some method of infusing students with the same moral perspective toward other peoples that they have acquired toward members of their own primary groups. To accomplish this imperative of global education, Joyce and Nicholson (1979) said that three steps must be taken or three divisive factors eliminated:

1. The first of these is the elimination of poverty, for the poor are isolated from other socioeconomic classes and also from other poor people.

2. The second factor is ethnicity. Such gives a person a sense of identity and of morality but cuts groups of people off from others and impoverishes them socially and culturally. When combined with poverty, ethnicity may be especially divisive.

3. Nationalism is the third divisive factor. It can, however, be a positive force but often alienates one people from another and leads to the creation of stereotypes. National loyalty, however, need not have this effect (pp. 104-105).

To deal with the politics of the situation and with the nationalism issue, Leach (1969) called upon governments to subsidize

a chain of international schools. By doing so, he conjectured that "governments would, in fact, put some of their trust in supranationalism as a safeguard for the future of mankind" (p. 185).

Readiness for Global Education

In the past and in most respects current early-childhood curriculum--nursery, kindergarten, primary level--introduced children to postman, fireman, grocery store or supermarket, and other community helpers. Rarely did one find simple cross-cultural comparisons of such helpers, nor was the concept of community in other lands introduced at this level. However, research has found that young children are much more aware of global problems than we have given them credit for. Contrary to the practice that children in early grades are only "here and now" minded, simple cross-cultural comparisons of community helpers and the communities in other lands are possible and necessary. Kenworthy (1970) stated that since experiences of today's children in many parts of the world have been enlarged, so also the dimensions of the curriculum need to have a broader scope. Many children could and should cope with the study of the peoples of our planet long before they are 10, 11, or 12. Some teaching about the international community or world seems essential, even in the early years at school (p. 31).

Morris (1979), in his chapter entitled "Elementary School Programs," specified a number of research studies supporting the readiness of children in early grades to have a more global curriculum rather than a redundant and heavily provincial social studies content (p. 117).

Flavell (1963) pointed out Piaget's profound effect on education as a whole but also the contribution Piaget made to sound learning theory for global education. Piaget suggested that by seven or eight years of age the child moves into a new and qualitatively different form of cognitive functioning. Flavell, Botkin, and Fry (1968) stated that at seven or eight egocentrism diminishes and the child becomes able to understand perspectives other than his own. The next five years become critical for the development of social attitudes.

Torney (n.d.) wrote that

> The years from 7 or 8 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 7 or 8 makes the individual much 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 7 to 12 is optimal both for education directed toward attitudinal objectives and for openness about the world. (pp. 4-13)

Lambert and Klineberg (1967) found that while American children about 10 years of age were particularly receptive to approaches to foreign people, this openness declined somewhat so that by 14 years of age there was an increased tendency to stereotype, accompanied by a decline in positive attitudes.

The task of the global-education program is, as Moyer 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)

Kenworthy (1956) noted that while the survival of the world calls for the ability to live in a world community, this ability must be developed in children early and in a variety of subject areas because prejudices are also learned at an early age. Moyer (1970) stated that attitudes toward racial groups are formed before the age of six, as are political attitudes and values. In a study of black and white nursery-school children, Goodman (1952) found awareness of racial difference by age four. Hess and Torney (1967) reported that political attitudes and values are evident by the time the child enters elementary school.

Trager and Yarrow (1952), in the Philadelphia studies of prejudice in young children, indicated that most young children have definite concepts of one or more religious groups. This same study concluded that as early as kindergarten, children have the kinds of attitudes that make for disunity, disharmony, and unhappiness in group life.

It is apparent, then, that as a child grows older he/she develops bases for international understanding or for prejudices and misconceptions that make it difficult for him/her to understand behaviors of others. His/her relationships in groups here and now are most beneficial in developing attitudes as a member of a global or larger society.

Supporting this need to deal with attitude formation in the young, Torney and Morris (1972) wrote that something more than a refinement of objectives is necessary for global education to become viable:

> 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 on 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)

Remy et al. (1975) did caution care in drawing conclusions about children's international learning from the research. They pointed out that this research has concentrated on children's learning about domestic politics. However, the authors abstracted from the research several ideas that they felt "can help sensitize us to the international learning processes of our students" (p. 39). Their ideas are briefly outlined as follows:

1. Children's international learning actually begins very early in life. Through the mass media, school, interaction with family, friends, the children begin to develop orientations toward world politics. By the time they reach the intermediate grades they 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.

2. What children learn about the world at one age builds on and is influenced by what they have previously learned.

3. The time of middle childhood (grades 3 through 8) is an important time in a child's global learning. It represents a time before too many stereotypically rigid perspectives dominate children's views of the world, and yet a time in which cognitive development is sufficiently advanced to make a diversity of viewpoints accessible.

4. Though aggregate statistics are dealt with in a discussion relative to a youngster's international learning, each individual student brings his/her own particular configuration of orientations toward the world. In some ways those orientations are very much like those of their classmates, but in other ways they are totally unique to them. Beliefs, attitudes, values, and knowledge develop quite differently in individuals when dealt with as a single person.

5. The mass media, especially television and newspapers, play an important role in children's international learning (pp. 39-40).

## Staff Development and Educational Change Required for Global Education in Schools

The key element for success of any given new-program change in a school district appears to be the teacher. The classroom teacher determines success or nonsuccess in a change formula for curriculum. Collins (n.d.) stated:

> In the final analysis it is the teacher who determines whether or not the whole system is in a "Go" or "No Go" mode. Furthermore, teachers teach what teachers know! Stated differently, teachers will teach about that which they are interested in and feel reasonably competent in handling. This reality is one reason why many programs, projects, curriculum revision ideas, and other innovations intended to upgrade the global dimension of education have fallen short of the mark. (p. 1)

In their interpretive report on three National Science Foundation studies relative to the status of precollege social-studies education, Shaver, Davis, and Helburn (1979) reminded the reader that the teacher is the key to what social studies will be for any student. What a teacher believes about schooling, his/her knowledge of the subject area and of available materials and techniques, how he/she decides to put these together for the classroom--out of that process will come the classroom experiences for children. True, other factors exist, but the point here is that the teacher plays the primary structuring role. These authors pointed out that the three NSF-funded studies confirmed the view that individual teachers have more freedom than either they or others wish to admit in deciding what social studies will be. In their position as arbiters, teachers can effectively veto curricular changes of which they do not approve (pp. 150-53).

If advocates of global studies are serious about altering in any significant way what happens in classrooms, they must focus on changing teachers. The entire issue confronting those concerned about establishing a more global perspective in students and the school curricula might be clarified considerably and expedited if the primary concern was shifted to concentrate upon what teachers think and feel about global society, rather than what they are presently teaching about it.

> All other questions relating to curriculum and instruction as well as teacher education tend to miss the point. Until we have available a cadre of persons prepared to disseminate a global message throughout education, secondary questions regarding course sequence and content, teaching strategies, physical arrangements of students, etc., remain largely irrelevant.

> The immediate need is to provide a program organized in such a manner as to guarantee teachers will be given experiences that hold out a good chance that they will think, feel and ultimately behave differently. (Collins, n.d., p. 2)

Classrooms are change-resistant organizational units. Even in school systems that are generally open to change, classrooms, in general, remain closed and resistant to change. That fact explains, more than any other, why the educational innovations of the 1960s and 1970s did not endure. Proposed changes were never owned, adopted, and implemented by classroom teachers (Hansen, 1980; Urich, 1979).

In certain areas of curricula, districts and teachers have been provided not merely new developments but alternative offerings from which to choose. This was a major purpose of federal funding, and while some can argue the extent to which an adequate breadth of alternatives has been provided, the goal has certainly been met to a decent degree--to a degree that one can judge success or lack of success. Yet we know a great number of districts and teachers have chosen not to use the new materials. For what reason?

Shaver et al. (1979) discussed a number of reasons for project failures:

1. The interests and orientations of teachers are different from the views of academicians and curriculum developers. There are concerns due to the socialization web teachers find themselves in. They desire the approval of other teachers, just as other teachers seek their approval. They do not want to look ineffective in the eyes of their principal. Students and parents are part of the school's social system, too, and teachers seek their respect and approval. In

short, the teacher's beliefs and the demands of the school as a social system are largely incompatible with the norms of the university scholarship system and with the norms of teaching espoused by trainers of teachers. Inservice training is seen as most helpful when the emphasis is not on revamping the teacher's conceptualizations, but on talking with other teachers and sharing "bags of tricks" for classroom use.

2. District supervisory personnel rank about on the same level as university professors by teachers relative to new teaching methods, information about instructional materials, and actual assistance given by supervisory personnel. Part of the difficulty is that school support systems are weak. Staffs are inadequate in number; teachers don't view these persons as informed about the realities of the classroom as they are. However, it should not be interpreted that teachers don't want help. They want "good" help, assistance that is responsive to their teaching situation as they see it. They believe that they are best equipped to know what their needs are.

3. Curriculum projects also fail, not because of "sour grapes," i.e., because teachers have not been involved in the curriculum-development projects or training institutes, but rather because it is more appropriate to teachers to continue doing what they have done before--practices consistent with their own values and how they perceive the community feels. The new-program material just doesn't "fit" (pp. 10-13).

These authors concluded that "reform to be effective, must be based on the recognition that teachers operate with a total

system, which must be mobilized and revamped if individual teachers are to make striking modifications in their students' social studies experiences" (p. 13).

Arends, Hersh, and Turner (1978), likewise, contended that "schools are complex social systems and that important lasting educational improvements require changes in the norms and structures of schools more than changes in the skills of individual educators" (p. 199). Goodlad and Klein (1970) pointed out that the organizational and social arrangements in schools have inhibited change by isolating teachers. There is definitely a large body of research evidence that points to the fact that improvement of schools cannot be achieved unless attention is paid to the fabric of the school's culture and organization as well as developing inservice that presumably will change the individual educator. Arends et al. offered the organizational-development model as one possible strategy. This model says that

> instead of trying to improve isolated components of schools, training and development efforts must aim toward helping people in schools come together and use the resources they already possess in more effective and satisfying ways. . . . Educators need to practice and have time for thinking about how they communicate with one another, solve problems, make decisions, develop curriculum together, or whatever. . . . Furthermore, this model recognizes that school improvement efforts do not necessarily occur quickly or in a linear fashion. Initial progress is likely to be accompanied with back sliding. The model demands long-term relationships between agents and client systems and requires agents who are knowledgeable about the psychology, sociology, and politics of client systems and the theory and practice of planned change in complex organizations. (p. 202)

If advocates of global-education curriculum are serious about altering in any significant way what happens in classrooms, they must

focus on changing teachers. Global education will require a program of inservice for teachers that guarantees a change in teachers first. They must be given experiences that hold out a good chance that they will think, feel, and, ultimately, behave differently. To accomplish this, the educator must understand the process of change. Sarason's (1971) assertion, echoed by Dalin (1978), must be considered when one is considering global education:

> Those who are responsible for introducing change into the school culture have no clear conception of the process--no organized set of principles that explicitly takes account of the complexity of the setting in its social-psychological and sociological aspects. (p. 9)

Having reviewed more than 150 articles dealing with staff development, inservice training, or educational change that have appeared in educational journals in only the past three years, Urich (1979) reported that only a handful of these articles provided insights, understandings, or conceptual tools that would be helpful to practitioners. What is needed is an understanding of the dynamics of change at work. Urich believed that significant gains in the effectiveness of staff development and improvement in schools will occur only insofar as our change programs address the complex social-psychological and sociological dynamics of a school system (p. 2).

To add to the complexity of the issue for global education is the fact that adoption cycles of 25 to 30 years are normal, given the current level of resistance to change that exists in classrooms. Pincus and Williams (1979) emphasized this point when they wrote that the time needed to implement large-scale planned change often exceeds the stable tenure of the political constituencies that the

planned change was designed to satisfy. Given the 25- to 30-year cycle, Hansen (1980) charged that statewide educators must be able to reduce a statewide adoption and implementation cycle to more like eight to ten years (p. 5).

Before such can happen, recognition of what factors make classrooms change resistant must be recognized. Any effort to effect a change is destined to failure unless attempts are made to understand the whys, wherefores, and hows. Hansen (1980) outlined nine reasons why classrooms remain change-resistant sociopolitical units and then made eight recommendations that could help change-resistant classrooms become change-persistent classrooms. The nine reasons why classrooms remain change-resistant sociopolitical units are:

1. Classroom teaching is the least-statusful professional role in education, with no concomitant career ladder within the role.

2. The prevalent change models used in education--coercion and seduction--are demoralizing and debilitating to teachers.

3. Teachers tend to be treated as professional "adolescents" by other professional educators.

4. The classroom is the most autonomous and least visible sociopolitical unit in the profession.

5. Linking teacher professional development to increases in student achievement is an inappropriate and short-sighted use of the industrial system's model.

6. Demands for classroom change have no conceptual integrity or "gestalt" for classroom teachers. Demands for change are coming

from a variety of quarters, with inadequate priority setting. There is likewise no integrating curriculum or instructional theory.

7. Teachers have not been socialized to an inquiry model of professional behavior. Teachers haven't been taught to proofread systematically their own professional behavior. They tend to attribute failure to the ineffectiveness of the innovation rather than the ineffectiveness of their own implementation.

8. Classroom-teacher unionization is a response to these conditions; unwittingly, however, it is also a contributing factor. Unions see little value in recognizing professional excellence plus the fact the union has set out to collect more control of curriculum and classroom instruction.

9. Staff development is too narrowly defined by professional educators and by lay leaders of the profession.

Having pointed out the factors contributing to change-resistant classrooms, the same author recommended the following in order to assist in bringing about what needs to be done for implementation of program changes. He recommended:

1. Coercive educational-change efforts that directly affect the classroom should be used sparingly.

2. Teachers should be accorded a more direct and vital role in the production, dissemination, and use of educational knowledge.

3. Certification policies for all educators should ensure continuing professional growth.

4. Career-ladder plans that allow "master teachers" to remain productive in the classroom should be provided.

5. Curriculum models that integrate instruction should be both developed and tested with teachers.

6. Professional-development centers should be encouraged to operate by the dominant philosophy that each teacher has both something to learn from and something to teach another teacher.

7. "Lighthouse schools" should be developed, where the appropriate instructional and professional climate can be modeled.

8. Stronger linkages between classroom educators and non-classroom educators must be forged.

Pointing to further difficulties in change or curriculum development, Harmer (1977) singled out high-school teachers as one of the most tightly closed societies in our culture. And in this teacher group, curriculum development has a low priority (p. 751).

## Needs Assessment

Many institutions--higher education, intermediate school districts, consulting firms--are engaged in inservice education. Before any inservice is given to a group of teachers, one important issue becomes needs assessment. Galligos (1979) asked, however: Whose needs assessment can be trusted? What some may identify as a need for more training in reading, for example, could, in some cases, be a need for motivational-skill development. What teachers say they need may or may not conform to that which supervisors or principals believe is needed nor what an objective observer may consider important. Galligos believed more must be done to develop and refine multilevel, cross-validated assessment techniques. This goes beyond the

computerized questionnaire or the Delphi (panel of experts) approach so that single-level or single-source "needs" are not the sole basis for inservice efforts. He then cautioned that there are four issues that must be considered within the scope of inservice education--philosophical, technical, economic, and political. Is inservice for the purpose of providing practicing teachers additional training in competencies they should have, thus a type of remediation, or should inservice relate to emerging needs in district settings, thus focusing on new areas of training and development? Implications here are that the same thing for all teachers in a fixed sequence may not work. Thus a prepackaged approach or economically feasible ways for colleges to become involved, cooperation with professional associations and/or administrators are all important and critical problems within the sphere of inservice education (p. 23).

The body of research (Berman & McLaughlin, 1975; Fullan & Pomfret, 1976; Lawrence, 1974) validated the suggestion that the requirements, needs, and preferences of teachers or clients be the starting point of all inservice activities. Arends et al. (1978), however, pointed out that the procedures for assessing needs are inadequate and raise a host of moral questions. These authors pointed out the following difficulties relative to needs assessment:

1. Most often, when asked to self-diagnose, the teacher doesn't know how to. It's difficult for any person to self-diagnose.

2. Often teachers' responses tend to be representative of the group rather than the individual self, rationalizing that teachers at large need such and such.

