Global education: A study of pre-service teacher education in Iowa

by

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We Americans, like humans everywhere, are faced with the challenge of adapting to life in a global age. Our national security, our environmental quality, our economic well-being, and our health and general welfare have all become inextricably linked to the world beyond our borders. President Reagan (1986) has said that we, as a nation, are in a "race to the future." Obviously, that future has international dimensions.

The technological advances brought about during the last half of this century have linked many of the nations of this planet closer than neighboring villages were at the turn of this century. World-wide, instantaneous communications and the ability to transport people and goods anywhere in the world within 24 hours validate Marshal McLuhan's reference to the world as a "global village." Kerr (1986) refers to the "growing interrelationships among nations and peoples along economic, political, and cultural lines" as "one of the greatest changes affecting our nation today" (p. 3).

The enormity and complexity of these concepts is illustrated by the problems and challenges presented by such connectedness. Consider the issues of:

- nuclear armaments and nuclear accidents
- environmental degradation
- economic interdependence
- infringement of basic human rights
Such problems are not contained within national borders, and many are self-perpetuating. For example, the Brazilian farmer, desperate to feed his family, is not concerned that his cutting and burning of the rainforest affects world-wide weather by warming the entire planet and consequently upsetting ecosystems. This practice can also result in soil depletion and desertification and ultimately in wide-spread hunger which then overloads world food supplies. Such effects loop back and become causes which have effects which loop back.

To solve these problems there is a need for resourceful and innovative leaders. Because we are a democracy, for that to happen we must have an educated people. As Thomas Jefferson said in his famous dictum, "I know no safe depository of the ultimate powers of the society but the people themselves."

Concerned citizens educators and legislators, as well as industrial and national leaders of most countries are keenly aware of their country's interdependence with other political, economic and social systems (Lamy, 1982). Thoughtful consideration of our global interdependence and the related issues are appropriately expressed by some of the world's most notable thinkers in *An Agenda for the 21st Century* (Kidder, 1987). Their priority concerns for our planet focus mainly on: the threat of nuclear annihilation; the danger of overpopulation; the degradation of the global environment; the gap between the developing and the industrial worlds; and the need for fundamental restructuring of educational systems—the systems which prepare schoolchildren to be tomorrow's decision-makers. Sissela Bok (1987), calling for the acknowledgment that "...we are dependent on really everyone else in the world," stated, "It's not going to be possible in the 21st century for countries to go it alone...and expect that these vast, overarching problems will be solved" (p. 16). Norman Cousins (1987) takes the agenda to the next step and suggests that "the world
"as a whole has to be managed, and not just its parts" (p. 38).
"Managing" implies planning. However, Jimmie Carter (1987) laments
that "...current efforts to resolve the problems are almost entirely a
reaction to crises" (p. 180). Management-by-crisis does not imply
planning, nor does it address the world "as a whole."

Mass media tend to support Carter's assertion. In 1989 the daily
news consisted mostly of international terrorism and hostage-taking; oil
spills and ocean dumping; frightening ozone reports; and human rights
violations. The list seems endless. And all have global implications.

Obviously, this state of the world is not recent news. C. M. Stanley
(1979), author of Managing Global Problems, likens the world
community to the "legendary horseman riding off in all directions."
Stanley cautions against pessimism, however. "The most compelling
reason being the inherent self-defeating nature of loss of hope" (p. 10).
As the Chinese character for the word "crisis" incorporates the symbols
for danger and opportunity, so also may the present world crises carry
with them unprecedented opportunity for those who are prepared.
Stanley cites wider education and a more enlightened public as two of
the possibilities for success in managing "...today's global chaos" (p. 10).

These two possibilities are the approaches supported by proponents
of what is termed "global education." The world our children will
inherit necessitates that they be educated in the skills, knowledge, and
attitudes that will allow them to make informed, humane choices as
American and world citizens. The key point is that a need for the
infusion of a global perspective in all areas of study has been established
(Hanvey, 1980).

Contending arguments suggest that a global perspective on people
and events may conflict with being loyal citizens of the United States
(Cunningham-Tancredo, 1987). However, one of the fundamental
purposes of education in our society is to develop responsible citizens.
Such citizens are defined as being useful members of society who contribute to its social and economic well-being. "Being a good American citizen means being a good global citizen" (Joy & Kniep, 1988). Global citizenship augments and enlarges traditional meanings of citizenship (Iowa Department of Education, 1989). It involves the recognition that, not only are we members and citizens of a particular society, the United States; we are also members of the larger global society of humanity, and as such, have responsibilities as citizens which extend to the entire human family (p. 4).

Educators in all fifty states have responded to the call for global education. The Iowa Department of Education was one of the first sixteen states to recognize the need to infuse a global perspective in all educational studies (Hayden, 1983). The most recent result is the Iowa Global Education Standard, 4.5 (11) which states:

The Board shall adopt a plan which incorporates global perspectives into all areas and levels of the educational program so that students have the opportunity to acquire a realistic perspective on world issues, problems, and prospects for an awareness of the relationship between an individual's self-interest and the concerns of the people else-where in the world. The plan shall include procedures for review of its effectiveness.

This mandate becomes effective July 1, 1989.

The consensus of most educators, including those in Iowa, is that the stated objectives of global education can best be met only by their infusion into existing curricula, into all areas of study at all levels of teaching (Cleveland, 1986). This places new and challenging demands on higher education. Are we preparing our teachers to teach with a
global perspective? Have they become informed world citizens themselves? The first and indispensable requirement for competent teachers is that they be educated persons themselves. Obviously, the future teacher's own experience in learning will dictate what the teacher will impart in terms of attitude and skills as well as knowledge.

Statement of the problem
This study was designed to investigate and report the status of global education within the pre-service teacher education curricula provided by teacher education colleges in Iowa.

Research questions
Smuckler and Sommers (1988) list five areas as being essential in "internationalizing" the curriculum: administrative support, faculty expertise, a supportive institutional organization, adequate resources, and a responsive student body (p. 6). The purpose of this study is to assess the efforts of Iowa's colleges towards internationalization; therefore, the research questions include:

1. What is the institutional commitment of Iowa colleges and universities toward internationalization?
2. What opportunities exist for faculty development on global issues?
3. What are the current curriculum and education program requirements in regard to global issues?
4. What resources are available on campus which contribute to the development of a global perspective?

This study is not an evaluation of programs, but rather it is an analysis of the present status of global education in Iowa's colleges and
universities within pre-service teacher education programs. Using information from this survey Iowa teacher educators and administrators may identify weaknesses and strengths in their current programs and determine appropriate actions and policies in student development.

Definitions

The Iowa Department of Education (1989) has incorporated the most widely-held concepts of global education in its definition of the term as presented in its publication, *A Guide for Integrating Global Education Across the Curriculum*. Global Education is the opportunity to acquire a realistic perspective on world issues, problems, and prospects for an awareness of the relationship between an individual's self-interest and the concerns of people elsewhere in the world. Its mission is to produce citizens who are both knowledgeable about the world, and who possess skills, values, and a commitment appropriate for the support of quality, long-term survival of all human beings (p. 1).