3. There is at times a time lag in the needs assessment, and in that time frame new and more important needs erupt.

4. At times, certain predominant issues in education that are in vogue at the time become the perceived need rather than the felt need (p. 198).

Goodlad and Klein (1970) blamed the preparation that teachers receive:

> It would appear that neither preservice nor inservice teacher education programs have provided them with precise pedagogical understandings and skills required for diagnosing and remedying the learning programs and needs of individual pupils. (p. 94)

Interestingly enough, when dealing with needs assessment dependent upon approaching teachers to determine such in relationship to themselves, Kelley (1962) pointed out that the average person is not that well acquainted with him/herself, for each person remains quite faithful to "his not-so-accurate image of himself and thereby acquires consistency. . . . There is a sense, in other words, in which we all become creatures of our own ideas about ourselves and of our compulsion to behave consistently with these ideas" (p. 14).

From a constructive and positive point of view, however, to bring about change and staff-development programs for teachers, the educational leader's contribution to improving the quality of instruction may have to be in the direction of seeking to enhance the teacher's self-image, with each leader developing his/her own techniques to achieve this end. However, it appears that accomplishment of this feat can be attained if one can demonstrate to teachers

acceptance of them as possessing competencies and abilities, provide resources needed, and ensure recognition of their contributions (Burch & Danby, 1978, p. 14).

## Personal Development Versus Remediation

As educational psychologists, Witherell and Erickson (1978) have come to see the underlying issue of teacher education as one of adult development:

> The teachers' own development as an interpreter and constructor of classroom events has been overlooked in both educational practice and research. . . . We focus on Loevinger's theory of ego development as a "conceptual lens" through which teachers' conceptions of teaching and human development in relation to their actual teaching behavior can be viewed. (p. 229)

These authors finally argued for instructing teachers in methods of analyzing and researching their own teaching as an important focus for inservice education. They argued with Elkind (1976) that teachers need to be child developmentalists who specialize in curriculum and instruction. If this position were agreed to, a much stronger focus on psychology in teacher-education programs--preservice and inservice--would be reuqired. One must look upon the teacher as potentially growing and changing, as a colleague in classroom research, and as an important source of knowledge in the field of human development (p. 57).

Hunt (1978) urged inservice to be viewed as development of educators as persons-in-relation. An adequate conception of the teacher as person forces questions: Who is the person? What does the person want? What does the person believe? What does the

person know? What does the person know how to do? and What is the person doing now? If such a process is applied, a transformation of inservice from the mechanical and irrelevant into a more relevant inservice for professionals will result (p. 243).

Whereas principles of learning hold true for both children and adults, i.e., the most effective learning takes place when the learner can see the results and has good feedback about his/her progress (Miller, 1977), Knowles (1970) pointed out that the principle of ego involvement lies at the center of adult education. What, in fact, it does is to seek techniques for involving adults in ever-deeper processes of self-diagnosis of their own needs for continued learning, for formulating their own goals for learning, for sharing responsibility for designing and carrying out their learning activities, and in evaluating their progress toward their objectives.

Cook and Mach (1975) as well as Perron (1978) emphasized the key for teachers in maintaining their enthusiasm for teaching is to assist them in finding ways to be productive learners themselves, to reestablish their roles as curriculum makers and as most knowledgeable about classroom practices and children's learning. If such is not done, teachers will inevitably be considered more as technicians than as professional educators.

Peer Support

Following the thought of many educators relative to inservice effectiveness and the problem of peer pressure and support, Lawrence and Branch (1978) suggested a peer-support system that has good

prospects as a means of managing staff development. In brief, the system is based on small teacher groups, which the authors called peer panels. The peer panels take on many of the managerial and supervisory functions of staff development: planning development activities, giving assistance to panel members, serving as a sounding board for problems and ideas, analyzing teaching and giving feedback, and working as a curriculum-development group. "The key to the system's success, we believe, is that peer panels follow a set of norms and rules that emphasize nonjudgmental support" (p. 245).

This researcher found in his own experience success in curriculum development and inservice training through use of a similar system, which was called "lead teachers." The district was one of 1,300 students with only four administrators. Consequently, for curriculum development, inservice, materials selection, and evaluation, the researcher, as superintendent, called for volunteers designated as "lead teachers" to develop curriculum, plan inservice, and evaluate. Results for the district were outstanding in the researcher's judgment. Curriculum guides for the first time in the district's history were formulated to articulate and coordinate subject areas; inservice was planned based on the perceived need in a given area being considered for a particular year. Materials selection, budgeting, and evaluation procedures were also part of the overall plan. The system for use of a peer group proved effective.

Research that indirectly bears on the peer-panel procedure seems to give it very strong support. Lawrence et al. (1974)

identified a number of patterns of effectiveness in inservice programs. These were:

1. School-based programs in which teachers are helpers and planners of inservice tend to be more successful than programs conducted by outside personnel without the assistance of teachers.

2. Programs that emphasize self-instruction by teachers have a strong record of effectiveness.

3. Inservice programs that have offered differentiated experiences (individualized) are more likely to accomplish their objectives than those that are common for all.

4. Use of demonstrations, supervised trials, and feedback accomplish their goals to a greater extent than those expecting a teacher to store up ideas for future use.

5. Inservice programs in which teachers share and provide mutual assistance to each other accomplish more than programs in which each teacher does separate work.

6. Teachers are more likely to benefit from inservice when they choose goals and activities for themselves as contrasted with programs in which such are preplanned.

Important also to effective inservice is the planning process. Although the location or time of an inservice program may be important, these are not significant factors in determining effective inservice programs. Godda, Crosby, and Mossey (1977) pointed to the planning process, which they outlined to be four phases:

1. Planning phase, which involves selection of participants, needs assessment that involves techniques and activities for the

classroom unless awareness of other needs is made legitimate, products, i.e., tangible outcomes wanted, and evaluation.

2. Design phase, which would have the three components of what (content), how, and why.

3. Implementing phase, in which four kinds of inservice programs occur--concept exploration, skill demonstration, material adaptation, and case-study analysis.

4. Reaching-closure phase. Evaluation and feedback usually occur, and there the inservice ends unless the participants recommend ongoing inservice planning (pp. 24-30).

Hunt (1978) pointed out a number of contradictions he found in literature and discussions about inservice work. First, experienced professional teachers are often viewed as passive pawns to be remediated. "Imagine declaring a 'Professional Development' day for a group of experienced actors, cancelling the play, and bringing in a drama critic for a lecture" (p. 239). In addition to this type of treatment, variation among teachers in style or stage (e.g., variation in learning style, developmental style) are almost never considered. And, of course, experts often lecture to large groups of teachers on the importance of individualizing instruction. It is surprising that the differences among the two and one-half million teachers in North America receive so little attention.

As educators adapt to differences among individual students, so it is important to distinguish differences in such things as learning style and developmental stages in teachers. Katz (1972) proposed that the career development of teachers be considered in terms of

four stages: survival, consolidation, renewal, and maturity. Hunt (1978) believed it is less important to accept these specific stages than it is to understand how teachers develop and how their development may be enhanced by inservice training. "We need to identify those characteristics of teachers that are linked to professional growth and to different ways of learning. Such descriptions could also provide clues about why certain teachers are attracted to a particular center, while others are not" (p. 240).

Recognizing that with the stability and entrenchment of staff today as contrasted to the time when teacher mobility remained high, Mann (1978) discussed the process of changing a school in terms of the process of politics. He stated that a number of assumptions--(1) belief that people can be changed, are malleable, even perfectable; (2) belief that people are rational, that they orient themselves toward goals, that they use information and calculation to govern their actions; and (3) belief that people in education share social purposes at some lofty or abstract level--be rethought, for such assumptions have not been sufficiently consensual to allow change-agent strategies to work. Change agents in education have faulted because they apply methods that are largely educational to situations that are fundamentally political. Treating innovation as a matter of organization learning--i.e., Who can be against improvement?--does not always work. Trainee characteristics must be understood. The higher the grade level, the more resistant to training was the teacher. Why did so few projects influence high schools? There were a number of reasons, according to Mann:

1. Most change projects emphasized process; high school teachers relate to their topical fields.

2. Topic specialization results in a feeling of superiority and strengthens defenses against outsiders and resistance to change more easily.

3. Many high school faculties are often split into antagonistic groups.

4. High school teachers tend to blame the anonymous mass of threatening students more than themselves for the failure of schooling.

5. High school teachers are less dependent on their principals than are elementary and thus are more insulated by the chain of command.

6. Faculties of high schools are usually more unionized and thus less malleable for "extra" demands of training programs.

7. There is less exogenous pressure on high schools (pp. 212-16).

Betz, Jensen, and Zigarmi (1978) pointed out that an important prerequisite to successful inservice programs is a strong personal commitment to such on the part of the principal. He probably will have to sell such to his staff, but even then these authors forewarned that from their experience the major stumbling block in the process for many faculties appears to be the lack of skill in one or all of the following: (1) the group decision-making process, (2) establishing and maintaining time lines, and (3) evaluation and follow-up (p. 13).

For the district central administrators it is vital that they explicitly see principals and teachers as professionals and visibly support their efforts to learn and grow. In the final analysis, effective staff development depends more on this point of view than on the specifics of the program (McLaughlin & Berman, 1977, pp. 191-94).

Supporting the position that administrators must play a leadership role, Brickell (1964) stated:

> Rearrangements of the structural elements of the institution depend almost exclusively upon administrative initiative. Teachers are not change-agents for innovations of major scope. Even when free to guide their own activities, teachers seldom suggest distinctly new types of working patterns for themselves.
>
> The administrator may promote--or prevent--innovation. He cannot stand aside, or be ignored. He is powerful not because he has a monopoly on imagination, creativity, or interest in change--the opposite is common--but simply because he has the authority to precipitate a decision. (p. 503)

From research conducted to this point, it appears that the role of the administrator is a critical factor in the change process involved in curriculum development and implementation.

## Implications of Research for Inservice

Miller (1977) as well as any number of studies (Ellis, 1975; Feinberg, 1974; Kelcher, 1972 [in Wilen & Kindsvatter, 1978]; Timmons, 1975; Vaugh, 1975) pointed out guidelines by which inservice education can be improved. Their research indicated that:

1. School districts must allocate specific funds for inservice education sufficient to maintain comprehensive and continuous programs. Between 0.0 and 2.0 percent of operating budgets were allocated to inservice (Kelcher, 1972).

2. The needs of teachers must directly influence the nature and design of inservice education programs. If this is done, and done before planning, inservice transfer of learning to the classroom is more likely.

3. Teachers need to be directly involved in planning the goals, content, and instructional approach of inservice education programs. Such is a logical follow-up to assessing teacher needs.

4. Objectives of inservice education programs must be written and specified in clear and precise terms. Objectives express purpose and provide direction. Programs lacking these will lack effectiveness and success.

5. Area colleges and universities should serve as a major source for program directors and consultants.

6. Inservice education programs should be held during the regular school day when possible and, when not, teachers should be financially compensated for their participation.

7. Inservice education programs must be assessed immediately upon completion based on objectives and again later to determine the extent to which objectives have been translated into teacher behaviors in the classroom.

> In-service education, especially when considered as a process, needs soundly conceived research as the means to transcend the common wisdom approach which is characteristic of most current practices. (p. 396)

Supporting and insisting on the fact that process is the influential change agent were Czajkowski and Patterson (1977):

> The agent of change is not a person but the experimental process the users go through in developing change. Change occurs as a result of engaging people in processes that promote the development

> of new perceptions and beliefs or the alteration of "old" ones. In most cases, little change is likely to occur until people perceive a discrepancy between existing and desired beliefs or actions. In order to perceive this discrepancy, people need the opportunity to examine currently held perceptions, reconsider them in the light of new data, and then put their trial ideas to rational and empirical tests that will verify the extent of utility. (p. 537)

Anyone who has spent time, energy, and resources in attempting to bring about substantive and positive changes in schools readily acknowledges the difficulty of the task. To bring about change, Urich (1979) found current practice in educational change--whether in curriculum or in professional development--seemed to be based on one or another variation of the three-phase model of (1) needs assessment, (2) program development and implementation, and (3) evaluation. This approach is seen as having fundamental weaknesses in it. As pointed out above, needs assessment depends on an instrument that far too often leads to various meanings given to a number of items on the instrument. Different meanings may be as many as individuals completing the instrument. Further, a respondent is limited in the identification of his/her needs by the items that are included on the instrument. Likewise, to diagnose one's own needs can be inherently very difficult (p. 7).

Therefore, there is a more fundamental weakness in initiating a change effort by conducting a needs assessment. The weakness rests in the fact that certain prerequisites or preconditions for change have been ignored. To overcome such a difficulty, Hersh and Yager (1972) spoke of three "prerequisites": (1) awareness, (2) readiness, and (3) commitment. A preliminary, short-term intervention program

that raises the levels of awareness, readiness, and commitment among school staffs provides the foundation for a change effort growing out of a subsequent needs assessment (p. 142). Saying it another way, the presence among school staffs of the conditions of awareness, readiness, and commitment is an essential precondition to effective and enduring change efforts. Urich (1979) signified the absolute necessity of making certain these preconditions exist when he stated,

> A program of curriculum change or professional development that involves significant financial, organizational, or personal resources and that leaves the presence of these pre-conditions to chance is one that may very well carry within itself the seeds of its own demise. (p. 7)

Pincus and Williams (1979) called for studies to be conducted on the process of planned change in urban school districts. Research that has been conducted has generally been done on small educational settings. Although such research is useful for large urban districts, there are important differences along the lines of communication, political and interest groups, and populations. The Rand research team studied innovation in five urban school districts chosen on the basis of their reputations as innovators, and also based on the opinions of experts. The team identified critical elements contributing to a district's success or failure in implementing change as five. These five stages were:

1. Establishing a zone of protective tolerance. Conditions in a school district must be favorable to the design and implementation of planned changes. Many districts fall short at this stage because they are consumed in many other items--too little money, mandated racial desegregation, shifting student population. Further,

the researchers found that innovative school districts differed considerably in the level of community support for change.

2. Implementing the leadership component. The process for change requires a person or a group to recognize the environment for change is propitious and to assert leadership to initiate and implement the change. The leadership may emerge from such sources as school board superintendent, etc. And this leadership may change as the stages of change pass--initiation, development, implementation, evaluation, diffusion.

3. Building an appropriate planning and delivery system. Large districts must have a delivery system that is consistent with the community's traditions, values, and expectations.

4. Deriving the benefits. Eventually the planned change effort begins to produce results, but it was found that results take many forms.

5. Maintaining stability. A district's innovativeness is a very delicate condition that can change very rapidly. Once a district achieves an innovative stance, it must take positive and carefully planned steps to prolong the stability of that condition (pp. 731-32).

Unit for Change

It is becoming increasingly apparent that in relation to an entire district it is the individual school that must be recognized and emphasized in the process. While recognizing the importance of success depends on the individual teacher, as stated above, Houts (1975) concluded:

> After almost three decades of attempts at large scale reform, and our subsequent realization that behind the schoolhouse door little has actually changed, we have begun to look increasingly to the individual school as an appropriate, and even powerful, unit of change. (p. 64)

A review of the literature provided ample documentation for a school-based approach to staff-development programs. Goodlad (1975), for example, took the position that the single school is the largest and the proper unit for educational change. Everyone else outside the school exists to make this happen, he said (p. 111). Likewise, Czajkowski and Patterson (1977) contended that the primary unit of change is the individual school and not the district level or classroom or grade. To concentrate on these levels means to bring about change in a collectivity, risk fragmentation, and underestimate the influence of school culture on classroom interaction (p. 538). In his article, "Staff Development in Florida," Zenke (1977) supported the contention that change and staff development should be concentrated at the school level. In doing so, each Florida school center now has the potential to become a professional self-renewal center, thus providing a major step toward the goal of program improvement (p. 178).

Although much has been written about inservice teacher education, the literature provided little direction for decision makers who are responsible for that aspect of professional education. Cruichshank, Lorish, and Thompson (1979) turned to the research review conducted by the Florida Department of Education to determine whether generalizations could be made that could guide decision makers.

These authors concluded, "Until inservice teacher education is examined more closely, we can only talk about what we think we know" (p. 31).

## Summary

This chapter reviewed literature on global education to determine its meaning, definition, and what themes are essential to a curriculum program. The elements that encompass global perspective were examined because global perspective is the ultimate change required for global understanding in an individual. Among scholars involved in global education, the current view of the world is that of a single, dynamic, interrelating system. The concept of the world as a system must be understood and more appreciated.

For curriculum development it is imperative to establish within a community the rationale for such a program as well as clearly defined goals and objectives. Literature dealing with these items was reviewed, as well as literature pertaining to the organizational principles involved, materials-selection guidelines, and children's developmental readiness for global education.

The key element for success of this program change appears to be the teacher. Consequently, literature was reviewed pertaining to the change process within teachers. Reasons why classrooms remain change resistant were outlined from the literature, and the ingredients for successful program change in schools were reviewed.

Chapter III presents the methodology and procedures employed to measure the global knowledge of the population of the study and the relationships as well as differences relative to global knowledge.

# CHAPTER III

# METHODOLOGY

## Introduction

This chapter describes briefly the American-sponsored elementary and secondary schools overseas, the participating subjects of this study, and the instrument and procedures employed to measure the global understanding of the group involved in this study.

## American-Sponsored Overseas Schools

International schools designated as "American-sponsored" numbered 154 and were located in 94 countries in 1980/81 (Appendix C). From the historical point of view, these particular schools date back to the late 1880s. The first school that aptly falls into this category was established in Mexico City when United States citizens there desired a school that would provide their children with a U.S.-style education--that is, an educational curriculum, school philosophy, language, methodology, and materials identical to stateside public and private education (Luebke, 1976, p. 13).

Since that time, the growth of these schools has been rapid, with the greatest growth period being after World War II. The growth paralleled and echoed the United States' active interest in world affairs on the diplomatic, business, industrial, technical, and military levels. With extensive U.S. presence, American schools were

founded because of the pressure from American parents living abroad to provide an American-style education for their children. This was true whether parents were diplomats, technicians, businessmen, or military (Engelman & Rushton, n.d., p. 2).

Wilson (1963) pointed out that U.S. businessmen were unwilling to serve overseas unless a U.S. type of education would be available for their children. He likewise stated that the U.S. State Department employees, military personnel, AID program staff, and persons affiliated with the U.N. political organizations also insisted on educational opportunities similar to those at home for their children when stationed abroad.

To respond to these pressures for a U.S.-type school, the Department of Defense responded with its own system of schools, commonly referred to as DOD schools. However, for other parents, schools designated as American-sponsored were founded in a number of different ways--through religious orders, missionary groups, business, or industrial firms. The majority of existing American community schools overseas were established through the efforts of various individuals and groups, representing both government and private interests. These have established associations for the purpose of operating the schools for their children. This study is related strictly to the American-sponsored overseas schools.

In the establishment of the schools that pertain to this study and of which the faculty from one of these schools were the participants of the study, the goals of this type of school are stated as twofold:

1. to provide educational opportunities for children attending that are generally comparable to educational programs in the U.S.

2. to serve as demonstration centers abroad of American educational philosophy, practice, and methodology with the hope of furthering international understanding (Appendix C).

It is because of the latter dimension stated as a clearly defined goal for American-sponsored overseas schools that this project undertook to discover what knowledge and teacher demographics contribute to global understanding. For example, what is the relationship, if any, between interest or proficiency in foreign languages and teachers' knowledge of the world or a foreign culture? The attempt was made in this research project to find out how closely language and other aspects of teachers' backgrounds were associated with their knowledge of the world.

The same document, Fact Sheet: American-Sponsored Elementary and Secondary Schools Overseas, while pointing out that the curriculum is a U.S. type of standard academic curriculum, says that one additional feature is the opportunity for these schools to develop and implement curricula that will provide experience leading to improvement of international understanding.

> The instructional programs all provide a core curriculum which will prepare students to enter schools, colleges and universities in the U.S. The language of instruction is English, supplemented in certain schools with the local language. The content of the programs may be more or less typically "American," depending upon the proportion of U.S. students, and the quality, of course, varies with each school. Certain schools, especially in Latin America, must also fulfill host-country curriculum

> requirements. The curricula tend to be largely academic, with relatively little attention given to vocational or commercial education, largely because of the high costs involved in the latter programs. An outstanding characteristic of most American-sponsored schools is the use they have made of their location abroad to provide quality programs of foreign language instruction, study of local culture, and social studies. The quality and range of instructional materials is good in the larger schools and improving in others. (Appendix C)

Despite a diversity among overseas schools in curricular programs, the schools' articulated programs, activities, materials, and staff inservice training programs are aimed at providing teachers with an international dimension.

Orr, Anderson, and Forehand (1971) stated that the international dimension for these schools should be defined as "not only possessing information [about other cultures] but also as the wisdom to recognize internationalism as a frame of mind, an attitude, a concept of oneself as a member of an international community--it means behaving interdependently rather than dependently" (p. 50).

This theme of international education is reinforced through the School-to-School Project. The School-to-School Project is a pairing between selected schools stateside and certain overseas schools. The project activities, with approximately 70 pairings to develop activities in international education, have among their general objectives the following two:

1. The development and expansion of significant and pertinent programs of international studies in the elementary and secondary schools at home and abroad.

2. The development of community identification to better world understanding (AASA, 1970, p. 18).

The one salient feature or commonality that each of these schools has and one of the reasons the term "American-sponsored" is used is that each school receives financial assistance of sorts from the U.S. government under a program administered by the Office of Overseas Schools of the U.S. Department of State. Criteria governing assistance to overseas schools are contained in Appendix C.

The financial assistance varies greatly. In many, if not most, instances, the assistance is rather nominal and always designated for specific school programs. The school involved in this study, for example, received $25,000 in a total 1981/82 budget of $2,470,500. For all of the 154 schools, the combined annual operating budget for 1980/81 was $181,000,000. Funds made available by the Office of Overseas Schools to these schools were approximately $5,000,000.

In the Fact Sheet 1980/81 (Appendix C) and in Luebke (1976), the American community schools abroad are private, independent institutions, owned and operated by the users. Luebke stated:

> The United States government does not in any sense operate any of the American-sponsored overseas schools, although in nearly every instance there is at least some representation on the board from among U.S. government employees. Even where all or a majority of board members are U.S. government employees, however, these persons usually serve in their private capacities as parents. (p. 30)

One might temper this statement on the operation of these schools. In many schools, although ownership and policy control are theoretically in the hands of associations of parents whose children are enrolled in the school, the by-laws of the school boards are written in such ways as to give majority control to U.S. Embassy personnel. In some schools, appointment of a board member or members

is the prerogative of the U.S. Ambassador. Likewise, the ambassador in a few instances, by the by-laws, has veto power over any board policy or action of the entire board of education.

Through other subtle or political means, the Embassy and/or the Office of Overseas Schools exerts influence over the school and its programs. One or the other may suggest or caution about superintendent or headmaster candidates. Through the allocation of funds for certain salaries, programs, and materials selection by the Office of Overseas Schools, influence is present.

In some schools, allowance is made for the local or international members of the community to share more or less directly in the concern for the school with the American community. All schools are subject in varying degrees and with varying effects to host-country laws and regulations pertaining to educational practices, importation of educational materials, and personnel practices.

Staffing in the overseas schools suggests that these schools are international in that respect also. Appendix A indicates that of the 7,282 teachers, 2,250 (30.8 percent) were from host countries and 1,171 (16 percent) from third countries. The highest percentage of American staff (67.99 percent) are in the Near East and South-Asia countries. Many of these U.S.-citizen teachers are wives of U.S.-government or business employees, but others are wives of local or third-country citizens. Where practicable and depending on certain local conditions and requirements, the overseas schools seek to recruit teachers from the United States in order to provide up-to-date educational leadership.

The State Department Fact Sheet summarizes the situation in terms of faculties:

> The administrators and most teachers are Americans or American-trained, with a large proportion of American staff hired locally from among dependent wives. Most staff members are college graduates, and the majority hold teaching certificates. Lack of funds and, in many instances, difficult living conditions and isolation from the U.S. professional community make recruitment and retention of qualified personnel from the U.S. difficult. The local and third-country teachers are usually well qualified, although they frequently lack training and experience in U.S. educational methods. Hiring of staff is the responsibility of the individual schools. (p. 2)

## Description of Subjects

It is from an American overseas school that the respondents of this study were taken. The respondents consisted of the teaching staff of the American International School in Vienna, Austria. Total staff for the 1981-82 school year was 65 teachers, including two building principals. Eight of these staff were part-time faculty members.

Salient features of the 60 members who participated in the study were the following. The mean age was 37.97 years; ages ranged from 24 years to 64 years. There were 23 males and 37 females on staff. Relative to citizenship, five countries were represented in the group: U.S. citizens, 42 (70 percent); Canada, 2 (3.3 percent); Austria, 14 (23.3 percent), Britain, 1 (1.7 percent), and New Zealand, 1 (1.7 percent). Twenty-seven (45 percent) of the respondents had bachelor's degrees, 30 (50 percent) held master's degrees, and 3 (5 percent) had doctorates. Of the total number of these teachers, 33 (55 percent) received a U.S. teaching certificate. In terms of language, English

was the native language for 46 (76.7 percent) and German for 14 (23.3 percent). However, 48 (80 percent) indicated they could speak, read, and/or write another language.

## Instruments Used for Data Gathering and Measurement

The data concerning the respondents summarized in the preceding discussion were gathered by means of biographical data sheets developed by the researcher for use in this study. Standardized directions were also developed and used in conjunction with the administration of the biographical instrument.

The intention behind the survey on personal characteristics was to discover whether any discrete personal characteristics are associated with levels of global knowledge. The questionnaire was designed to ferret out those personal characteristics and elements of teachers' backgrounds that might influence the extent of global knowledge of teachers.

Because sociocultural perspective seems to be a potentially significant factor, data were collected on teachers' ethnicity--country of birth. It seemed highly probable that formal educational experience and the teacher's field of study and assignment would likewise influence teachers' levels of global knowledge. Included also were questions on the reading, speaking, and/or writing of foreign language.

The survey gathered data through items concerning foreign travel and the extent of travel a teacher did relative to length of stay in a world area and the number of countries.

In addition to the biographical material collected for the purposes of describing the population, an instrument developed by Educational Testing Services (ETS), Princeton, New Jersey, to obtain a scientific sampling of what college students know about their world was used. The survey measures included a test of global knowledge and three additional questionnaires--on students' backgrounds and interests, their foreign-language backgrounds and proficiency, and their attitudes toward foreign nations and world issues. The survey, which was funded by the Office (now the Department) of Education and supported by the National Endowment for the Humanities, was administered to about 3,000 undergraduates at 185 institutions. The nationwide survey of freshmen and seniors in four-year colleges and students in two-year institutions to determine their understanding of the world and world issues was conducted in winter and early spring of 1980.

The version of the knowledge section of the test consisted of 101 questions (96 of which were written for this test and 5 taken from a test for high school students developed and administered by ETS several years ago; Other Nations, Other Cultures). The test administered to the respondents of this study was a later version of the original, in which questions were reduced in number to 65. The full survey questions were reduced to provide an instrument that required less testing time. However, both versions of the knowledge test are centered on 13 topics: environment, food, health, population, international monetary and trade arrangements, energy, race and ethnicity, human rights, war and armaments, arts and culture, religious

issues, relations among states, and distribution of natural characteristics (physical geography). The test stressed the themes of interdependence among nations, the problems of developing nations, and such historical transformations that the test designers felt to be important to an understanding of the modern world. The major emphasis within these topics is on the contemporary, but there are also items that test knowledge of historical background.

In designing the test, the designers were confronted with three major test issues:

1. From whose perspective would the test be developed?

2. What knowledge and skills did global understanding comprise?

3. What was the sophistication of the global understanding to be tested? (Burrows, 1981, p. 2)

Due to financial constraints, test designers were restricted to scholars from the United States whose world-mindedness would insure a test at once relevant to American concerns but at the same time not parochial. Restriction of bias in test items was safeguarded in this fashion, for it was argued that any person involved in construction of a global-knowledge test is influenced by his background, place, time, and so forth. On the issue of perspective, no serious consideration was given to a test that would be universal as opposed to American in orientation. The assumption was that a test of global understanding for American students would have as much in common with a test devised by and for others. What may be viewed as U.S. problems would sooner or later affect America; conversely, what might be viewed as someone

else's problem often carried implications of magnitude for the United States.

In structuring the knowledge section of the test, the issues approach rather than that of international relations or area studies was adopted. The issues approach was preferred because of its implicitly global scope and the multiple dimensions that characterize most issues. Few issues can, for example, be restricted to pure economics or another discipline. This issues approach afforded testers also to trace issues across time, space, and societal institutions.

In the actual test construction of questions relating to an issue, a "chain" of questions was written.

> Each "chain" would begin with a very basic question about the manifestation of a contemporary global issue in the United States or, conversely, with a contemporary issue abroad that reflected the actions or influence of the United States. From there the chain would quickly proceed outward in space (i.e., beyond the United States) and, more slowly, backward in time. By the end of the chain the questions would be dealing with the global ramifications of the issue and with its historical roots. As the chain proceeded through space and time, the questions would also have different disciplinary foci or, perhaps, be multidisciplinary. Finally, the chain would demonstrate a rough progression from very basic to more sophisticated knowledge of the issue. To the questions of what knowledge and skills global understanding comprised, it was easier to deal with the knowledge aspect of the test rather than the skills. (Burrows, 1981, pp. 2-3)

Relative to skills of global understanding, the test did not really distinguish skills in this area from the problem-solving skills in the social sciences and humanities in general. Little consideration was actually given to the skills problem. The committee felt a certain amount of knowledge about a subject is needed before problem-solving skills can be employed.

The range of difficulty or sophistication of the global questions to be tested raised two points. Was the test of knowledge to be written at the level students were assumed to be on or at the criterion level defined by the test constructors? The dilemma faced by the test committee was whether to have a level of sophistication, the performance results for which would be relatively low and therefore point out to the public the immediate need for curricular change but the scores would be so low as to almost preclude making discriminations among students. If the opposite approach were employed, the reverse in terms of assets and liabilities would be present. The test designers sought to steer a middle course, generally veering toward the higher level of global understanding. The assumption was made that such a course of action would be somewhat of a trade-off in what the test goals were ultimately to achieve.

Although the test questions focused on issues, disciplinary elements were built into each of the questions. A question on world oil reserves, for example, might call for knowledge of ecology, politics, and geography as well as economics. The test does not assess formal knowledge of a discipline but "rather the kind of awareness of a discipline one has from studying related courses in college or reading newspapers and magazines" (Burrows, 1981, p. 8). In summary, the test is not an in-depth assessment of student knowledge about the 13 global issues, but rather a survey whose strength lies in the breadth of coverage of the issues.

The original survey was carried out in February and early March of 1980. One hundred eighty-five colleges, universities, and

two-year institutions in the entire U.S. participated in the survey. The sample consisted of approximately 1,000 freshmen, 1,000 seniors, and 1,000 students from two-year colleges, whose average age was 22. The three groups were predominantly female. "White or Caucasian" students constituted the majority of all groups, "Black or Afro-American" the largest minority. Significant numbers of seniors (3.5 percent) and two-year students (3.1 percent) identified with various ethnic backgrounds.

## Collection of Data

The researcher at a November half-day inservice administered the Global Measures instrument to the respondents. The respondents' assistance was requested for three basic reasons.

First, the five-year curriculum plan for the school called for beginning efforts during the 1981/82 school year to develop a global-education curriculum. As part of the overall curriculum plan, an inservice time had been planned in which Dr. John Chapman, Social Science Specialist from the Department of Education, State of Michigan, would inservice teachers on global education. In beginning work on this aspect of the curriculum, it was thought helpful to know what the staff's current understanding of global issues was and to raise their conscious level of world problems and issues.

Motivation for attempting to develop an articulated and coordinated curriculum K-12 in global education lay not only in the educational goals discussed above for an American-sponsored overseas school but also in the fact that the parent community and student body

of AIS are becoming more international in their make-up. There is wide interest in responding to the needs of the schools' changing population.

Second, it was explained to the staff that global education has become a concern of the U.S. government because of America's position in the world. Through the U.S. Department of Education, a number of grants have been given to states to assist in developing model global-education curricula. Michigan is one of these states. And as one part of their efforts, they wish to gather research data to establish the current status of global understanding with students and teachers. Data are being sought from both stateside schools and overseas schools.