A *global perspective* consists of the information, attitudes, awareness, and skills, which taken together, can help individuals see the world as interrelated systems. It facilitates an understanding of the world and how people affect others and how others affect them (Wolansky, 1988).

The term *global education* is preferred over the term *international education*. The difference is in the focus and content of each. For instance, the study of International Banking or World Geography contributes to a "knowledge" of world affairs. This knowledge is of utmost importance, of course. However, the focus of *global education* is the development of a "feel" for world affairs (Cleveland, 1986). Children need to develop a feel for basic human needs and rights; the interrelated global changes; the limited usefulness of violence and the resolution of conflicts through negotiation; and the readjustment in
what people produce, consume, and do for a living (p. 416). What is unique about global education, and therefore requires emphasis on perspectives, is the very fact that it is drawn from a world increasingly characterized by pluralism, interdependence, and change. Kniep (1986) identifies four elements of study as being essential and basic to global education: the study of human values, the study of global systems, the study of global problems and issues, and the study of the history of contacts and interdependence among peoples, cultures, and nations. "Unless these four elements are included, educational programs will fall short of being truly global" (p. 437). Curricula which include these elements contribute towards the internationalization of students.

Delimitations of the Study

The following limitations were taken into consideration in the interpretation of data from this study.

1. The data and discussion are limited by a sample of one state.
2. This study is limited to pre-service teacher education.
3. The data were collected from only one source within each institution.

Assumptions

For the purpose of this study the following assumptions were made.

1. The world is changing, and so is the role of the United States. America is a democracy dependent upon the voice of the people. The people must be informed to maintain leadership in an interdependent world.
2. Assuming that students today will be the policy-makers of tomorrow, it is crucial that they be taught to view the world with a global perspective.

3. The formal education system is one of the most effective means for assisting the process of learning how to participate in policy analysis and formation. Academic and informational knowledge can be brought to bear on the formation of judgment by citizens, thus constituting a great contribution by the educational and informational systems to the whole society (Report of the Study Commission on Global Education, 1986).

4. A survey of Iowa colleges and universities should be undertaken to determine the status of teacher preparation in the area of global education. Because children's perception and attitude about the world are impacted by their educators, teacher education is the focus of this study.

5. A valid and reliable instrument for the assessment of teacher preparation in developing a global perspective was developed.

6. Responses to the questionnaire were honest and accurate.
SUMMARY

In a world characterized by increasing internationalization and growing interdependence, as well as by increasing diversification of our nation's population, education must take on new dimensions. Based on the assumption that education is only as good as the teachers who plan it and carry it on, colleges and universities must attempt to develop and implement programs in teacher education that reflect and promote a global perspective.

For the purposes of this study, global perspective was defined as the information, attitudes, awareness, and skills which taken together, can help individuals see the world as interrelated systems. It facilitates an understanding of the world and how people affect others and how others affect them. The result of the experiences by which one acquires a global perspective can be termed internationalization.

The purpose of this study then, is to assess the internationalization of teacher preparation in the state of Iowa. The focus covers four areas of concern: (1) the commitment of the institution to international issues, (2) internationalization of faculty, (3) course content and education program requirements of a global nature, and (4) other sources which contribute to the development of a global perspective in undergraduate teacher preparation.

The following chapter is a review of the pertinent literature and research. Chapter Three is directed to the procedures and methods used to conduct the study. The results of the tabulation and analysis of the array of data collected are reported in Chapter Four. The summary, conclusions, and implication for further research conclude the study in Chapter Five.
CHAPTER II

REVIEW OF LITERATURE

The focus of this review of literature is on five topics. The first is the concept of global education, the general response to global education, and Iowa efforts to infuse a global perspective into Iowa education which is the underpinning of global education. The second topic focuses on the recipients of these efforts—today's schoolchildren. This is a summary of recent research, reports, and recommendations on the status of American education. The third topic summarizes the national response to these recommendations. The fourth topic supports the rationale for global education. This section, The World Our Children Will Inherit, is characterized by Boulding's (1985) definition of our world as a structure comprised of many complex and interdependent systems: social, physical and biological, environmental, economic, and political systems. The fifth topic concentrates on pre-service teacher education. It identifies some areas which must be addressed if our future teachers are to be prepared to teach with a global perspective.

Education with a Global Perspective

We are ruled by concepts. Surrounded by data, we ignore most of it, perhaps because we are surrounded by it. Therefore, objects and ideas gain attention only if they pass through our conceptual filters. These filters are our frame of reference, or perspectives. They affect what we see and believe about the world (Mehlinger et al., 1978). Hanvey (1980) discusses how our perspectives can be expanded from a narrow, parochial frame of reference to a global perspective. With the
belief that not every individual must be brought to the same level of perceptual development in order for a population to be moving in the direction of a more global perspective, Hanvey identified five dimensions to be considered in developing a global perspective (p. 162). They are:

1. Perspective Consciousness
2. "State of the Planet" Awareness
3. Cross-Cultural Awareness
4. Knowledge of Global Dynamics
5. Awareness of Human Choices

The first of these refers to a "perspective consciousness." This is the recognition that one's perception of the world is shaped by the culture in which one grew up and is not shared by all people. Other people have different perspectives. This recognition is an important step in the development of a global perspective.

"State of Planet" awareness refers to an understanding of prevailing world conditions and developments. They include "emergent conditions and trends, e.g. population growth, migrations, economic conditions, resources and physical environment, political developments, science and technology, law, health, inter-nation and intra-nation conflicts, etc." (p. 163).

For most people in the world, direct experience beyond the local community is infrequent or non-existent. Therefore, information about the world comes from mass media. The message received may or may not contribute meaningfully to a valid picture of world conditions because such a picture is based upon a reasonably dependable sense of what shape the world is in. Hanvey uses the example that an outbreak of influenza is news; endemic malaria is not. A rapid decline in values on the world's stock exchanges is news; the long-standing poverty of hundreds of millions of people is not. A certain level of education is
necessary to see the full significance of the data. For instance, if from
the earliest grades students examined and discussed cases where
seemingly innocent behaviors such as the effect of the use of aerosol
sprays on depletion of the ozone layer, they could relate the data to its
global dimensions.

Cross-cultural awareness is a recognition of the diversity of ideas
and practices of people around the world, how these ideas and
practices compare, and how the ideas and practices of one’s own
society might be viewed from other vantage points. Hanvey cites this as
the most difficult to achieve, stating that acceptance of fundamental
differences "seems to be resisted by powerful forces in the human
psychosocial system" (p. 164). However, when we are able to admit the
humaness of those who are different from ourselves, then the
strangeness of their ways becomes less strange and more
understandable. Ideally, we would become able to look at the world
through their eyes.