Finally, it was explained that the data would also be used as part of this researcher's doctoral work.

## Data Analysis

The information obtained from each teacher was tabulated on a coding form and key punched on an IBM computer card. The unit of analysis was the group. The hypotheses were analyzed by the analysis of variance, the multivariate analysis of variance, Pearson product-moment correlation, and Spearman rank-order correlation using the Statistical Package for the Social Sciences (SPSS) program at the Computer Center of Michigan State University.

# CHAPTER IV

## DATA ANALYSIS

The purpose of this research project was to explore the extent of global knowledge of teachers in an American-sponsored overseas school and to examine the knowledge relative to selected characteristics and background of the teachers in the sample group. The measure of global knowledge was obtained through the administration of the Educational Testing Service's instrument, Measures of Global Understanding, to the teacher group. The characteristics that were compared and related to the scores the teachers received on the global-knowledge test were age; main subject areas taught; number of areas of the world visited or lived in; length of time a teacher lived in or visited a geographical area; years teaching; years teaching overseas; number of languages read, written, and/or spoken; highest university degree held; citizenship; perceived degree of training for teaching about other countries and cultures; and different undergraduate and graduate majors.

The global-knowledge test administered to the sample group consisted of questions relating to 13 global issues. The issues were environment, food, health, energy, religious issues, arts and culture, distribution of natural characteristics, relations among states, war and armaments, monetary and trade arrangements, human rights, racial

and ethnic issues, and population. To the test scores on each of these global issues as well as to the composite score of the test, the various teachers' characteristics and background were compared by use of the analysis of variance for the global composite test scores, the multivariate analysis of variance for the set of global-issues test scores, Pearson's product-moment correlation, and Spearman's rank correlation coefficient.

The previous chapter described the procedure for collecting and analyzing the data. This chapter presents the statistical analyses as they relate to the various hypotheses.

## Hypotheses and Statistical Tests

The hypotheses were analyzed by the multivariate analysis of variance, Pearson product-moment correlation, and Spearman rank-order correlation using the Statistical Package for the Social Sciences (SPSS) program at the Computer Center of Michigan State University.

### Teaching Assignments and Composite Score

1. There will be no significant difference between the global-knowledge composite test scores of teachers teaching different subject areas in an American-sponsored overseas school.

In the research project, teachers were grouped into five main subject areas. These groups were mathematics/science group, elementary K-5 group, foreign languages including English-as-a-second-language group, a group designated as humanities, and a fifth group tagged as "other." In the humanities group according to subject area taught

there were included teachers instructing in the social sciences, language arts, fine arts, art, music, drama, and library. The "other" group was comprised of physical education teachers, administrators, counselor, and business teacher.

Four planned comparisons were made between the scores obtained by the five groups of teachers as they were assigned to teach different subject matter. These four comparisons were:

1. Mathematics/science teachers' scores were compared to the scores obtained by the elementary group, the foreign language group, and the humanities group.

2. The elementary K-5 teachers' scores were compared to the scores obtained by the foreign languages teachers and the humanities teachers.

3. The scores of the foreign language teachers were compared to the humanities teachers' scores.

4. The scores of the staff designated "other" were compared to the scores received by the other four groups--mathematics/science, elementary, foreign language, humanities.

Results

1. For the scores of the mathematics/science teachers compared to the scores of the elementary K-5, foreign languages, and humanities teachers, the F-ratio of 4.07 (1 and 55 df) was statistically significant. The data did not support the null hypothesis. ($p < .05$).

2. For the scores of the elementary group compared to the scores of the foreign language teachers and the humanities teachers,

the F-ratio of 5.61 (1 and 55 df) was statistically significant. The data did not support the null hypothesis ($p < .05$).

3. For the scores of the foreign language teachers compared to the humanities teachers, the F-ratio of .102 (1 and 55 df) was not statistically significant. The data failed to reject the null hypothesis ($p > .05$).

4. For the scores of the teachers classified "other" (physical education, building administrators, counselor, and business) compared to the scores of the other teachers, the F-ratio of .328 (1 and 55 df) was not statistically significant. The data failed to reject the null hypothesis ($p > .05$).

Means for each group are presented in Table 1. Analysis of variance summary table for the composite test scores is presented in Table 2.

Table 1.--Means for each group for global-understanding test composite scores of teachers as per teaching assignment--mathematics/science, elementary K-5, foreign language, humanities, and other.

| Subject Area Taught | Group Size | Mean |
|---|---|---|
| Math/science | 9 | 47.33 |
| Elementary | 14 | 37.14 |
| Foreign language | 13 | 42.85 |
| Humanities | 16 | 43.81 |
| Other | 8 | 40.63 |
| Entire sample | 60 | 42.15 |

Table 2.--Analysis of variance summary table for the composite test scores on the global-understanding test for teachers according to classroom assignments.

| Source | Sum of Squares | df | Mean Square | F | Sig. of F |
|---|---|---|---|---|---|
| Math/science vs. elementary, foreign language and humanities groups | 266.54 | 1 | 266.54 | 4.070 | .0485 |
| Elementary vs. foreign language and humanities groups | 367.23 | 1 | 367.23 | 5.607 | .0214 |
| Foreign language vs. humanities group | 6.70 | 1 | 6.70 | .102 | .7503 |
| Other vs. all groups | 21.47 | 1 | 21.47 | .328 | .5693 |
| Within cells | 3601.72 | 55 | 65.49 | -- | -- |

Teaching Assignments and Scores on 13 Issues

1.1. There will be no significant difference between the scores on the 13 global issues of teachers teaching different subject areas in an American-sponsored overseas school.

Results

1. For the scores of the mathematics/science teachers on the 13 issues compared to the scores of the elementary K-5, foreign languages, and humanities teachers, the approximate multivariate F-ratio of 1.78 (13 and 43 df) was not statistically significant. The data failed to reject the null hypothesis ($p > .05$). Since the multivariate F

was not significant, it is inappropriate to examine univariate F's and correlations with the canonical variables for significance testing. However, when looking at the univariate F-tests, the math/science group scored better on questions pertaining to energy, culture, and environmental alterations than teachers assigned to teach elementary, foreign language, and humanities (Table 3).

Table 3.--Multivariate test of significance for differences on scores for 13 areas of global knowledge between teachers of math/science versus teachers of foreign language and teachers of humanities/social sciences.

| | Univariate F | Sig. of F | Correlation With Canonical Variable |
|---|---|---|---|
| 1. Energy | 5.630 | .021 | .435 |
| 2. Food | .489 | .487 | .128 |
| 3. Health | 3.530 | .066 | .345 |
| 4. Population | .897 | .351 | .173 |
| 5. Racial | 1.410 | .240 | .218 |
| 6. Culture | 5.120 | .028 | .415 |
| 7. Geography | .048 | .828 | .040 |
| 8. Trade | 3.000 | .089 | .318 |
| 9. Human Rights | .040 | .843 | .037 |
| 10. War | .456 | .507 | .123 |
| 11. Environment | 13.920 | .0005 | .685 |
| 12. Relations | .066 | .798 | .047 |
| 13. Religion | .020 | .900 | -.023 |

Approximate multivariate F = 1.78 (13, 43 df) p = .077

The correlations between disciminant functions (i.e., linear combinations that account maximally for most of the variance between the two groups) and each of the subtests were environment (.6849), energy (.4355), culture (.4152), and health (.3447). (See Table 3.)

Means for the groups are presented in Table 4.

2. For the scores of the elementary K-5 teachers on the 13 issues compared to the scores of the foreign language teachers and the humanities teachers, the approximate multivariate F-ratio of 3.64 (13 and 43 df) was statistically significant. The data did not support the null hypothesis ($p < .05$). (See Table 5.)

Within the univariate F-tests with 1 and 55 df, the elementary teachers scored lower than the other two groups on the questions pertaining to the issues of energy, population, culture, and human rights (Table 5).

The correlations between discriminant functions (i.e., linear combinations that account maximally for most of the variance between the two groups) and each of the subtests were culture (-.5922), population (-.4806), human rights (-.3219), and energy (-.2998). (See Table 5.)

The univariate F's and correlations with the canonical variables for the 13 subtests are presented in Table 5.

Table 4.--Means for the groups in test scores on the individual 13 global issues for the teachers as per teaching assignment--mathematics/science, elementary K-5, foreign language, humanities, other.

| Teaching Assignment | N | Energy | Food | Health | Population | Racial | Culture | Geography | Trade | Human Rights | War | Environment | Relations | Religion |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Math/science | 9 | 3.78 | 3.22 | 2.78 | 4.22 | 3.78 | 5.66 | 3.44 | 5.00 | 2.22 | 4.55 | 3.89 | 3.33 | 1.44 |
| Elementary | 14 | 2.36 | 3.21 | 2.21 | 3.00 | 3.29 | 3.93 | 3.14 | 4.14 | 1.71 | 3.71 | 2.50 | 2.71 | 1.21 |
| Foreign language | 13 | 3.08 | 2.54 | 2.38 | 3.93 | 3.23 | 5.46 | 3.54 | 4.23 | 2.46 | 4.46 | 2.54 | 3.62 | 1.38 |
| Humanities | 16 | 3.19 | 3.13 | 2.25 | 4.56 | 3.31 | 5.25 | 3.44 | 4.06 | 2.31 | 4.44 | 2.75 | 3.31 | 1.81 |
| Other | 8 | 3.50 | 2.25 | 2.88 | 3.50 | 2.50 | 4.38 | 3.38 | 3.50 | 2.75 | 4.38 | 3.38 | 3.00 | 1.25 |
| Entire sample | 60 | 3.10 | 2.92 | 2.43 | 3.87 | 3.25 | 4.93 | 3.38 | 4.18 | 2.25 | 4.28 | 2.90 | 3.20 | 1.45 |

Table 5.--Multivariate test of significance for differences on scores for 13 areas of global knowledge between teachers of elementary grades versus the foreign language teacher group and the humanities group.

| | Univariate F | Sig. of F | Correlation With Canonical Variable |
|---|---|---|---|
| 1. Energy | 5.4500 | .023 | -.300 |
| 2. Food | 1.2800 | .263 | .145 |
| 3. Health | .1700 | .685 | -.052 |
| 4. Population | 13.9900 | .0004 | -.481 |
| 5. Racial | .0007 | .979 | .003 |
| 6. Culture | 21.2400 | .00002 | -.592 |
| 7. Geography | 1.3300 | .2531 | -.148 |
| 8. Trade | .00012 | .991 | .001 |
| 9. Human rights | 6.2800 | .015 | -.322 |
| 10. War | 2.5400 | .117 | -.205 |
| 11. Environment | .2680 | .614 | -.065 |
| 12. Relations | 2.9300 | .092 | -.220 |
| 13. Religion | 1.7300 | .194 | -.169 |

Approximate multivariate F = 3.64 (13, 43 df) p = .0007

3. For the scores of the foreign language teachers on the 13 issues compared to the scores of the humanities group of teachers, the approximate multivariate F-ratio of .633 (13 and 43 df) was not statistically significant. The data failed to reject the null hypothesis ($p > .05$). (See Table 6.)

Since the multivariate F-ratio was not significant, it is inappropriate to examine univariate F's and correlations with the canonical variable for significance testing. However, when looking at the univariate F-tests, it is noted that the foreign language

teachers scored lower on food, population, and religion than teachers assigned to teach in the humanities areas.

The correlations between discriminant functions and each of the subtests were religion (.5362), food (.4954), population (.3671), and environment (.3282). (See Table 6.)

Table 6.--Multivariate test of significance for differences on scores for 13 areas of global knowledge between foreign language teachers versus teachers of humanities/social science.

| | Univariate F | Sig. of F | Correlation With Canonical Variable |
|---|---|---|---|
| 1. Energy | .083 | .774 | .295 |
| 2. Food | 2.693 | .107 | .495 |
| 3. Health | .248 | .621 | -.190 |
| 4. Population | 2.670 | .108 | .367 |
| 5. Racial | .037 | .849 | .217 |
| 6. Culture | .360 | .551 | -.230 |
| 7. Geography | .089 | .766 | -.087 |
| 8. Trade | .111 | .741 | -.249 |
| 9. Human rights | .240 | .627 | -.427 |
| 10. War | .002 | .964 | -.293 |
| 11. Environment | .364 | .549 | .328 |
| 12. Relations | .380 | .540 | -.481 |
| 13. Religion | 1.456 | .233 | .536 |

Approximate multivariate F = .633 (13, 43 df) p = .813

4. For the scores of the teachers classified "other" (physical education, building administrators, counselor, and business) compared to the scores of the other teacher groups, the approximate multivariate F-ratio of 3.51 (13 and 43 df) was

statistically significant. The data did not support the null hypothesis ($p < .05$). (See Table 4.)

Within the univariate F-tests with 1 and 55 df, the issue that the group of teachers classified as "other" scored lower in than the other groups was food (Table 7).

The correlation between discriminant functions and the subtests on food was -.277 (Table 7).

Although the univariate test for racial issues was not statistically significant, its correlation with the canonical variable was nearly as great as that for food.

Table 7.--Multivariate test of significance for differences on scores for 13 areas of global knowledge between teachers classified "other" versus the math/science, humanities, foreign language, and elementary teacher groups.

| | Univariate F | Sig. of F | Correlation With Canonical Variable |
|---|---|---|---|
| 1. Energy | 1.400 | .242 | .155 |
| 2. Food | 4.480 | .039 | -.277 |
| 3. Health | 3.430 | .070 | .243 |
| 4. Population | 1.130 | .292 | -.139 |
| 5. Racial | 3.960 | .052 | -.260 |
| 6. Culture | 3.230 | .078 | -.235 |
| 7. Geography | .00078 | .977 | -.004 |
| 8. Trade | 2.350 | .131 | -.201 |
| 9. Human rights | 3.470 | .068 | .244 |
| 10. War | .039 | .845 | .026 |
| 11. Environment | 2.360 | .130 | .201 |
| 12. Relations | .210 | .646 | -.060 |
| 13. Religion | .410 | .525 | -.084 |

Approximate multivariate F = 3.51 (13, 43 df) p = .00093

Citizenship and Composite Score

2. There will be no significant difference between the global-knowledge composite test scores received by teachers who are U.S. or Canadian citizens and by teachers of other citizenship.

The F-ratio of 3.00 (1 and 57 df) was not statistically significant. The data failed to reject the null hypothesis ($p > .05$).

Means for each group are presented in Table 8.

Table 8.--Means in global-understanding composite test scores of teachers with U.S./Canadian citizenship and those of other citizenship.

| Citizenship | Group Size | Mean |
|---|---|---|
| U.S./Canadian citizenship | 44 | 43.23 |
| Other citizenship | 15 | 38.87 |

Citizenship and Scores on 13 Issues

2.1. There will be no significant difference between the scores of teachers who have U.S. or Canadian citizenship and the scores of teachers holding other citizenship.

The F-ratio of 3.060 (13 and 45 df) was statistically significant. The data did not support the null hypothesis ($p < .05$). The hypothesis was rejected.

Means for the two groups are presented in Table 9.

Within the univariate F-tests with 1 and 55 df, the areas teachers with U.S. or Canadian citizenship scored higher in than teachers of other citizenship were food, population, and trade.

Table 9.--Means for differences in test scores on the individual 13 global issues for the teachers as per citizenship, languages, educational major, U.S. degree or not.

| | N | Energy | Food | Health | Population | Racial | Culture | Geography | Trade | Human Rights | War | Environment | Relations | Religion |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Citizenship--US/C | 44 | 3.21 | 3.18 | 2.43 | 4.09 | 3.39 | 4.96 | 3.39 | 4.39 | 2.25 | 4.36 | 2.96 | 3.11 | 1.52 |
| Citizenship--other | 15 | 2.80 | 2.07 | 2.40 | 3.27 | 2.80 | 4.93 | 3.33 | 3.53 | 2.27 | 4.13 | 2.73 | 3.40 | 1.20 |
| Entire sample | 59 | 3.10 | 2.90 | 2.42 | 3.88 | 3.24 | 4.95 | 3.37 | 4.17 | 2.25 | 4.31 | 2.90 | 3.19 | 1.44 |
| Having: | | | | | | | | | | | | | | |
| Other language | 48 | 3.23 | 2.81 | 2.42 | 3.92 | 3.21 | 4.94 | 3.44 | 4.04 | 2.29 | 4.33 | 2.81 | 3.23 | 1.46 |
| No other lang. | 12 | 2.58 | 3.33 | 2.50 | 3.67 | 3.42 | 4.92 | 3.17 | 4.75 | 2.08 | 4.08 | 3.25 | 3.08 | 1.42 |
| Entire sample | 60 | 3.10 | 2.92 | 2.43 | 3.87 | 3.25 | 4.93 | 3.38 | 4.18 | 2.25 | 4.28 | 2.90 | 3.20 | 1.45 |
| Ed. Majors: | | | | | | | | | | | | | | |
| 1. Math/science | 7 | 3.86 | 3.14 | 2.71 | 4.43 | 3.71 | 5.43 | 3.00 | 4.57 | 2.14 | 4.43 | 3.71 | 3.43 | 1.29 |
| 2. Math/sci/educ. | 1 | 6.00 | 2.00 | 3.00 | 3.00 | 4.00 | 6.00 | 4.00 | 5.00 | 3.00 | 5.00 | 5.00 | 3.00 | 1.00 |
| 3. Social science | 19 | 3.16 | 3.21 | 2.47 | 4.26 | 3.84 | 5.26 | 3.63 | 4.74 | 2.53 | 4.37 | 2.95 | 3.21 | 1.89 |
| 4. Social sci/educ. | 5 | 3.00 | 2.80 | 2.60 | 4.20 | 3.00 | 4.80 | 3.20 | 4.20 | 2.40 | 5.00 | 2.80 | 3.20 | 1.40 |
| 5. Foreign lang. | 6 | 2.83 | 2.17 | 2.33 | 3.83 | 3.50 | 5.50 | 3.67 | 4.33 | 2.50 | 5.00 | 2.17 | 3.50 | 1.50 |
| 6. Education | 12 | 2.42 | 3.08 | 2.00 | 3.42 | 2.58 | 4.00 | 3.17 | 3.67 | 1.67 | 3.33 | 2.50 | 2.83 | .92 |
| 7. Entire sample | 50 | 3.08 | 2.98 | 2.40 | 4.00 | 3.40 | 4.98 | 3.40 | 4.36 | 2.26 | 4.28 | 2.88 | 3.18 | 1.46 |
| U.S. degreed | 45 | 3.29 | 3.11 | 2.49 | 4.04 | 3.47 | 5.04 | 3.38 | 4.56 | 2.33 | 4.44 | 2.98 | 3.22 | 1.58 |
| Non-U.S. degreed | 15 | 2.53 | 2.33 | 2.27 | 3.33 | 2.60 | 4.60 | 3.40 | 3.07 | 2.00 | 3.80 | 2.67 | 3.13 | 1.07 |
| Entire sample | 60 | 3.10 | 2.92 | 2.43 | 3.87 | 3.25 | 4.93 | 3.38 | 4.18 | 2.25 | 4.28 | 2.90 | 3.20 | 1.45 |

These results were supported by the correlations between discriminant functions (i.e., linear combinations that account maximally for most of the variance between the two groups) and each of the subtests for food (.601), population (.344), and trade (.300). (See Table 10.)

Table 10.--Multivariate test of significance for differences in scores for 13 areas of global knowledge between teachers who have U.S. or Canadian citizenship and those teachers of other citizenship.

| | Univariate F | Sig. of F | Correlation With Canonical Variable |
|---|---|---|---|
| 1. Energy | 1.500 | .225 | .173 |
| 2. Food | 18.240 | .00007 | .602 |
| 3. Health | .020 | .88824 | .020 |
| 4. Population | 4.970 | .018 | .344 |
| 5. Racial | 2.930 | .092 | .241 |
| 6. Culture | .004 | .951 | .009 |
| 7. Geography | .040 | .844 | .028 |
| 8. Trade | 4.540 | .037 | .300 |
| 9. Human rights | .004 | .950 | -.009 |
| 10. War | .297 | .589 | .077 |
| 11. Environment | .507 | .484 | .099 |
| 12. Relations | .523 | .473 | -.102 |
| 13. Religion | 1.303 | .260 | .160 |

Approximate multivariate F = 3.06 (13, 45 df) p = .00265

Languages and Composite Score

3. There will be no significant difference between the global-knowledge composite test scores received by teachers who speak, read, and/or write a foreign language and by those teachers who do not have another language.

The F-ratio of .002 (1 and 58 df) was not statistically significant. The data failed to reject the null hypothesis ($p > .05$).

Means for each group are presented in Table 11.

Table 11.--Means for global-understanding composite test scores of teachers with a foreign language and those without a foreign language.

| Groups | Group Size | Mean |
|---|---|---|
| Foreign language | 48 | 42.13 |
| Without a foreign language | 12 | 42.25 |

Other Languages and Scores on 13 Issues

3.1. There will be no significant difference in the scores on the 13 topics of the global-knowledge test for teachers who speak, read, and/or write a foreign language and for teachers who do not have another language.

The approximate multivariate F-ratio of 1.46 (13 and 46 df) was not statistically significant. The data failed to reject the null hypothesis ($p > .05$).

Means for the groups are presented in Table 9.

Educational Background and Composite Score

4. There will be no significant difference in the global-knowledge composite test scores obtained by teachers having different college undergraduate and graduate majors.

In the research project, teachers were grouped into six groups according to their undergraduate and graduate majors. These groupings were:

1. Teachers with an undergraduate major in mathematics or science and no graduate major or a graduate major in mathematics or science.

2. Teachers with an undergraduate and graduate major combination of mathematics or science and education.

3. Teachers with an undergraduate major in social science and no graduate major or a graduate major in social science.

4. Teachers with an undergraduate and graduate major combination of social science and education.

5. Teachers with an undergraduate major in foreign language and no graduate major or a graduate major in foreign language.

6. Teachers with an undergraduate major in education and no graduate major or a graduate major in education.

Five planned comparisons were made between the composite global scores obtained by the six groups of teachers having different undergraduate and graduate majors. These five comparisons were:

1. Teachers with an undergraduate major in education and no graduate major or a graduate major in education compared to the other five groups.

2. Teachers with mathematics or science majors and teachers with mathematics or science and education majors compared to social science undergraduate or graduate majors or teachers with an undergraduate and graduate major combination of social science and education.

3. Foreign language majors compared to the social science majors and teachers with a combination social science major and education major.

4. Teachers with an undergraduate major in mathematics or science and no graduate major or a graduate major in mathematics or science compared to those with an undergraduate and graduate major combination of mathematics or science and education.

5. Teachers with a social science undergraduate major or graduate major in social sciences compared to those with an undergraduate and graduate major combination of social sciences and education.

Results

1. For the scores of the education majors compared to the scores of the other five groups of teachers, the F-ratio of 12.55 (1 and 44 df) was statistically significant. The data did not support the null hypothesis ($p < .05$).

Means for the groups are presented in Table 12.

2. For the scores of the mathematics or science majors and the mathematics or science and education majors compared to the social science, social science and education, and the foreign language

majors, the F-ratio of .156 was not statistically significant. The data failed to reject the null hypothesis ($p > .05$).

Table 12.--Means for the groups for global-understanding composite test scores of teachers according to undergraduate and graduate majors.

| Graduate Major | Group Size | Mean |
|---|---|---|
| Math/science | 7 | 45.86 |
| Math/science and education | 1 | 50.00 |
| Social science | 19 | 45.53 |
| Social science and education | 5 | 42.60 |
| Foreign language | 6 | 42.83 |
| Education | 12 | 35.58 |
| Entire sample | 50 | 42.66 |

3. For the scores of the social science majors and the social science and education majors compared to the foreign language majors, the F-ratio of .293 was not statistically significant. The data failed to reject the null hypothesis ($p > .05$).

4. For the scores of the mathematics or science majors compared to the mathematics and education combination majors, the F-ratio of 1.03 was not statistically significant. The data failed to reject the null hypothesis ($p > .05$).

5. For the scores of the social science majors compared to the social science and education combination majors, the F-ratio of 2.86 was not statistically significant. The data failed to reject the null hypothesis ($p > .05$).

Table 13.--Analysis of variance summary table for the composite test scores on the global-understanding test for teachers according to undergraduate and graduate majors.

| Source | Sum of Squares | df | Mean Square | F | Sig. of F |
|---|---|---|---|---|---|
| Education | 655.94 | 1 | 655.94 | 12.5450 | .00095 |
| Math or science and math or science/education vs. Social science, social science education and foreign language | 8.16 | 1 | 8.16 | .1561 | .6947 |
| Social science and social science/education vs. foreign language | 15.31 | 1 | 15.31 | .2939 | .5917 |
| Math or science only vs. math or science/education | 53.93 | 1 | 53.93 | 1.0310 | .3154 |
| Social science vs. social science/education | 149.34 | 1 | 149.34 | 2.8560 | .0981 |
| Within cells | 2300.54 | 44 | 52.29 | | |

Educational Background and Scores on 13 Issues

4.1. There will be no significant difference in the test scores of teachers with different undergraduate and graduate majors relative to each of the 13 global issues.

The planned comparisons were identical to the comparisons made relative to the composite test scores.

Results

1. For the scores of the education majors compared to the scores of the other five groups of teachers, the approximate multi-

multivariate F-ratio of 2.10 (13 and 32 df) was not statistically significant. The data failed to reject the null hypothesis ($p > .05$).

Means for the groups are presented in Table 9.

Because the F-ratio was only slightly significant (sig. of F = .0537), the univariate F-tests (1 and 44 df) were examined. Areas in which the elementary teachers scored lower than the other groups were energy and culture. Other low-scoring areas were health, racial, human rights, war, and environment (Table 14).

Table 14.--Multivariate test of significance for differences on scores for 13 areas of global knowledge between teachers with education majors versus all other majors.

| | Univariate F | Sig. of F | Correlation With Canonical Variable |
|---|---|---|---|
| 1. Energy | 12.81 | .0009 | .4170 |
| 2. Food | 1.63 | .2085 | -.4256 |
| 3. Health | 4.40 | .0416 | -.1489 |
| 4. Population | 1.56 | .2181 | -.2299 |
| 5. Racial | 6.59 | .0137 | .0724 |
| 6. Culture | 12.91 | .0008 | .5521 |
| 7. Geography | 1.19 | .2822 | .0555 |
| 8. Trade | 3.71 | .0607 | -.0208 |
| 9. Human rights | 6.00 | .0113 | .3461 |
| 10. War | 8.67 | .0052 | .2402 |
| 11. Environment | 5.27 | .0265 | .5705 |
| 12. Relations | .71 | .4058 | -.4494 |
| 13. Religion | 1.94 | .1709 | .0055 |

Approximate multivariate F = 2.01 p = .05365

The correlations between discriminant functions (i.e., linear combinations that account maximally for most of the variance between the groups) and each of the subtests were energy (.417), culture (.552), human rights (.346), war (.240), and environment (.571). (See Table 14.)

2. For scores of teachers with a math or science major and teachers with a math or science/education combination compared to the scores of teachers with a social science major, social science/education major, or a foreign language major, the approximate multivariate F-ratio of 2.07 was statistically significant. The null hypothesis was rejected ($p < .05$). (See Table 9.)

Examining the univariate F-tests (1 and 44 df), the math or science majors and teachers with a math or science/education combination scored higher than the teachers with other majors on two issues: energy ($F = 4.64$) and environment ($F = 6.07$). The correlation between the dependent and canonical variables for energy was .354, and for environmental issues it was .405. (Table 15).

3. For the scores of the social science and social science/education majors compared to teachers with a foreign language major, the approximate multivariate F-ratio of .576 (13 and 32 df) was not statistically significant. The data failed to reject the null hypothesis ($p > .05$). (See Table 9.)

Because the F-ratio was not statistically significant, the univariate F-tests and the correlations between the dependent and canonical variables were not examined.

Table 15.--Multivariate test of significance for differences on scores for 13 areas of global knowledge between teachers with math or science, math or science/education majors versus social science, social science/education, or foreign language majors.

| | Univariate F | Sig. of F | Correlation With Canonical Variable |
|---|---|---|---|
| 1. Energy | 4.636 | .037 | .354 |
| 2. Food | .042 | .838 | .034 |
| 3. Health | .002 | .964 | .007 |
| 4. Population | 1.410 | .241 | -.195 |
| 5. Racial | .128 | .722 | -.059 |
| 6. Culture | .310 | .580 | -.091 |
| 7. Geography | .214 | .646 | -.076 |
| 8. Trade | .070 | .793 | -.043 |
| 9. Human rights | .831 | .367 | -.150 |
| 10. War | 1.869 | .179 | -.225 |
| 11. Environment | 6.071 | .017 | .405 |
| 12. Relations | .232 | .632 | -.079 |
| 13. Religion | 2.273 | .139 | -.248 |

Approximate multivariate F = 2.07 p = .047

4. Due to the small sample size of one for teachers with a math or science/education major combination, the comparison was not examined.

5. For the scores of the social science majors compared to the scores of the social science/education combination majors, the approximate multivariate F-ratio of .932 was not statistically significant. The data failed to reject the null hypothesis ($p > .05$). (See Table 9.)

Because the F-ratio was not statistically significant, the univariate F-tests and the correlations between the dependent and canonical variables were not examined.

U.S. Degree and/or Teaching Certificate and Composite Score

5. There will be no significant difference in the global-knowledge composite test scores of teachers who have graduated and/or hold a teaching certificate from a U.S. university and those who have not graduated and/or do not hold a teaching certificate from a U.S. university.

The F-ratio of 8.99 (1 and 58 df) for scores of teachers with a degree or teaching certificate from a U.S. institution was statistically significant. The data did not support the null hypothesis ($p < .05$).

Means for the groups are presented in Table 16.

Table 16.--Means for differences in the global-knowledge composite test scores of teachers with a U.S. degree and those without.

| Group | Group Size | Mean |
|---|---|---|
| U.S. degree and/or certificate | 45 | 43.93 |
| Without U.S. degree and/or certificate | 15 | 36.80 |

U.S. Degree and/or Teaching Certificate and Scores on 13 Issues

5.1. There will be no significant difference in the scores on the 13 topics of the global-knowledge test of teachers who have a degree from a U.S. university or hold a teaching certificate from the U.S. and the scores of those who have not graduated from a U.S. institution.

The approximate F-ratio of 2.58 (13 and 46 df) was statistically significant. The data did not support the null hypothesis ($p < .05$).

Means for the groups are presented in Table 9.

Within the univariate F-tests with 1 and 58 df, the areas in which teachers with U.S. degree/teaching certificate scored higher than those without a U.S. degree or certificate were energy, food, population, racial, and trade (Table 17).

The correlations between the discriminant functions and each of the subtests were energy (.368), food (.425), population (.322), racial issues (.405), and trade (.631). (See Table 17.)

Number of Areas and Composite Score

6. There will be no relationship between the number of countries traveled or lived in and the teachers' composite scores on the global-understanding test.

Pearson's correlation coefficient indicated that a relationship apparently existed between the number of areas traveled or lived in and the teacher's composite test scores ($r = .2524$, $n = 60$,

($p = .026$). The null hypothesis was rejected, although it should be noted that this relationship was weak (Table 18).

Table 17.--Multivariate test of significance for differences on scores for 13 global issues between teachers with U.S. degrees versus those without.

| | Univariate F | Sig. of F | Correlation With Canonical Variable |
|---|---|---|---|
| 1. Energy | 5.730 | .020 | .368 |
| 2. Food | 7.620 | .008 | .425 |
| 3. Health | 1.000 | .321 | .154 |
| 4. Population | 4.390 | .041 | .322 |
| 5. Racial | 6.920 | .011 | .405 |
| 6. Culture | 1.750 | .191 | .204 |
| 7. Geography | .007 | .934 | -.013 |
| 8. Trade | 16.810 | .0001 | .631 |
| 9. Human rights | 1.730 | .194 | .202 |
| 10. War | 2.430 | .124 | .240 |
| 11. Environment | 1.010 | .318 | .155 |
| 12. Relations | .051 | .822 | .035 |
| 13. Religion | 3.420 | .070 | .284 |

Approximate multivariate $F = 2.58$ (13, 46 df) $p = .0091$

Number of Areas and Scores on 13 Issues

6.1. There will be no relationship between the number of countries traveled or lived in and the teachers' scores on the 13 global issues of the test.