Knowledge of global dynamics leads to an understanding of global
change. This is necessary because control of change is one of the
central problems of our era. Hanvey suggests three categories of
learning about change (p. 165).

1. Basic principles of change in social systems
   - the ramifications of new elements in social systems
   - the unanticipated consequences
   - overt and covert functions of elements
   - feedback, positive and negative

2. Growth as a form of change
   - desired growth in the form of economic development
   - undesired growth in the form of exponential increase
     in population, resource depletion, etc.
3. Global planning
   -- national interests and global planning
   -- attempts to model the world system as related to national policy formulation.

This knowledge would bring an understanding that our world is a system of interrelated elements, things which interact in complex and surprising ways. It also precipitates Hanvey's fifth dimension, the problem of choice.

Heightened awareness of our own cultural perspective and how others view the world, as well as an awareness of global dynamics and patterns of change, brings with it problems of choice. Hanvey uses the example of the use of the pesticide DDT. Despite the fact that we now know that the use of DDT is a threat to human populations as well as to future generations, hundreds of millions of people still depend on DDT to control malaria and agricultural pests (p. 166). The continued use of products such as DDT constitutes a human choice. Many practices world-wide are now being questioned because we now know new things. We know that factors interconnect and that there are limits to resources and the planet's carrying capacity. We also recognize that other people and future generations have rights. With a global perspective actions cannot proceed automatically; choosing a course of behavior becomes a more reasoned process. Choice becomes the problem.

Hanvey has presented these five dimensions of a global perspective with the recognition that there are more. However, a review of the literature reveals that these five themes seem to be the basis of most global education programs now underway.
Educational efforts towards global education

Dewey (1966) advocated bringing the real world into the classroom and to the academic lives of children. Bringing the complex world of the 1990s into the classroom can be considered a monumental task.

The literature is filled with articles about what should be taught and how it should be taught. However, less likely to be studied and written about are society's expectations for the schools and the realities of the classrooms. Becker (1981) states that these conditions are especially apparent in educational reform movements such as global education where there is much discussion but little agreement of purposes, goals, and definitions (p. 229). But one thing is certain. Whatever definitions, goals and objectives are advocated by global educators, publishers, or state offices of education, in the final analysis it is the teacher's values along with his or her knowledge of the subject area which will determine the experiences the students will have in the classroom.

Otero (1983) discusses the concerns of school personnel about being overloaded. The question arises of where global education can be included in an already-overloaded curriculum. Even educators who voice an interest in global education see the squeeze. Careful examination of current realities at the local school level reveal teachers who feel overloaded with the myriad of roles expected of them and wonder where a global perspective fits into an already overcrowded curriculum (p. 98). Otero cites a model for school change which attempts to respond to the pressures that teachers feel as well as to develop a more positive attitude toward the changes. The model involves weekend retreats for teachers in which the format includes: activities in which participants are able to document the fact that the world is changing and schools are not responding to those changes;
discussion in which participants come to an agreement that the world is indeed a major aspect of their lives and needs to be known differently by themselves as well as their students; followed by a brainstorming session to identify what skills, values, and knowledge are needed by students to live in a rapidly changing world. What has become apparent is that teachers want to prepare students for their future in a complex, interdependent world, but do not know how (p. 99).

The mystique of the concept of global education is addressed by Ernest L. Boyer the former U.S. Commissioner of Education (1979) with the statement that "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" (p. 5). Useful and practical education today includes information about the world. Anderson (1979) cites that the competencies needed for a global education are not different from the competencies needed for effective responsible citizenship within the context of family, community, or nation.

According to the literature this view of global education as being a necessary part of "basic" education seems to be a widely-held view. However, no academic discipline or department owns global education. It is not a separate subject. It is a way of learning. An infusion of a global perspective into all subjects is what global education is about. Helping mathematic students understand the metric system is global education. Learning how people in various parts of the world meet the minimum daily food requirements is an appropriate topic for health studies. Music, physical education, science, literature—each subject expands students' understanding of how they have become participants in a world culture (Mehlinger et al., ca.1983, p. 14).
**Iowa efforts towards global education**

Iowa ranks among the leaders in global education (Kerr, 1986, p. 23). It is among a handful of states which mandate global education and one of an even fewer number which require that this instruction be infused in all curriculum areas and all grade levels (DeKock, 1989, p. 8). In Iowa, global education is viewed to be interdisciplinary and cross-disciplinary. As a K-16 educational experience it is intended to become a lifelong learning activity.

The impetus for global education in Iowa has been provided by the Iowa Global Education Association (IGEA). IGEA grew out of the desire to build a support system for the many educators striving to infuse their teaching with a global perspective. After a decade of efforts, IGEA was formalized into an organization in 1985. In collaboration with the Iowa Department of Education, accomplishments include:

- **The Iowa Global Education Standard 4.5 (11)**
- **A Guide for Integrating Global Education Across the Curriculum**
- **The I.O.WA Connection**
- **The Global I Newsletter**

The Iowa Global Education Standard, which was adopted in 1988, requires all school districts to have a written plan for infusing a global perspective into all areas of education at all levels by July 1, 1989. IGEA is a major resource for implementing the Standard.

**A Guide for Integrating Global Education Across the Curriculum** was developed to assist schools in meeting the new educational standard for global education. It is intended to point the way for school districts in Iowa to develop their own models of global education. The guide presents a thematic model for developing global perspectives.
The themes identified include:

1. Global interdependence
2. Human resources, values, and culture
3. The global environment and material resources
4. Global peace and conflict management
5. Change and alternative futures.

**The I.O.W.A. Connection** (Iowan’s Organizing For World Awareness) is a publication of short lesson plans for teachers, K-12. The document was compiled to assist teachers in integrating global education into their current curriculum.

**The Global I Newsletter** is the quarterly newsletter published by IGEA. It is “the forum for the discussion and dissemination of ideas, classroom activities, lesson plans, resources, issues, quotations” and anything its members and others would like to share about the topic of global education (Svengalis, 1989, p. 1).

Another Iowa-based resource for the promotion of a global perspective is **Teachable Moments**, published by the Stanley Foundation of Muscatine, Iowa. It provides “brief, thought-provoking classroom activities that address global themes” (Drum & Otero, 1989).

**Today’s Schoolchildren - Tomorrow's World Citizens**

**Present education: Research and reports**

Based on the complex, interdependent world our children will inherit, it is not surprising that education has emerged at the forefront of our nation's agenda. This position has come about since **The President's Commission on Foreign Language and International Studies** (1978) reported weaknesses which, in their view, posed threats to America’s security and economic viability. Their often-quoted
statement that "...nothing less is at issue than the nation's security" (p. 1) initiated a flurry of studies, reports, and recommendations on America's educational system. Funded by the U.S. Government; private foundations such as Exxon, Ford, Carnegie, and Rockefeller; national associations; and concerned educators, such studies outlined the weaknesses in U.S. education and alerted the nation to the relationship of education to our country's security and well-being.

Beginning with the President's Commission, their concerns were America's inadequate capacities to communicate with its allies and analyze the behaviors of potential adversaries, as well as earning the trust of peoples and governments beyond U.S. borders. These concerns were the result of a year-long study in which they examined testimony from the fields of education, business and labor, industry and government, and from representative citizen groups. The basic conclusion of the study was that the U.S. educational system has failed to develop in its citizens an understanding of the relationship between American interests and goals and those of other peoples and other cultures. This, they contend, has resulted in a provincial, narrow view of the world and America's place within it. A lack of understanding of global interrelatedness has diminished U.S. capabilities in diplomacy and foreign trade decisions.

The Commission's concern that "a dangerously inadequate understanding of world affairs" is reflected in the 1977 Gallup Poll that showed that [in spite of long waiting lines at gas stations] over half the general public was unaware that the United States must import part of its petroleum supplies. Another study revealed that 40 percent of high school seniors could not correctly locate Egypt on a map, while over 20 percent were equally ignorant about the whereabouts of France or China (p. 8). The suspicion grew that perhaps too many of our schoolchildren did not know where in the world they live.
Reporting that our educational resources are plainly inadequate to meet current needs, the Commission made an urgent request that immediate attention be given to the study of foreign languages and international studies. New emphasis on these two areas of education has caused some dispute. Most American students, if they know nothing else, know and are impressed with the fact that a professional athlete or popular singer earns more money many times over than the best United Nations interpreter. Such attitudes, coupled with the high drop-out rate of high school students, made it apparent that an assessment of fundamental attitudes as well as other areas of our educational programs needed examination.

The ensuing years brought educational scrutiny from every angle: students and learning; attitudes and performance; parental participation; teachers and teaching; quality and equality; school organization and management; and leadership at the local, state, and federal levels. One of the first of these studies resulted in the now-famous report, *A Nation At Risk: The Imperative for Educational Reform* (1983). The 18-member commission appointed by Secretary of Education T.H. Bell was directed to examine the overall quality of education in the United States. Results of the study were alarming. The Commission stressed that the United States stood to lose its prominence as a world leader in industry and commerce. The commission reported that, in fact, the U.S. risks the long-standing promise that "means that all children by virtue of their own efforts, competently guided, can hope to attain the mature and informed judgment needed to secure gainful employment and to manage their own lives, thereby serving not only their own interests but also the progress of society itself" (p. 8). Indicators of the risk included:
International comparisons of student achievement completed a decade ago, reveal that on 19 academic tests American students were never first or second and in comparison with other industrialized nations were last seven times.

Some 23 million American adults are functionally illiterate by the simplest tests on everyday reading, writing and comprehension.

About 13 percent of all 17-year olds in the United States can be considered functionally illiterate. Functional illiteracy among minority youth may run as high as 40 percent.

Average achievement of high school students on most standardized tests is now lower than 26 years ago when Sputnik was launched.

Over half the population of gifted students do not match their tested ability with comparable achievement in school.

The College Board's Scholastic Aptitude Tests (SAT) demonstrate a virtually unbroken decline from 1963 to 1980. Average verbal scores fell over 50 points and average mathematics scores dropped nearly 40 points* (p. 8).

This comprehensive report includes recommendations for educational improvement with focus mainly on: curriculum; standards and expectations; time devoted to learning; the preparation of teachers to teach; and leadership and financial support for education. Perhaps the most important result of this study was raising general awareness of our educational inadequacies.
Goodlad (1983) released an eight-year study which supported *A Nation At Risk*. His book titled *A Place Called School: Prospects for the Future* cited four existing conditions which he claimed must be addressed in order for educational improvement to be possible. The first condition is the existence of "a youth culture powerfully preoccupied with itself" resulting in truancy, absenteeism, interpersonal tensions, and sometimes violence.

The second condition of concern is the slow response of education to technological advances. Tomorrow's job scene will be very much different from today's and obviously schools cannot have a future apart from technology.

The third and fourth conditions are concerned with the need for a highly educated society in general. Because it is becoming increasingly difficult to cope with the complexities of today's world, Goodlad emphasizes the need to develop a generally high degree of awareness, insight, and problem-solving ability that comes from high quality, general education (pp. 321-322).

Heightened awareness of America's educational inadequacies has created new concern for U.S. economic growth and international competition. Based on these two concerns, many more studies of education were conducted. Two of note were: *Action for Excellence: A Comprehensive Plan to Improve Our Nation's Schools* and *America's Competitive Challenge: The Need for a National Response*. The first of these is a report from the National Task Force on Education for Economic Growth (1983). The concern of this 42-member task force focuses on the challenge of new skills for a new age. "Technological change and global competition make it imperative to equip students in public schools with skills that go beyond the basics" (p. 8). Their concern is that prevailing policies such as lowered standards for college entrance and lessened emphasis on homework work against the
excellence in education which will be essential for meeting the challenges of the 21st century. Recommendations include "more intense and more productive" academic experiences. To achieve this, the task force recommends that states and school systems establish "firm, explicit, and demanding requirements concerning discipline, attendance, homework, grades, and other essentials of effective schooling" (p. 10).

The second study mentioned above, *America’s Competitive Challenge*, is a report to the President of the United States by the Business-Higher Education Forum (1983). This 16-member task force representing corporate and university chief executives was asked by the President "to explore ways in which our national competitive position could be further strengthened through increased innovation and productivity" (p. v). Reflecting again the stated inability of American citizens to relate the goals and aspirations of this nation to those of peoples beyond our borders the task force stated that "...until citizens recognize that industrial competitiveness on an international scale is the key to economic growth, and until they appreciate that the overall well-being of society itself depends on such economic growth, we fear that little progress will be made" (p. 1). It follows that American schoolchildren must learn about and understand American influence and interdependence on global economics. Educational recommendations from the task force include "expanded study programs and curriculum requirements in the fields of foreign language, culture and sociopolitical institutions...and centers for international study..." (p. 13). With new concern that the Japanese are outworking, outselling, outproducing and outliving us, a number of education comparative studies have been done. Beck (1985) cites a study which sheds light on some of the reasons for the lag of American students behind Asian students. For instance, American students go to
school an average of 178 days a year, while the Chinese and Japanese are in class 240 days. American students spend less time in academic learning while at school. For example, the researchers found American fifth graders were involved in academic activities only 64 percent of the time, compared with 87 percent for the Japanese and 91 percent for the Chinese. That added up to 19.6 hours a week for the Americans, 32.6 hours a week for the Japanese and 40.4 for the Chinese. Based on these figures it appears that American children are not getting as much opportunity to learn.