Pearson's correlation coefficient indicates that a slight relationship apparently exists between three of the issues and the

Table 18.--Pearson's correlation-coefficients summary table for the composite test scores on the global-understanding test and number of areas, years teaching, years teaching overseas, number of languages, and age.

| | | No. of Areas | Time-Area | Years Teaching | Years Overseas | No. of Languages | Age |
|---|---|---|---|---|---|---|---|
| Global Test Score | r | .2524 | .3150 | .0049 | .0044 | .1822 | .0605 |
| | n | 60 | 60 | 60 | 60 | 60 | 60 |
| | p | .026 | .007 | .485 | .487 | .082 | .323 |

number of countries traveled or lived in. These issues are population ($r = .2402$, $n = 60$, $p = .032$), human rights ($r = .2383$, $n = 60$, $p = .033$), and relations among nations ($r = .2825$, $n = 60$, $p = .014$). For the remaining ten issues, Pearson's correlation coefficient indicates that no correlation has been detected between the number of countries traveled or lived in and the teachers' scores on the ten remaining global issues (Table 19).

Amount of Time in Foreign Countries and Composite Score

7. There will be no relationship between the amount of time teachers have spent in foreign countries and the teachers' composite test scores on the global-understanding test.

Pearson's correlation coefficient indicates that some relationship apparently exists between the amount of time traveling and/or living in foreign countries and the teacher's composite test scores on the global-understanding test ($r = .3150$, $n = 60$, $p = .007$). The null hypothesis is rejected (Table 18).

Table 19.--Pearson correlation-coefficient summary table for the scores on the 13 global issues and the variables.

| Variable | | Number of Areas | Time-Area | Years Teaching | Years Overseas | Number of Languages | Age |
|---|---|---|---|---|---|---|---|
| Energy | r | .0996 | .2499 | .0117 | -.0063 | .2531 | .0578 |
| | n | 60 | 60 | 60 | 60 | 60 | 60 |
| | p | .224 | .027 | .465 | .481 | .026 | .330 |
| Food | r | .1033 | .0180 | -.1493 | -.3818 | -.0604 | -.1637 |
| | n | 60 | 60 | 60 | 60 | 60 | 60 |
| | p | .216 | .446 | .127 | .001 | .323 | .106 |
| Health | r | .1575 | .2648 | .2203 | .1660 | .1581 | .2543 |
| | n | 60 | 60 | 60 | 60 | 60 | 60 |
| | p | .115 | .020 | .045 | .103 | .114 | .025 |
| Population | r | .2402 | .2181 | -.0584 | -.0667 | .1211 | .0241 |
| | n | 60 | 60 | 60 | 60 | 60 | 60 |
| | p | .032 | .047 | .329 | .306 | .178 | .427 |
| Racial | r | .0855 | .1900 | -.0877 | -.0879 | .0404 | -.0256 |
| | n | 60 | 60 | 60 | 60 | 60 | 60 |
| | p | .258 | .073 | .253 | .252 | .380 | .423 |
| Culture | r | .1756 | .3182 | .1317 | .1418 | .2576 | .1959 |
| | n | 60 | 60 | 60 | 60 | 60 | 60 |
| | p | .090 | .007 | .158 | .140 | .023 | .067 |
| Geography | r | .1629 | .1398 | -.0992 | .1645 | .1195 | -.0373 |
| | n | 60 | 60 | 60 | 60 | 60 | 60 |
| | p | .107 | .143 | .225 | .105 | .182 | .389 |
| Trade | r | .1068 | .2916 | .0239 | -.0285 | .0322 | .0606 |
| | n | 60 | 60 | 60 | 60 | 60 | 60 |
| | p | .208 | .012 | .428 | .414 | .404 | .323 |
| Human Rights | r | .2383 | .1868 | .0956 | .1900 | .1016 | .0548 |
| | n | 60 | 60 | 60 | 60 | 60 | 60 |
| | p | .033 | .077 | .234 | .073 | .220 | .339 |
| War | r | .1326 | .2229 | -.0240 | .0200 | .1631 | .1400 |
| | n | 60 | 60 | 60 | 60 | 60 | 60 |
| | p | .156 | .043 | .428 | .440 | .107 | .143 |
| Environment | r | .0742 | .0333 | -.0244 | -.0648 | -.0232 | -.0133 |
| | n | 60 | 60 | 60 | 60 | 60 | 60 |
| | p | .287 | .400 | .427 | .311 | .430 | .460 |
| Relations | r | .2825 | .4310 | .0404 | .0742 | .1999 | -.0184 |
| | n | 60 | 60 | 60 | 60 | 60 | 60 |
| | p | .014 | .138 | .380 | .287 | .063 | .445 |
| Religion | r | .1145 | .1403 | .0141 | -.0075 | .0297 | -.0549 |
| | n | 60 | 60 | 60 | 60 | 60 | 60 |
| | p | .192 | .143 | .457 | .477 | .411 | .339 |

Amount of Time and Scores on 13 Issues

7.1. There will be no relationship between the amount of time teachers have spent in foreign countries other than their homeland and teachers' scores on the 13 topics of the test.

Pearson's correlation coefficient indicates that a relationship apparently exists between six of the issues and the amount of time spent in foreign countries. These issues were energy ($r = .2499$, $n = 60$, $p = .027$), health ($r = .2648$, $n = 60$, $p = .020$), population ($r = .2181$, $n = 60$, $p = .047$), culture ($r = .3182$, $n = 60$, $p = .007$), trade ($r = .2916$, $n = 60$, $p = .012$), and war ($r = .2229$, $n = 60$, $p = .043$). (See Table 19.) For the remaining seven issues, no correlation apparently exists.

Years Teaching and Composite Score

8. There will be no relationship between the number of years a teacher has taught and the teacher's composite test score on the global-knowledge test.

Pearson's correlation coefficient indicates that no relationship apparently exists between the number of years a teacher has taught and the teacher's composite test score ($r = .0049$, $n = 60$, $p = .485$). The null hypothesis is not rejected (Table 18).

Years Teaching and Scores on 13 Issues

8.1. There will be no relationship between the number of years a teacher has taught and the teachers' scores on the 13 topics of the test.

Pearson's correlation coefficient indicates that a slight relationship apparently exists between one of the issues and the number of years a teacher has taught. This global issue is health ($r = .2203$, $n = 60$, $p = .045$). For the remaining issues the data indicate that a relationship apparently does not exist between 12 global issues and the number of years a teacher has taught. A number of the issues have a negative correlation (Table 19).

Years Teaching Overseas and Composite Score

9. There will be no relationship between the number of years a teacher has taught in international schools and the teacher's composite test score.

Pearson's correlation coefficient indicates that no relationship apparently exists between the number of years a teacher has taught in international schools and the teacher's composite test score ($r = .0044$, $n = 60$, $p = .487$). The null hypothesis is not rejected (Table 18).

Years Teaching Overseas and Scores on 13 Issues

9.1. There will be no relationship between the number of years a teacher has taught in American-sponsored overseas schools and the teachers' scores on the 13 topics of the test.

Pearson's correlation coefficient indicates that a negative relationship apparently exists between the score on one of the issues and the number of years a teacher has taught overseas. This global issue is food ($r = -.3818$, $n = 60$, $p = .001$). For the remaining

issues the data indicate that a relationship apparently does not exist between the remaining 12 issues and the number of years a teacher has taught overseas. A number of issues have a negative correlation (Table 19).

Number of Languages and Composite Score

10. There will be no relationship between the number of languages a teacher speaks, reads, or writes and the teacher's composite test score.

Pearson's correlation coefficient indicates that a relationship apparently does not exist between the number of languages with which a teacher has facility and the teacher's composite test score on the global-knowledge test ($r = .1822$, $n = 60$, $p = .082$). The null hypothesis is not rejected (Table 18).

Number of Languages and Scores on 13 Issues

10.1. There will be no relationship between the number of languages a teacher speaks, reads, and/or writes and the teachers' scores on the 13 issues of the global-knowledge test.

Pearson's correlation coefficient indicates that a slight relationship apparently exists between the two issues of energy ($r = .2531$, $n = 60$, $p = .026$) and culture ($r = .2576$, $n = 60$, $p = .023$) and the teachers' scores on these two issues. For the remaining issues the data indicate that no relationship apparently exists (Table 19).

Age and Composite Score

11. There will be no relationship between the ages of teachers and the composite test scores on the global-knowledge test.

Pearson's correlation coefficient indicates that a relationship apparently does not exist between the ages of the teachers and the composite test score ($r = .0605$, $n = 60$, $p = .323$). The null hypothesis is not rejected (Table 18).

Age and Scores on 13 Issues

11.1. There will be no relationship between the ages of the teachers and the teachers' scores on the 13 issues of the global-knowledge test.

Pearson's correlation coefficient indicates that a slight relationship apparently exists between the teachers' scores on the health issue and the ages of teachers ($r = .2543$, $n = 60$, $p = .025$). Apparently no relationship exists between the teachers' ages and scores on the remaining 12 issues (Table 19).

Highest Degree Earned and Composite Score

12. There will be no relationship between the highest degree earned by teachers and the composite scores on the global-knowledge test.

Spearman's rank-order correlation coefficient indicates that no relationship apparently exists between the highest degree earned by teachers and their composite score on the global-knowledge test ($r = .0043$, $n = 60$, sig. = .488). The null hypothesis is not rejected (Table 20).

Table 20.--Spearman's correlation-coefficients summary table for the composite test scores on the global-understanding test and highest degree earned and the variable of perceived training.

| | | Highest Degree | Perceived Training |
|---|---|---|---|
| Global Test Scores | r | .0043 | .0058 |
| | n | 60 | 60 |
| | sig. | .488 | .483 |

Highest Degree Earned and Scores on 13 Issues

12.1. There will be no relationship between the highest degrees earned by teachers and their scores relative to the 13 global issues on the test.

Spearman's correlation coefficient indicates that a slight relationship apparently exists between scores on three of the issues: geography ($r = -.2275$, $n = 60$, sig. = .041), war ($r = .2583$, $n = 60$, sig. = .024), and environmental issues ($r = .2167$, $n = 60$, sig. = .049). With the remaining ten issues the data indicate that no relationship apparently exists (Table 21).

Perceived Training to Teach Cultures and Composite Score

13. There will be no relationship between the teachers' perceived degree of educational training for teaching about other nations and cultures and their scores on the global-knowledge test.

Spearman's rank-order correlation coefficient indicates that no relationship apparently exists between the teachers' perceived degree of educational training for teaching about other nations and

Table 21.--Spearman correlation-coefficients summary table for the scores on the 13 global issues and the variables of highest degree earned and university major.

| | | Energy | Food | Health | Population | Racial | Culture | Geography | Trade | Human Rights | War | Environment | Relations | Religion |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Highest degree earned | r | -.0815 | -.1051 | .1873 | -.1175 | -.0574 | -.0318 | -.2275 | -.0644 | .0487 | .2583 | .2167 | .1021 | -.0640 |
| | n | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| | sig. | .268 | .213 | .076 | .186 | .332 | .405 | .041 | .313 | .356 | .024 | .049 | .219 | .314 |
| Perceived training | r | .0019 | -.0641 | .1000 | -.1794 | .0440 | .1422 | .0348 | .0130 | .0016 | -.0273 | -.1818 | .0857 | .1088 |
| | n | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| | sig. | .495 | .314 | .223 | .086 | .370 | .140 | .396 | .461 | .496 | .419 | .083 | .248 | .205 |

cultures and their score on the global-knowledge test ($r = .0058$, $n = 60$, sig. = .483). The null hypothesis is not rejected (Table 20).

## Perceived Training to Teach Cultures and Scores on 13 Issues

13.1. There will be no relationship between teachers' perceived degree of educational training for teaching about nations and cultures and teachers' scores on the 13 topics of the global-knowledge test.

Spearman's correlation coefficient indicates that no relationship apparently exists between the teachers' perceived degree of educational training for teaching about nations and cultures and teachers' scores on the 13 topics of the global-knowledge test (Table 21).

## Results by Rank Order of Global Issues

When rank ordering the 13 issues, it was found that teachers scored well on questions pertaining to the topics of geography, culture, and health. However, with topics of religion, energy, and relations among nations the respondents scored their lowest. Table 22 gives the rank order of all the issues.

## Summary

The major findings reported within the limitations of the study in this chapter were:

1. When the composite scores of teachers assigned to teach mathematics/science were compared to the scores of the following

groups of teachers--elementary K-5, foreign language, and humanities--there was a significant difference. Of the four teacher groups variously assigned, the scores of the math/science group were higher than those of the other groups.

Table 22.--Rank order of 13 global issues.

| | No. of Questions | Mean | Univariate F | Sig. of F |
|---|---|---|---|---|
| Geography | 4 | .846 | .500 | .482 |
| Culture | 6 | .822 | .113 | .738 |
| Health | 3 | .811 | 2.246 | .139 |
| Human rights | 3 | .750 | .735 | .395 |
| War & armaments | 6 | .714 | .189 | .665 |
| Trade & monetary | 6 | .697 | 2.343 | .131 |
| Racial issues | 5 | .650 | .028 | .869 |
| Population | 6 | .644 | 4.171 | .046 |
| Food | 5 | .583 | .010 | .922 |
| Environment | 5 | .580 | 2.689 | .107 |
| Relations among nations | 6 | .533 | .363 | .549 |
| Energy | 6 | .517 | .763 | .386 |
| Religion | 3 | .483 | -- | -- |

Multivariate F = 21.37 (12, 48 df) sig. of F = .00001

Composite scores of teachers assigned to elementary grades K-5, when compared to scores of teachers assigned to teach foreign language or humanities, indicated a significant difference also. Scores received by the elementary teachers were lower than scores of all other teacher groups.

The comparisons made between scores of foreign language teachers to scores received by the humanities teachers indicated no significant difference. The same was true for the group designated other, i.e., physical education teachers, administrators, and counselor, whose scores were compared to all of the above groups--no significant difference was found.

2. Comparison of composite scores on the global-knowledge test between the variables of citizenship; foreign languages teachers speak, read, or write; years teaching; years teaching overseas; number of languages a teacher speaks, reads, or writes; age; highest degree earned; and perceived training to teach cultures indicated no significant differences.

3. Relative to college or university majors a teacher possessed, it was found that a significant difference existed between the teachers with education majors when compared to the following groups: teachers with mathematics/science majors, mathematics/science and education combination majors, social science only majors, social science and education majors, and foreign language majors. Education majors scored lower than the above-mentioned teachers in the various groups.

Comparisons made between teachers with foreign language majors compared to social science majors and social science and education majors combination indicated a significant difference did not exist. It was the same with mathematics/science or mathematics/science and education majors combination compared to social science, social science and education, and foreign language majors. Comparisons made

with mathematics/science and mathematics science and education combination majors indicated that a significant difference did not exist.

4. Comparisons made between the scores obtained by teachers with and without a U.S. degree and/or teaching certificate, the number of areas of the world a teacher had visited or lived in, and the amount of time spent in foreign countries indicated that a significant difference did exist.

5. When comparing scores of teachers given various teaching assignments, the data indicated that no significant difference in scores between mathematics/science teachers and the elementary K-5, foreign language, and humanities teachers was evident; and for scores of foreign language teachers compared to scores of humanities teachers, no significant difference was apparent. However, the data did indicate significant differences between the scores on the 13 issues of elementary teachers compared to the scores of foreign language teachers and humanities teachers. The elementary teachers scored lower than the other two groups on the energy, population, culture, and human rights issues. For the group classified as "other," i.e., physical education teachers, administrators, and counselor, the data also indicated a significant difference between their scores and the scores of all the other groups. This group scored lower on the issue of food.

6. Relative to citizenship, the data indicated a difference between scores of U.S./Canadian citizens and those of other citizenships.

7. The data indicated no difference between scores on the 13 global issues of teachers who speak, read, or write another language and those who do not.

8. Relative to teachers' college and university majors, the data indicated differences between scores of education majors whose scores were compared to five other majors. Likewise, a difference existed between scores of teachers with a math/science major or a math/science and education major compared to scores of social science majors, social science/education majors, and foreign language majors.

9. Likewise, scores of teachers with a U.S. degree and/or teaching certificate, when compared to scores on the 13 global issues, indicated a significant difference.