Poor performance in math and science reflect this deficiency and geography has all but disappeared from the curriculum. A 1987 Gallup poll of high school seniors (Kidder, 1989) reveals that 25 percent of Dallas students did not know the country bordering the United States on the south and nearly 40 percent of Boston seniors could not name the six New England states. Such geographic ignorance is not surprising when we consider the geographic illiteracy of U.S. adults. A 1988 Gallup poll comparing U.S. adults and eight other countries revealed:

- In knowledge of geography, U.S. adults rank behind those in Sweden, West Germany, Japan, France, Canada, and Great Britain and ranks ahead of those in Italy and Mexico. Young American adults (age eighteen to twenty-four) know the least about geography of any age group surveyed in any country.

- One in seven adults could not locate the United States on a world map; more than one-half did not know, even roughly, the size of the nation's population.
• One-half of American adults could not point out South Africa on a map; one-half could not identify even one South American country; and only 55 percent could locate New York—in fact, thirty-seven states were identified as New York (National Governors' Association, 1989).

Whether the concern is for national security or world peace; for global competition or cooperation in economics and trade balances; for wealth imbalance, overpopulation, and poverty; or environmental challenges, the success or failure of American education will determine the quality of our democracy and the promise of American ideals.

Meeting the Educational Challenge

By comparison to past U.S. educational standards, to current standards abroad, and especially to the needs of America in the future, many Americans are beginning to realize that change must occur in the education of our children. Most educators seem to agree that the studies, reports, and recommendations on educational reform have helped create what the American Federation of Teachers (AFT) president, Albert Shanker described as an "unprecedented opportunity for education." The Staff of the National Commission on Excellence in Education (1983) reported that through an analysis of over 700 articles collected from 45 different news sources in the months following the release of A Nation At Risk, it was clear that the nation was responding. With national attention turned toward education the Commission saw a trend toward optimism. With renewed emphasis on parental responsibilities and federal, state, and local support, educators felt that
they could strive for excellence instead of being deterred by "conflicting pressures to accomplish a variety of goals outside the traditional academic areas" (p. 4).

Bell (1984) commended teachers, administrators, parents, students, and citizens as well as public officials for taking up the challenge to improve education. Bell cited that the ethic of excellence reasserted its strength, that more major studies were underway, that professional educators had seized the opportunity to make improvement in school practice, that consensus had developed over the imperative to close what Ernest L. Boyer, President of the Carnegie Foundation for the Advancement of Teaching, called "the alarming gap between school achievement and the task to be accomplished" (p. 11). Bell added that his commission's study also showed that the nation's governors were enacting and funding comprehensive school reform packages, and that corporate leaders, as well as the American public, had enlisted in the struggle to improve education.

The Commission reported that individual state task forces were initiated in all 50 states. For example, in Iowa an 11-member task force formed by the State Legislature developed a 10-year workplan for education. Another statewide task force reviewed teacher preparation and certification requirements. And a third task force reviewed performance appraisal systems for teachers with an attempt to develop a model system. A task force of the Iowa State Board of Regents and the Department of Public Instruction developed a document called "Educational Excellence for Iowa," which examines the linkage between education and preparation for life, work, and higher education (p. 59).

Other states examined those issues which they felt were most appropriate for them. For instance, instructional time; the basics; teacher education and compensation; governance responsibility and planning; improvement of substandard schools; accreditation; and
financial support from the public, the legislature, and business and industry were highlighted.

The significance of all of this is of course, the fact that the nation, as a whole, recognized and is responding to the educational crisis. Reforming our educational system from the grassroots upward lays the foundation for the preparation of a strengthened and prepared youth for their intelligent participation in maintaining this democracy.

As changes are initiated they are being made with an eye toward the changing world of which we are a part. Technological advances and global interdependence are factors which figure prominently in the new reform and in many instances are taking shape in the form of global education.

The World Our Children Will Inherit: A Rationale for Global Education

Boulding (1985) defines the world as a total system. By this he means it is a complex structure of many different systems: social, physical, biological, economic, and political systems, as well as communication and evaluative systems. When a broad view of the world is taken to include problems which are not limited to national boundaries such as nuclear accidents, the greenhouse effect, water and air pollution, and international terrorism, the world can be clearly perceived as a "total system." Goodlad (1986) states that the sudden awakening to at least some of the symptoms and effects of world-wide systems has been both numbing and terrifying for millions of people around the world (p. 429). The Study Commission on Global Education (1986) concurs that "[global] interdependence is not an opinion or a political statement but a demonstrable fact" (p. 14). Combining Boulding's definition of the world and the concerns of the Study Commission, a rationale for global education can be established.
Social systems: Global humanism

Futrell (1988) has created a graphic analogy to our present world. "We have inherited a large house, a great 'world house' in which we all must live together... A house of black and white and yellow and brown and red people, of Easterner and Westerner, of Catholic and Protestant and Jew and Moslem and Hindu... A house in which lives a family long separated by culture, by conviction, by social and economic status...and a family that will never again live apart and so must somehow learn to live together." (p. 3).

Is it conceivable that in such a house one-fourth of the family members consume three-fourths of the available food while other members starve? Can more powerful members coerce, manipulate, or exploit other members to gain the use of the majority of the resources in order to maintain a vastly superior life-style without noticing the misery such actions create?

Ours is a prosperous "house." McNamara (1987) reflects on the past quarter century "...as a period of unprecedented change and progress in the developing world." "And yet," he continues, "despite this impressive record, some 800 million individuals continue to be trapped in what I have termed absolute poverty, a condition of life so characterized by malnutrition, illiteracy, disease, squalid surroundings; high infant mortality, and low life expectancy as to be beneath any reasonable definition of human decency" (p.118).

The Old English proverb that states "What the eye does not see, the heart does not grieve about" remains true today only if the eye will not see. Technology has provided the means to see, but it is a human choice whether or not to see, whether or not to respond, indeed, whether or not to care.

When asked the greatest problem we face today, President Jimmy Carter (1987) responded, "...the relationship between the advanced
nations and the poverty-stricken nations" (p. 177). Carter elaborated on this concern by describing it as "a chasm that hasn't, so far, been bridged." Nor, among the leaders of what he calls the "rich nations," is there "an adequate awareness" of the problems facing poorer nations. The problems he enumerates include environmental degradation, overpopulation, and international debt. They show up in the developing world as hunger, disease, poverty, and political instability. Carter associates these problems with environmental issues: forest decimation, soil erosion, population increases...problems which loop back and become causes of other problems. For instance, as land production drops, refugee farmers move to the city increasing an already-overloaded urban population resulting in neglect of the farms and increased burdens on the city. The result is an increasing spiral of economic imbalance. The frustration of people in their attempt to just meet daily needs in many cases leads to conflict, violence or revolution.

Carter, when asked if he feels that the industrial nations are increasingly less insulated from the spillover from such problems, replied, "Yes, but so far Americans are asking, "How much money do they owe our banks or our government?" rather than 'What caused the revolution in Nicaragua? Why are the Salvadorans still not endorsing the Duarte government? What are the root causes of starvation in the Sudan or in other sub-Saharan nations or in Ethiopia?' Needed he says, is "a partnership or cooperative arrangement with those nations, which asks, "What can we do jointly about this common problem?" (p. 180).

Gurtov (1988) agrees. He advocates new concepts and values to deal effectively with global problems by proposing a "Global-Humanist" outlook. He expresses optimism that such a movement is in process. Gurtov quotes from North-South, the report of the Brandt Commission. "Generations of people are needed, says the report, who will be 'more
concerned with human values than with bureaucratic regulations and
technocratic constraints" (Brandt, pp. 8-11). Gurtov's optimism,
however, is tempered by the concern that such movement "may not be
happening fast enough to head off one or another kind of catastrophe"
(p. 42).

Gurtov believes that the core element of a Global-Humanist
approach is "the primacy of the human interest above any other...state,
ideological, economic, or bureaucratic." He lists the following values as
primary to the Global-Humanist approach:

1. peace, meaning the minimization of violence and the
   institutionalization of nonviolent ways to resolve conflict;
2. social and economic justice, the movement toward equity in
   reward and opportunity for all without the imposition of
   arbitrary distinctions;
3. political justice, civil liberties guaranteed in law and fact;
4. ecological balance, including resource conservation and
   environmental protection;
5. humane governance, popular participation in, and the
   accountability of, government (p. 43).

A number of international documents to which most of the world's
states adhere are based on these values, such as the Nuremberg
Principles derived from the Nazi war crime trials (1945), the Universal
Declaration of Human Rights (1948), the Convention on the Prevention
and Punishment of the Crime of Genocide (1940), the International
Convention of the Elimination of All Forms of Racial Discrimination
(1965), the International Covenant on Economic, Social, and Cultural
Rights (1966), and the International Covenant on Civil and Political
Rights (1966). As Dr. Martin Luther King, Jr. has said, "Injustice
anywhere is a threat to justice everywhere."

Berman and Miel (1983) suggest that learning about the world’s greatest documents such as those listed above would not only give students a broad sweep of human history, but would also enlighten them to the situations which create the necessity for such documents. "To be human is to feel connected with others in time and space" (p. 15). To feel such connection to others, children need to recognize that basic needs are the same everywhere. Diversity in our "inherited house" is a fact of life and all people, regardless of differences, share the common needs of food, shelter, clothing, and security. With a perspective grounded in the value of the human person, whoever or wherever they are, our future citizens will learn to value that diversity and will be prepared to make humane, responsible public policy.

Physical and biological systems: The global environment

The State of the World report of 1989 states that our global commons—the oceans, the atmosphere, and tropical forests—are now at risk. and further, ozone depletion, climate change, and oceanic pollution "simply cannot be solved at the national level" (Brown et al., 1989, p. 17).

July 17, 1989 in Paris, France, the 15th summit of the largest industrial democracies ended harmoniously with an urgent call for decisive action to combat "serious threats" to the world's environment (Des Moines Register, p. 1). The final declaration focused attention on worsening world pollution. It was a worldwide call for all nations to make environmental concerns a higher priority and called for the leading democracies to "work together to achieve the common goals of preserving a healthy and balanced global environment." Although many environmentalists were disappointed in the lack of guidelines to accomplish such goals, the issue here is the acknowledgement that
such goals can only be accomplished with international cooperation.

High on the summit agenda were the issues of: global warming, acid rain, ocean dumping, oil spills and the destruction of forests. Earlier these particular issues prompted Brown (Worldwatch Institute) to declare, "We are losing at this point, clearly losing the battle to save the planet" (Associated Press as reported in Ames Daily Tribune, 3/12/89).

Oil spills and ocean dumping dominated the news media in 1989 as the public reacted, as Carter has pointed out, to yet another "crisis." Unfortunately public outcry seems to be the only attention-getter which will influence policy reform. An informed public is essential even though much of it today is through public media. Because such topics as global warming and acid rain do not play as well as immediate crises on television, less attention is given to these imminent dangers. Last year one of America's largest factories, the USX Clairton Coke works, pumped nearly six million pounds of toxic chemicals into the Pennsylvania sky (Easterbrook, 1989). When confronted with these figures, a USX vice president stated, "We do put up big numbers, but every one of those pounds going into the air is in total compliance with the law" (p. 28). That's the point. Flagrant polluting is legal.

This year James E. Hansen, head of NASA's Goddard Institute for Space Studies released findings from a study of global temperature records for the last century. The results clearly indicated the long-predicted global warming (Brown, 1989). Global warming, which causes wide-spread drought as well as other disastrous effects, is believed to be caused by the burning of coal, oil, and gas, as well as the destruction of tropical rain forests, which cleanse the air. The Institute's alarming results had been reported to top Washington officials, however, Mr. Hansen declared to the press that his testimony on global warming had been doctored by the Office of Management and
Budget to appear less threatening (Associated Press, as reported in Ames Daily Tribune, 5/9/89). Administration officials did not deny Hansen's allegations and presidential spokesman Marlin Fitzwater, meantime, called the practice of alternations "routine" and said changes were made in the scientific report by a budget official "four or five levels down from the top" (p. A2). Apparently this was intended to be an acceptable reply.

This scenario exemplifies Boulding's theory of global systems interacting with one another and overlapping many others. The NASA report case involves the world's physical, biological, social, economic, and political systems in one frightening example.

Dramatic events serve to awaken people. However, receiving the news from the media is often after the fact. Although the world summit of 1989 is an encouraging sign, social change occurs when the people alter the way they perceive the elements which constitute their world. Effective and long-term responses to the environmental problems—as well as to other global concerns now unfolding—require that humanity's perception of its relationship to the earth and to each other must be addressed in our school systems at an early age. The "trickle-down" effect in education is not sufficient to meet the need.

Economic systems: Global interdependence

In 1982, John Naisbitt identified one of the ten "megatrends" which he claimed would bear upon the future of the U.S., as the move "from a national economy to a world economy" (p. 53). A report from the National Governors Association (1989) bears out Naisbitt's prediction: "The international frontier is no longer the future—a new age has arrived" (p. v).

A review of the literature shows that fundamental changes in the world economy have indeed brought a new age and new challenges to
the American people. The facts are now well known. For the first time in history the United States has gone from a creditor nation to a debtor nation. In 1982, the world owed the United States $140 billion. By early 1988, the U.S. owed the world $420 billion, a swing of more than half a trillion dollars in only six years (Magaziner & Patinkin, 1989). Magaziner & Patinkin also expand on U.S. deficit trading, stating that, as the U.S. continues to buy more from other nations than they buy from us, it is costing more than just dollars because foreigners have begun to use the profits to buy our assets—our land, our buildings, our businesses. Their report states that over 10 percent of our manufacturing assets, 20 percent of our banking assets, and over 35 percent of the commercial real estate in cities like Los Angeles were foreign-owned by mid-1988 (p. ix).


Considering the fact that fully 70 percent of the goods the U.S. produces compete with merchandise from abroad, the President's Commission stated that "...quite simply, no longer is there a truly domestic U.S. market" (p. 9). The Commission's question: Is America prepared to compete in an increasingly interdependent and competitive world environment? After a 15-month study, their answer:
"Not well enough" (p. 1).