10. Pearson's correlation coefficient indicated a relationship existed between the following variables and certain of the global issues:

a. Number of areas and population, human rights, and relations among nations.

b. Amount of time spent in areas of the world and energy, health, population, culture, trade, and war.

c. Years teaching and health.

d. Years teaching overseas and food.

e. Number of languages and energy and culture.

f. Age and health.

g. Highest degree and geography, war, and environmental issues.

h. Perceived training to teach cultures and no issues.

# CHAPTER V

# CONCLUSIONS AND RECOMMENDATIONS

## Introduction

The purpose of this study was to obtain, analyze, and compare data about selected characteristics of teachers in an American-sponsored overseas school and to compare these to their knowledge of global issues. Previous chapters described the setting, population, instrument used for data gathering, methodology, and statistical analysis of the hypotheses. This chapter is organized as follows: (1) Major Results, (2) Discussion and Implications of the Findings, and (3) Recommendations for Future Research.

## Major Results

Within the limitations of setting, population, and methodology, the major results of the study were:

1. Teachers assigned to teach mathematics and science scored higher on the knowledge test of global issues than teachers of either elementary K-5 grades, foreign language, or humanities. While the differences were derived from an overall comparison of 13 global issues, those issues contributing most to the differences between scores of mathematics and science teachers and the other teachers were questions pertaining to energy, culture, and environmental alterations.

2. Teachers assigned to teach elementary grades K-5, when compared to teachers of the humanities and teachers of foreign language, scored lowest on the global knowledge. The factors that contributed more to the difference in the scores were the issues of energy, population, culture, and human rights.

3. Education majors scored lowest on the global-knowledge test when compared to teachers with majors in mathematics, science, social science, or foreign language. Areas in which education majors scored lower than other majors were energy and culture. Other low-scoring areas were health, racial issues, human rights, war, and environment.

4. Scores on the global-knowledge test of teachers knowing a foreign language and those who do not were not statistically significant. Also, there was no relationship between scores on the global-knowledge test and the number of languages a teacher knows.

5. Those teachers prepared in the United States, who had received either a degree or teaching certificate from an institution of higher education, scored significantly higher on the global-knowledge test than those not prepared in the United States. The factors that contributed more to the difference in scores between U.S.-prepared teachers and those prepared elsewhere were energy, food, population, racial issues, and trade.

6. There was a significant correlation between both the number of countries a teacher visited or lived in, the length of time spent in such places, and their performance on the test of global knowledge.

7. With the variables of age, years teaching, years teaching overseas, highest degree earned, and the perceived training to teach about other cultures or countries, there was no statistically significant relationship relative to the scores on the global-knowledge test.

8. When rank ordering the 13 issues, teachers scored well on the topics of geography, culture, and health. With topics of religion, energy, and relations among nations the respondents scored lowest.

## Discussion and Implications of the Findings

1. One of the significant findings of the study was that mathematics and science teachers scored significantly higher in the global-knowledge test than did humanities teachers, including social science teachers, elementary teachers, and the foreign language teachers. The finding of this study paralleled the finding of the original study among college students. In that survey, mathematics and engineering majors scored higher than other majors with the exception of history majors.

Why this finding is surprising rests in the fact that the content of the knowledge test has little to do with the academic program of mathematics majors. While the mathematics and science teachers could be expected to score high on questions pertaining to the energy issue and the environment, which they did, their performance on the test in comparison to other majors is surprising since the content of the knowledge has little to do with their academic

programs. It would appear that a factor contributing to their high achievement might be the test's emphasis on intellectual ability. This intelligence factor ought to be verified in future studies pertaining to global education.

One of the major curriculum issues in global education is the framework for curriculum development a school district takes to reach the goal of global perspective within the learner. Reference here is made to consideration of whether an interdisciplinary approach is used, whether global education becomes the exclusive prerogative of the social studies department, or finally, whether the program is an add-on course of any particular department. At times a choice may not exist, but it would seem that the optimum program should be interdisciplinary. The U.S. Commissioner of Education Task Force (1979, p. 4) concluded that developing global perspectives requires intellectual contributions from many sources. Global perspective must be grounded broadly in the various disciplines.

Not only for this reason but also for reason of the performance level of the mathematics and science teachers on the global-knowledge test it seems imperative that science and mathematics teachers be involved in curriculum development for global perspective. These teachers appear to be most knowledgeable about global complexities. Why such is the case may yet remain to be discovered, but given the nature of the content global education deals with, science and mathematics people must be involved.

The end result, for example, of the realization that resources that seemed inexhaustible are now perceived as having finite limits,

that science and technology do not and cannot solve all problems, even when given direction and financing, and that no people is self-sufficient as a nation ought to be that science and mathematics educators recognize and focus more on the interaction of all levels of education. If they worked with other departments, especially the social sciences, all would benefit from the broader dimension of an issue. Students, moreover, would be assisted in seeing science and math not as isolated subjects but as two that are carried on in a social milieu by persons who care about the rest of society.

Furthermore, the mathematics and science departments should be involved in global education in an interdisciplinary manner because their programs represent a unique potential for examplifying the global view. On so many ideas such as democracy there is little worldwide agreement or consensus. However, the ideas of mathematics, and particular science, tend to be universal. Such ideas as interdependence, continuity, conservation, and community are notions already in the science curriculum and are fundamental, in turn, to the development of global perspective.

Several general steps need to taken by mathematics and science education programs at all levels if the long-term goal of global education is to be achieved. First, as with all subject areas, greater efforts must be made to "decompartmentalize" the program. This requires both that the science programs be seen by students as interrelated themselves, and then of seeing science in a broader perspective. It might be necessary to stress general science as a

curriculum entity and to prepare teachers specifically to teach science from a global perspective.

Further, science generally draws on mathematics as its primary supporting discipline. But it would appear that science instruction should be interacting with the social studies if a realistic picture is to be achieved of how things are in the world today. For example, an area in which a curriculum bridge might be constructed would be between general science and the social studies. Also, preparation of teachers to co-teach certain interdisciplinary courses would seem appropriate. Many global issues generally draw on a knowledge of science and technology to provide a basis for decision making, but, in addition, they require some knowledge of political science, economics, sociology, and history for decision-making mechanisms and parameters of operation.

2. A major assumption has been that foreign language has a positive effect in developing knowledge of and sensitivity toward other peoples and cultures. This study did not research the affect relative to global issues to determine how foreign language teachers feel toward world problems. This study dealt with the cognitive area of global understanding, and the data of the study indicated foreign languages do not contribute significantly to global knowledge. The performance of the foreign language teachers on the test of global issues was poor. Only education majors scored lower. No relationship existed between the performance of those teachers who spoke another foreign language and those who did not. And the number of

foreign languages a teacher spoke resulted in no significant relationship in test performance.

The original study with college students concluded also that there is no significant correlation between students' proficiency in foreign language and their performance on the test of global understanding. Moreover, the college study concluded that there seemed to be little interest in or enthusiasm for foreign languages. Except for history, foreign language attracted the lowest percentage of freshmen as a possible major course of study. Most students felt that sociology, history, and economics had contributed more to their awareness of world problems than had foreign language study.

Although the original survey results showed clearly that students who are proficient in foreign languages are not necessarily informed about world affairs, there is a hint that those having a facility for learning foreign languages have a greater interest in learning about international problems than those who do not. It may be the interest is there but the opportunity is not. It is this interest that might provide the key to effective foreign language instruction and global education.

Overall, it would appear that foreign language programs and proficiency in languages do not necessarily offer effective experience with other cultures as has been widely assumed. For this reason there is need to examine the role of foreign language in the curriculum and the training of foreign language teachers.

At first glance, the role of foreign languages for global perspective seems clear and powerful. A knowledge of foreign

languages is felt to assist the learner in knowing about world affairs; foreign language is felt to have a positive effect in developing knowledge about other countries. Interrelationships among peoples obviously depend on communication in a shared language. Although it is generally agreed as to need of foreign language instruction and some of its expected outcome, when one stops to analyze the role of languages in the curriculum, the training and inservicing of foreign language teachers toward global education presents certain complications at this point.

Consider the number of languages on earth. Which are to be taught, especially at the K-12 level? Are our teaching methods developing second-language competence? Can our content and methods result in the global perspectives we need?

Foreign language educators might research students' feelings of irrelevancy of foreign language study, respect for the value of its study, as well as teaching methods. The fact that college entrance and graduation requirements in foreign language have been abolished by most institutions does not strengthen the position of such study in the curriculum. In light of the nation's needs and attitudes, however, new perspectives on the teaching of foreign languages appear imperative.

Considerations that must be made relative to foreign language instruction are that, first, the "old fashionable" languages will not meet current necessities. We must evaluate the inclusion of such languages as Russian, Japanese, Arabic, Chinese, and African. One can readily recognize the problems with these languages in a school

curriculum. The question of what languages, at what grade level, and at what level of competence are all necessary to be answered before one can even speak of the global perspective and interdisciplinary dimensions of this area of an educational program.

Further, it becomes apparent that if foreign language teaching should be interdisciplinary, it must add anthropology, religion, economics, sociology, and specific issues such as food, population, and energy to its basic emphasis on linguistic competence, augmented by literature and what is loosely referred to as culture. Expertise in all areas cannot be expected, but a sufficient acquaintance can be so that new insights in regular teaching become present. This requires inservice education and cooperation with other disciplines.

Development of public awareness is also essential in this entire process of establishing foreign languages' role for global perspective. Course content, dealing specifically with less-traditional foreign languages, and centers established as we do for vocational education for maximum outreach along with interdisciplinary approach, review of methods and instruction, analysis of materials, teaching methodology, and improvement in teacher competence are all going to have to be part of the foreign langauge renewal if it is to be involved in global education effectively.

3. In this study, as in the original study with college students, education majors scored lowest compared to mathematics, science, social science, and foreign language majors. Education majors are generally elementary-school teachers. These teachers tend to pursue academic programs that are less subject-matter or content-area

oriented and more child oriented. The possibility also exists, however, that elementary education is attracting lesss academically capable people. If so, selection of candidates becomes a major concern.

The implications for elementary teachers' training and inservicing seem to point to a need for extensive preparation in all aspects of global education, especially how it related to the various developmental stages of a child. Research has found that young children are much more aware of global problems than we have previously thought. Kenworthy (1967) pointed out that since experiences of today's children have been so much enhanced through the mass media and travel (and certainly with the international child found in American overseas schools), as well as enlarged, so also the dimensions of the curriculum need to have a broader scope. Other studies listed by Morris (Becker, 1979, p. 117) have supported the readiness of children in early grades to have a more global curriculum rather than a redundant and heavily provincial program of learning.

Teachers' training for elementary-level instruction must draw heavily on a curriculum of affect as well as a curriculum of cognition. Efforts to divorce either would seem to be an error. Teachers must be knowledgeable about children's attitudes toward the world, their awareness of global problems, what experiences to provide elementary children, and a sensitivity to types of materials that will support rather than subvert development of global perspectives.

4. In developing curriculum for global education, the social studies programs would appear to be the most likely starting point. Although there was no statistical significance between scores of social science majors and foreign language majors when compared to mathematics and science majors and again when social science majors were compared to foreign language majors, social science majors scored very well on the test. History majors had the highest percentage (74.6 percent) correct of all majors. No comparisons were made with history majors because of the small sample number.

Although history majors were the highest scorers on the test, it is not surprising since many of the questions required some knowledge of history. History majors were the highest scorers also among the college students in the original study. These findings suggest the continued need for a strong history program in the curriculum. It must be a program that would be organized to give students a greater awareness, knowledge, and understanding of global issues. Supporting a strong history program would be programs of other social sciences such as economics and sociology. College students felt that these programs had contributed more to their awareness of world problems than had foreign language study. Unfortunately, many times, as the original study revealed, history is the least-popular major course of study (Burrows, 1981, p. 39).

5. Findings of the study concerning travel, living and working overseas would seem to lend support to the importance of providing teachers such opportunities to increase their global understanding. The assumption that travel, study, or working abroad

assists in developing a global perspective in an individual appears accurate. A correlation did exist, although it was slight, between teachers' scores on the global knowledge test and both the numbers of countries and the amount of time spent in countries overseas. To the open-ended question about what factor in their own lives contributed to the development of global understanding in themselves, travel and living in another country and experiencing another culture were listed most frequently (51 percent). Some teachers indirectly reinforced the effect of travel mentioned by others as the single most important factor influencing their global perspective when they mentioned the teaching of children and working with parents from different countries as other factors. Two teachers listed having friends from other countries as contributing factors in their lives for the development of global understanding. Programs, therefore, that encourage study abroad as well as leaves of absence assuring job security upon return for the person, and sabbaticals should be devised to assist in developing global perspective.

The research did not indicate any specific length of time, number of countries, or circumstances involved in the achievement of greater global knowledge. Also, nothing was included in the study relating to affect, defined in the college study as being largely attitudinal measures that are predominantly, but not exclusively, political in nature (Burrows et al., 1981, p. 11).

Perhaps much more important than providing opportunities for travel, the nature of the overseas experience relative to global education must be thought through. The areas of the world to be

experienced should be more than Europe or Mexico. Few opportunities exist or are taken in such areas as Africa, the Middle East, and South America. The structure and the quality of any program involving travel or living abroad must be considered at length, for too often experiences overseas result in superficial conclusions about peoples and their cultures. A teacher going abroad seeking experiences with other peoples might benefit more from such experiences if orientation programs, language provisions, and a structure for study and reflection were an integral part of the stay. Perhaps too much is left to happenstance and is lost or misconstrued in the opportunity.

6. When examining the rank order of global issues, it was surprising to find the issues of food, environmental alteration, energy, and religion scored lowest on. With the exception of religion, food supplies and starvation the world over, energy demands, and the environment have been issues widely reported on in the media and studied at various levels. Attention must be given to such global issues in any training programs for teachers.

The one issue, religion, needs special comment. Not only did the teachers score poorly on this issue, but college students did likewise in the original study. Further study is required to determine the reasons for this lack of performance of respondents on this issue. Conjecture might tell us that the interpretation of the United States Constitution tenet of separation of church and state is being somewhat misconstrued when consideration is given to it and its curricular dimensions in our schools. The study of religion and

philosophy must become a more important segment of both training for and instruction by teachers. Religion and philosophy exemplify the ideals, goals, and sometimes the parameters of a cultural group. The intention is not to delve into complex theology, but to bring about an awareness of the basic aspirations and traditions of the culture of a people. It certainly remains doubtful, therefore, if one can have a global perspective without having a knowledge of religions as they relate to global issues. The lack of understanding on the part of some people of the Middle East conflict, the Irish rebellion, and the South African problem may be related to limited knowledge of the role of religion within cultures.

## Recommendations for Future Study

Little research has been conducted about global understanding and global-education programs, although more is being planned. Some recommendations for future research are:

1. A study, replicating the original survey conducted among college students, should be conducted using a larger population of teachers in American-sponsored overseas schools and other types of international schools to determine what significant factors contribute to global knowledge among these teachers. Not only should English-speaking international schools be the target of such studies, but the overseas schools of the French, Japanese, Russians, and Arabs. The study should include the portions of the original study dealing with the affect and language background of teachers. A determination of teacher attitudes and sensitivities about global

issues should prove beneficial for preservice and inservice programs of teachers as well as an asset to program development in the United States.

2. This study should be replicated with entire faculties of schools, such as was done in this study. Various types of settings and geographical locations in the United States would also seem appropriate. If this is not feasible, an appropriate sample from the various disciplines such as mathematics, history, art, music, and so forth, should be surveyed.

3. Developmental studies need to be conducted to determine the changes in global understanding, both cognitive and affective, of teachers over a period of time and after various types of treatments or programs are used in preservice and inservice programs.

4. An approach that uses personal interviews in conjunction with the regular survey instrument should be used in future studies to obtain additional insights and hypotheses for testing. The approach should include the creation of other criteria for analyzing and categorizing global understanding.

5. Research needs to be conducted with different curriculum programs to determine the optimum school experiences for children at various developmental stages for achieving global understanding.

6. Studies need to be conducted relative to the curriculum and methodology of foreign languages for not only developing basic linguistic and reasoning skills but also in developing effective global understanding.

7. Further research should be conducted to determine the factors why mathematics and science teachers scored highest on the global-knowledge test despite the fact that the content of the knowledge test has little to do with their academic program.