The Governor's Task Force (1989) supplied some of the reasons for the lag when they stated that the United States is not well-prepared for international trade "because we know neither the languages, the cultures, nor the geographic characteristics of our competitors" (Overview, p. v).

U.S. involvement in a changing world is exemplified in the following statistics (K=thousand, M=million, B=billion dollars):

<table>
<thead>
<tr>
<th></th>
<th>1975</th>
<th>1986</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. exports of goods and services</td>
<td>155,726.0 M</td>
<td>375,073.0 M</td>
</tr>
<tr>
<td>U.S. imports of goods and services</td>
<td>132,745.0 M</td>
<td>498,573.0 M</td>
</tr>
<tr>
<td>Value of U.S. agricultural exports</td>
<td>21.9 B</td>
<td>26.2 B</td>
</tr>
<tr>
<td>Value of agricultural imports</td>
<td>9.3 B</td>
<td>21.4 B</td>
</tr>
<tr>
<td>U.S. -owned assets abroad</td>
<td>295.1 B</td>
<td>1,071.4 B</td>
</tr>
<tr>
<td>Foreign-owned assets in U.S.</td>
<td>220.9 B</td>
<td>1,340.7 B</td>
</tr>
<tr>
<td>U.S. travelers to foreign countries</td>
<td>6,354.0 K</td>
<td>11,706.0 K</td>
</tr>
<tr>
<td>Foreign visitors to U.S.</td>
<td>3,674.0 K</td>
<td>8,880.0 K</td>
</tr>
</tbody>
</table>


To focus on Iowa interests, the Iowa Department of Economic Development reports that although Iowa ranks 25th in population, it ranks 10th in total value of export shipments. Of the $5 billion Iowa exports, 60 percent is agricultural with the other 40 percent comprised of industrial products. Iowa's economy, as discussed at the 1984 conference of the Society for International Development, has become a microcosm of the world's economy and within that world economy Iowa has definite and increasing degrees of dependence and interdependence (Talbot, 1985).
Although, according to the Iowa Directory of Exporters. 1988-89, there are approximately 2,000 Iowa-based companies doing business abroad, with approximately 1,300 engaged in export, the Iowa economy is basically driven by agriculture. In turn, the agricultural economy is driven by exports; exports are driven by the change in demand from developing countries; the demand from developing countries is influenced by their ability to export; and their ability to export is influenced greatly by the health of the world economy (Bolen, 1985, p. 57). "To hardly overstate the case, as the world's economy prospers, so does Iowa; when it is stagnant and unstable, so is Iowa's economy" (p. 11).

It is not surprising then that the 1989 Governors' Report states that "American education can no longer be circumscribed by national boundaries. we must prepare to do business anywhere on earth" (p. 5).

Political systems: National and international security

Traditionally, national security has been defined almost exclusively in military terms. Brown (1989) states that [security] as a military concept is used to justify the expenditure of enormous sums of money, the maintenance of large armed forces, the deployment of ever-newer weapons systems, the intervention by stronger powers in the affairs of weaker nations, or even the violation of human rights at home (p. 132). Brown's caution is that security of nations depends at least as much on economic well-being, social justice, and ecological stability as it does on military might.

For the moment, let us examine the "traditional" meaning of security, that of military might. The notion exists that countries should be able to defend themselves from any conceivable threat at all times. That notion could be considered obsolete from the standpoint of nuclear weapons. Stephenson (1982) reminds us that in the age of
weapons of mass destruction, the accumulation of weapons tends to diminish the security of an opponent more than it adds to a nation's own security. For these reasons, Stevenson's claim is that present security policies have yielded international insecurity. McNamara (1987) states that obviously no well-informed, coolly rational military or civilian leader would initiate the use of nuclear weapons. However, he continues, "It has been my experience---and I think it is a widely shared experience---that military and civilian leaders in times of crisis are neither well informed nor coolly rational" (P. 99). Moscow, Washington, and other big power capitals may currently agree on the idea of settling disputes through mediation. However, with the wide-spread acquisition of nuclear arms, disaster may be initiated by almost anyone in any part of the globe.

An Agenda For the 21st Century is a compilation of essays written by twenty-two of the world's renowned thinkers (Kidder, 1987). When asked: What are the major issues that will face humanity in the 21st century, the nuclear issue ranked first. If, indeed, there exist enough nuclear weapons to annihilate the planet hundreds of times over, who can claim security?

Brown (1989) refers to the retention and buildup of nuclear arms as the "permanent war economy" (p. 133). The false sense of security such military might provides is created at staggering costs. The Worldwatch Institute reported that during the 1980s global military spending rose rapidly, while GNP growth continued a downward trend. For the first time since 1960, the growth in global military outlays exceeded that of world economic output (p. 137). Annual expenditures for military purposes reached $825 billion in 1986 (Sivard, 1988). It is without exaggeration that Boulding (1986), speaking as an economist, makes the claim that national defense is now the greatest enemy of national security. One can only imagine what environmental and social
problems could be alleviated with a budget such as that of the military. Interdependence of another nature is all too familiar with members of Iowa State University. Summer, 1989 news reports were a daily and personal reminder of international terrorism. Former ISU graduates, Terry Sutherland (1974) and Tom Anderson (1958) were still held hostage after four years in captivity in Lebanon. The world held its breath as other hostages were murdered prompting international negotiations. Brademas (1987) states that [international terrorism] is another example of Americans being "victimized by their ignorance" [of other countries] (p. 6). Brademas quotes Gary Sick, a former National Security Council staff member who dealt with the Iranian hostage crisis under President Carter: "Despite our strategic closeness to Iran, our two countries remain fundamentally ignorant of each other and we have survived the last five years with our ignorance largely intact" (p. 6).

Such international incidents, as well as skyjackings and bombings are not infrequent, isolated incidents. They cross national boundaries and touch the world as a whole. Boulding (1986) states that civilians now constitute a rapidly growing share of war victims. Whether through direct war actions or war-induced starvation, civilians accounted for 52 percent of all deaths in the fifties, but for 85 percent in the eighties.

By necessity, today's children must develop the skills to manage unprecedented responsibilities. The stakes are clearly too high to risk policy responses limited by parochial, nationalistic interests, and ethnocentric biases (Lamy, 1982). These skills can be taught by teachers who themselves are prepared to teach with a global perspective.
Internationalizing Teacher Education

The case for introducing global education into programs for preparing teachers rests on several points: (1) the certainty of change, (2) the need to redress deficiencies, (3) recommendations by national commissions, (4) accreditation requirements, and (5) recommendations by the American Association of Colleges for Teacher Education (AACTE) (Klassen & Leavitt, 1982). This paper thus far has addressed the first three of these points. The final two points are perhaps the most important because they address the "how to" of initiating global education through the undergraduate education of teachers.