8. Little research has been done on young children's international understanding and their readiness for global-education concepts at their level and the success such a program might have. Research to date suggests that young children appear to be more aware of global problems than we may have thought. However, conclusions about children's international learning have been drawn from current research in this area that has concentrated on children's learning about domestic politics for the most part. Many of the current domestic studies could well be replicated in overseas schools that have student bodies of 15 to 20 nationalities and that are in multiple foreign-language situations as well as in rich, cultural settings.

9. Research leading to the development of measures for a classroom teacher to determine the existing attitudes of children toward global-education issues and research to determine the factors important to maintain, modify, or change their attitudes should be conducted. The assumptions that children make about their world are not always known or understood by adults. Since attitude plays such an important role in global understanding, more research is required to assist the classroom teacher to direct, verify, and modify attitudes.

10. There is need to trace the historical development of international education over the past decades. Global education

would appear to represent a logical or evolutionary step in the development of international education. A clear understanding of the various stages and component parts of international education should assist in comprehending to a greater degree global-education curriculum needs.

11. Research should be included for the determination of effective ways in which travel, working overseas, and study abroad can be used for staff development and for use of such persons in curriculum-development programs.

## Summary

Viewing the earth as a single unit or this planet as a global society is, of course, not a new or unique idea. It has been around for awhile. But the widespread acceptance of the need for a "new" approach to education based on such a notion is a recent phenomenon. The recognition of the growing interrelatedness and interdependence of all on this planet demands a more sophisticated world citizenry, more knowledgeable of international, political, economic, and cultural phenomena. Schools may well provide the single most important opportunity for acquiring basic knowledge and attitudes about international events and processes. If so, then schools and their staffs have an exciting challenge ahead.

Although the findings of this study are limited to its population and methodology, they appear to parallel closely the original study done with college students. It appears that teachers do not have a grasp of world issues and are not prepared to teach about them

for a global perspective. Misconceptions about population, energy, religion, and nutrition are common among teachers. It appears that students taught in our schools are not being provided the knowledge needed for not only today's world but tomorrow's living as well. Teachers teach what they know, but their knowledge and methods for teaching global issues for global perspective remain in doubt.

Teacher preparation, curriculum development, and inservice training of teachers for global education and perspective is in much need of change. Most of what we have been doing must be examined. The role of foreign language requires change; preparation of elementary staff and curricula for young children needs examination; and interdisciplinary teaching appears necessary with all the changes it requires. The key issue is the need for teachers to change their role and to consider varied aspects of global studies as well as interaction with colleagues from different disciplines.

To achieve the goal of global perspective, much change in the entire system is required. However, as Hutchins (n.d.) said, "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." If we can prepare students of today to achieve stewardship for planetary resources, wise decisions and judgments can be made to assure humankind a future in time and place. Human kind will realize that as a species they can be masters of their

destiny and that they must work together in formulating and shaping that destiny. The challenge is before educators, and the time to proceed on a global course is now.

# APPENDICES

# APPENDIX A

## STATISTICS CONCERNING AMERICAN-SPONSORED OVERSEAS SCHOOLS, 1980-1981

Table A1.--Statistics concerning American-sponsored overseas schools, 1980-1981.

| Number of Schools | Full High Schools | Professional Staff | | | | Area | Number of Countries | Student Enrollment | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | U.S. | Host Country | Third Country | Total | | | U.S. Gov. | Bus. & Found. | U.S. Other | Host Country | Third Country | Total |
| 29 | 5 | 261 | 22 | 417 | 700 | AFRICA | 26 | 838 | 203 | 390 | 1,441 | 5,870 | 8,742 |
| 47 | 48 | 1,301 | 1,440 | 175 | 2,916 | CENTRAL & SOUTH AMERICA | 21 | 1,137 | 2,470 | 3,614 | 24,811 | 5,238 | 37,270 |
| 39 | 21 | 773 | 246 | 264 | 1,283 | EUROPE | 21 | 2,559 | 2,694 | 1,295 | 2,857 | 4,218 | 13,623 |
| 22 | 11 | 920 | 236 | 197 | 1,353 | NEAR EAST & SOUTH ASIA | 16 | 1,360 | 1,983 | 1,634 | 2,533 | 5,096 | 12,606 |
| 17 | 7 | 606 | 306 | 118 | 1,030 | EAST ASIA | 10 | 1,126 | 3,337 | 1,444 | 1,048 | 4,665 | 11,620 |
| 154 | 92 | 3,861 | 2,25 | 1,171 | 7,282 | TOTALS | 94 | 7,020 | 10,687 | 8,377 | 32,690 | 25,087 | 83,861 |

# APPENDIX B

## FACT SHEET: AMERICAN INTERNATIONAL SCHOOL, VIENNA, AUSTRIA, 1980-81

OVERSEAS SCHOOLS ADVISORY COUNCIL

FACT SHEET

AMERICAN INTERNATIONAL SCHOOL
Salmannsdorferstrasse 47
1190 Vienna, Austria
Tel. 44-27-63

1980-81

The American International School, Vienna, is an independent co-educational day school which offers an educational program from kindergarten through grade 12 for students of all nationalities. The School was founded in 1959. The school year comprises two semesters extending from August 28 through January 16 and from January 17 through June 12.

Organization: The School is governed by an 11-member Executive Board, elected annually by the Parents' Association which sponsors the School. Membership in the Association is automatically conferred on the parents or guardians of children enrolled in the School. The School is incorporated under Austrian law and has been designated as tax-exempt under Section 501 (c) (3) of the U.S. Internal Revenue Code.

Curriculum: The curriculum is that of U.S. general academic, college-preparatory public schools. The International Baccalaureate Diploma is also offered in a demanding two-year study plan. Advanced Placement is also offered. The School's testing program includes College Entrance Examination Board tests and standardized achievement tests. Instruction is in English. German is required, and French and Latin are taught as foreign languages. The School is accredited by the Middle States Association and the Austrian Ministry of Education.

Faculty: There were 56 full-time and 6 part-time faculty members in the 1980-81 school year, including 45 U.S. citizens, 14 host-country nationals, and 3 persons of other nationalities.

Enrollment: Enrollment at the opening of the 1980-81 school year was 681, including 311 U.S. citizens, 109 host-country nationals, and 261 of other nationalities. Of the U.S. enrollment, 102 were dependents of U.S. Government direct-hire or contract employees, 49 of U.S. business of foundation employees, and 160 of other private U.S. citizens.

Facilities: A single building houses the three school divisions and has 40 classrooms, 2 libraries, 3 laboratories, a gymnasium, a cafeteria, and a theater. The total campus has 15 acres. A soccer field, an elementary playground, and a small track are among the outdoor facilities.

Finances: In the 1980-81 school year, about 95 percent of the School's income was derived from regular day school tuition and fees. Annual tuition rates were as follows: all-day Kdg.: $2,400; Primary (1-5): $3,840 and Secondary (6-12): $4,272. These fees are payable in Austrian Schillings (AS 13 = U.S. $1). There is an application fee of $230 payable on first enrollment in the School. (All above fees are quoted in U.S. dollars.)

*This Fact Sheet is intended to provide general information. Prospective users of the school may wish to contact the school directly for more specific and up-to-the-minute information regarding curriculum, special programs, and the like.*

Statistics as of September 1980

# APPENDIX B

## FACT SHEET: "AMERICAN-SPONSORED" ELEMENTARY AND SECONDARY SCHOOLS OVERSEAS: 1980-81

# OVERSEAS SCHOOLS ADVISORY COUNCIL

## FACT SHEET: "AMERICAN-SPONSORED" ELEMENTARY AND SECONDARY SCHOOLS OVERSEAS: 1980-81

The Worldwide Context: The school-age children among overseas Americans--estimated to number nearly a quarter million--attend a wide variety of schools. Most of the children of military personnel attend schools established and operated by the various branches of the U.S. Armed Forces, and a number of government, and private-sector civilian children also attend these schools on a space-available, tuition-paying basis. However, most of the civilian children abroad attend non-Government, coeducational, private schools of various kinds. These schools include those founded by U.S. companies, church organizations, and individual proprietors, although the largest number of private schools are non-profit, non-denominational, independent schools established on a cooperative basis by American citizens residing in a foreign community. Most of the schools in this last group have received assistance and support from the U.S. Government under a program administered by the Office of Overseas Schools of the U.S. Department of State. The schools which have received such assistance constitute the "American-sponsored" schools described in this fact sheet.

Statistics on the "American-Sponsored" Schools assisted by the Department of State at a Glance: During the school year 1980-1981, the Office of Overseas Schools is assisting 154 schools in 94 countries. The purposes of the assistance program are to help the schools provide adequate education for U.S. Government dependents and to demonstrate to foreign nationals the philosophy and method of American education. The schools are open to nationals of all countries, and their teaching staffs are nulti-national. Enrollment in the schools at the beginning of the 1980-81 school year totalled 83,861 of whom 26,084 were U.S. citizens, and 57,777 were children from the host country and from some 90 other countries. Of the U.S. enrollment, 7,020 were dependents of employees carrying out U.S. Government programs, 10,687 were dependents of employees of U.S. business firms and foundations, and 8,377 were dependents of other private citizens. Of the total of 7,282 teachers and administrators employed in the schools, 3,861 were U.S. citizens and 3,421 were foreign nationls from some 70 countries. A table is attached which summarizes the salient statistics of the American-Sponsored Overseas Schools.

Basic Characteristics: No statement about the American-sponsored overseas schools would apply without exception or qualification to each school. Variety is one of their basic characteristics. They range from tiny schools such as that in Leningrad, U.S.S.R. with 3 students, to the American School of Quito, Ecuedor, with 2,821 students. Very vew schools have boarding facilities.

Although emphasis varies, all the schools share the purpose of providing educational opportunities for American and other children which are generally comparable to educational programs in the U.S. and of demonstrating American educational philosophy and practice abroad to help further international understanding.

The schools are not operated or controlled by the U.S. Government. Ownership and policy control are typically in the hands of associations of parents of the children enrolled who elect a school board to supervise the superintendent or headmaster whom the board chooses to administer the school. In some schools the organization is highly formalized, comprising corporate status in the U.S. or in the host country, while other schools are loosely defined cooperative entities. Depending upon the predominant character of the American community, some schools are closely associated with the U.S. Embassy and AID Missions; in others the local or international communities share direct concern for the school with the American community. All schools are subject in varying degrees and with varying effects to host-country laws and regulations pertaining to educational practices, importation of educational materials, personnel practices and the like.

Combined annual operating budgets of the 154 schools total approximately $181,000,000. Tuition payments are the principal source of financing for the schools. Tuition charges are generally lower than for comparable schools in the U.S., and in virtually all the schools tuition income is insufficient to provide for programs comparable to good U.S. schools. Many schools derive additional support from gifts and contributions from U.S. and local business firms, foundations, missions groups, individuals and local government, and all have received some grants from the limited funds available under the program of the Office of Overseas Schools (a total of approximately $5,000,000 annually).

The instructional programs all provide a core curriculum which will prepare students to enter schools, colleges and universities in the U.S. The langauge of instruction is English, supplemented in certain schools with the local language. The content of the programs may be more or less typically "American," depending upon the proportion of U.S. students, and the quality, of course, varies with each school. Certain schools, especially in Latin America, must also fulfill host-country curriculum requirements. The curricula tend to be largely academic, with relatively little attention given to vocational or commercial education, largely because of the high costs involved in the latter programs. An outstanding characteristic of most American-sponsored schools is the use they have made of their location abroad to provide quality programs of foreign language instruction, study of local culture, and social studies. The quality and range of instructional materials is good in the larger schools and improving in others.

In terms of faculties, the administrators and most teachers are Americans or American-trained, with a large proportion of American staff hired locally from among dependent wives. Most staff members

are college graduates, and the majority hold teaching certificates. Lack of funds and, in many instances, difficult living conditions and isolation from the U.S. professional community make recruitment and retention of qualified personnel from the U.S. difficult. The local and third-country teachers are usually well qualified, although they frequently lack training and experience in U.S. educational methods. Hiring of staff is the responsibility of the individual schools.

Plant and equipment facilities vary widely in adequacy; because of the difficulty in securing long-term financing, many schools are housed in inadequate buildings.

Fur further information: Dr. Paul T. Luebke
Office of Overseas Schools
Room 234, SA-6
Department of State
Washington, D.C. 20520

# APPENDIX D

## CRITERIA GOVERNING ASSISTANCE TO SCHOOLS

## CRITERIA GOVERNING ASSISTANCE TO SCHOOLS

The criteria established for assistance to American-sponsored overseas schools are listed in Section 600 of the Foreign Affairs Manual, Volume II (2 FAM 600). Those established under the Mutual Educational and Cultural Exchange Act of 1961, as amended, are as follows:

1. The school must meet a demonstrated need for American-type educational facilities in the community or region, and, in the case of primary and seconcary schools, shall be open to the enrollment of qualified American students.

2. The school must have been founded by or must be operated or sponsored by citizens or non-profit institutions of the United States, with or without the participation of nationals of other countries.

3. The school must operate without objection from the national government of the host country and must be nonpolitical in character.

4. Authority over policy, finances and administration must be vested in a competent board of responsible persons, usually including representation of the appropriate U.S. Embassy or Consultate, but at a minimum to include representation by U.S. citizens. This will vary from school to school depending on local circumstances and on U.S. policy.

5. The director or principal of the school, wherever practicable, should be a U.S. citizen.

6. There should be a sufficient number of teachers from the United States or teachers trained in American educational methods to assure adequate contact for the students with these methods and the corresponding ideals.

7. The curriculum and instruction of the school should be of good quality and reflect accepted U.S. theory and practice in education to the greatest extent practicable.

8. Primary and secondary curricula should provide instruction in the language, literature, geography, and history of the United States, and, where practicable, of the country where the school is located. Wherever the needs of American students require it, English shall be used as a language of instruction.

9. The operation of the school should contribute to mutual understanding between the people of the United States and the peoples of the host country or other countries through such means as enrollment

of foreign nationals, the provision of binational extracurricular, and community programs, and English-language classes for special students.

10. The financial plan of the school should provide for continuing recourse to all feasible means of achieving and maintaining its financial independence through an adequate fee structure, endowment, and other forms of private support.

11. Financial aid will not be given to church-connected schools. Nor will it be given to government, company, or private profit-earning schools unless provisions of such assistance would assure educational facilities for American dependents which would not otherwise be available in the area.

Even though the basic purposes underlying assistance to American-sponsored overseas schools under the Mutual Educational and Cultural Exchange Act have to do with the demonstration of American educational philosophy and practice and therefore do not relate directly to the education of dependent children of American personnel, it is self-evident that American children should constitute a sizeable portion of a school's enrollment if it is indeed to be an "American" school demonstrating American educational ideas and ideals.

The final criterion above makes incidental reference to the need for educational facilities overseas for dependents of Americans stationed abroad, but it is the funds provided under the Foreign Service Act and the Foreign Assistance Act which have been authorized and appropriated for the specific purpose of providing educational opportunities for dependents of government personnel. To be eligible for assistance under the provisions of these legislative authorities under criteria established both by AID and the Department of State (and also listed in "2 FAM 600"), a school must meet the following conditions.

1. There are sufficient numbers of dependent children at post to represent an established need for dependent education.

2. There is evidence of local support on the part of the United States, local, and other foreign communities at post.

3. There is evidence that there are available sufficient numbers of qualified and interested persons, including American citizens, to provide proper policy, financial, and administrative guidance to the schools.

4. English is the primary language of instruction.

5. To the extent practical under existing local conditions, the school follows a fundamentally American curriculum and American teaching methods and uses American textbooks and reference materials.

6. Academic standards, including teacher qualifications, are comparable to those in American schools.

7. There is a policy of admitting all dependents of U.S. government employees who otherwise meet the school's admission standards.

8. There is evidence that the school will ultimately be able to cover ordinary recurring operating expenses from tuition or other school income other than U.S. Government grants.

9. There is evidence that there is no other feasible means currently available to the school for adequately financing expenditures necessary to provide for the education of government dependents.

Eligibility of an overseas school for assistance under either or both sets of criteria is determined in the first instance by the local American Embassy or Consultate, which thereupon passes on to the Department of State its recommendation that the school be included in the overseas schools assistance program. If the Department of State concurs, the school's requests for assistance in carrying out specific goal-oriented activities are then considered for funding, subject to the justification of requests in the light of assistance policies and to the availability of funds.

Source: Luebke, 1976, pp. 40-41.

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