The AACTE is the major professional organization of teacher education in the United States. As a constituent member of the National Council for Accreditation of Teacher Education (NCATE), the AACTE has an evident interest in accreditation standards that reflect current and future needs of schools, colleges, and departments of education. An AACTE study, *The World and the American Teacher* (1980), stated:

> Without teachers whose own knowledge and attitudes are in tune with the demands of world society... there is little chance that new perspectives can be introduced into the structure and content of modern education, in the United States or anywhere else (Taylor, 1968, p. 19).

In September, 1984, the AACTE initiated a three-year project in cooperation with the National Council on Foreign Language and International Studies (NCFLIS) and the International Council on Education for Teaching (ICET). The project was based on the study done by Klassen and Leavitt in 1982. The purpose was to promote the international perspective within schools, colleges and departments of
education (SCDEs). The project called for a set of guidelines which could be used by the SCDEs to "internationalize" their undergraduate teacher preparation curricula. The project was also to develop an inventory of promising practices that would identify exemplary efforts to promote an international understanding and awareness in the preparation of teachers. The guidelines were comprised of seven sections corresponding to identified activity areas. Each element of the guidelines consisted of a principle, and an interpretation of its potential contribution to international education. These are followed by a series of thought-provoking questions. The term "international" has since been replaced by the term "global." The areas identified were:

- Administrative Leadership
- Curriculum Development
- Faculty Development
- Student Awareness
- Resources
- Service
- Research

**Administrative leadership** was defined to mean that the SCDE and its governance structure be committed to the internationalization of the campus and the curriculum. The **Curriculum Development** area defined international education as a fundamental part of general and professional studies. It is the preparation for social, political, and economic realities that humans experience in a culturally diverse and competitive, interdependent world and therefore a fundamental
consideration of curriculum development. The Faculty Development area was based on the fact that the faculty are a major determinant of the substance and quality of general, professional, and graduate studies and engage in research to develop a global knowledge base. The recommendation was that the SCDE recruit and support faculty whose teaching, research, and service will enhance the international dimension in its programs. Student Awareness provided that students be provided with the opportunity to develop attitudes, skills, and knowledge that are consistent with the realities of the modern world and that prepare them for careers in education. Resources required that the SCDE provide personnel, materials, curricular, and organizational resources to support the infusion of the international dimension in its programs. The Service area declared that schools, colleges, and departments of education have an on-going commitment to provide service to local school districts, community agencies, and businesses in the area of international education. The Research area emphasized that the SCDE is committed to adding an international dimension to its research function and to using international and comparative research in its curriculum and faculty development activities.

These guidelines were submitted to the board of directors of the American Association of Colleges for Teacher Education by the International Council on Education for Teachers at the 1986 annual meeting of the National Council on Foreign Language and International Studies.

It can be noted that the first of the guidelines refers to administrative leadership. In most of the studies, reports, and recommendations reviewed for this study, it became apparent that although the above-mentioned guidelines are all central to global education, support from the central administration is crucial. Smuckler
and Sommers (1988) state that "the real spark for successful programs usually comes from leadership elements and priorities and a reward system that provides the necessary incentives." They emphasize that the president, provost, and perhaps the governing board must provide the university-wide context and support for curricular emphasis and development. "Thus, the role of the university president and provost is critically important, in most cases, if the university is to move toward internationalizing faculty expertise and program development" (p. 6).

This study, *Global education: A study of pre-service teacher education in Iowa*, takes into consideration the global concerns expressed by government officials, business leaders, educators, and concerned citizens for American education. The questionnaire designed for this study is based on the above-mentioned guidelines set forth by the International Council on Education for Teachers.

Two recent studies of note which are related to global education are *Global education attitudes and practices of Iowa home economics teachers* (Babbich, 1986) and *The international knowledge of beginning journalism students* (McGrath, 1989).

It seems apparent that pre-service teacher education programs must infuse global education in all subjects and more adequately equip future teachers with a global awareness, perspective, and strategies for enabling them to help their students to acquire a global perspective appropriate for their particular level of instruction.

This review of the literature enabled the researcher to gain insights into the importance of the topic, its complexity, and the urgency for responding to an important component of American education. It also helped to create the survey questionnaire for the study.
CHAPTER III

DESIGN OF THE STUDY

The Iowa Department of Education recently created a Global Education Mandate that requires Iowa teachers to have the appropriate abilities and attitudes to help our schoolchildren acquire the knowledge and skills needed to become responsible, informed global citizens. The purpose of this study is to assess the efforts of Iowa's colleges towards internationalization.

For this purpose an instrument was developed to address the following four areas of concern in the higher education environment:

- What is the institutional commitment of Iowa colleges and universities toward internationalization?
- What opportunities exist for faculty development on global issues?
- What are the current curriculum and education program requirements?
- What resources are available to students on campus which contribute to the development of a global perspective?

Description of Sample

The subject sample was comprised of persons identified to be Coordinators of International Education at all four-year Iowa colleges and universities. An envelope containing the following items was mailed to each person:
1. A cover letter of introduction explaining the research and asking for the completion of the enclosed questionnaire (Appendix A).

2. A five-part questionnaire: Part A - Demographics; Part B - Institutional Commitment; Part C - Curriculum; Part D - Faculty Development; and Part E - Student Internationalization Opportunities (Appendix B).

3. A postage-paid, addressed envelope for return of the completed questionnaire.

Anonymity was assured to all respondents. A follow-up phonecall was made three weeks later to non-respondents. A second mailing was made one month later to the remaining non-respondents (Appendix C).

Development of Survey

The five-part questionnaire was developed by the researcher for use in this study.

Demographic data

This section was designed to gather institutional data concerning student populations in terms of size, plurality, and numbers of international and minority students, as well as numbers majoring in education.

Institutional commitment

This section was designed to assess the degree to which the institution provides students and faculty with significant educational opportunities offering a global perspective—opportunities which recognize the plurality of cultures, global interdependence, the
existence of common concerns, and the need for more effective methods of international and intercultural cooperation—through international programs and research.

**Faculty development**

Faculty development is a key ingredient in strengthening an institution's international dimension. This section was designed to determine the degree to which the institution promotes and supports opportunities for international development of faculty members through foreign travel, colloquia series on international issues such as human rights, world food, environmental deterioration, etc. And further, what priority is given to international/intercultural issues by the Education Curriculum Advisory Committee.

**Curriculum**

This section was designed to determine whether students in Education are required to take courses in global education as they apply to an understanding of the complexities of the international system; a knowledge of world cultures and events; and an appreciation of the diversity and commonalities of human values and interests. Also questioned is the expectation that student teaching experiences include preparing and teaching classroom lessons organized around global concepts such as change, conflict, communication, and interdependence.

**Student internationalization opportunities**

Many experiences contribute to the development of a global perspective. The final section explores other sources which provide information, attitude awareness, and skill-building opportunities which, when taken together, can facilitate an understanding of the world and
how people affect others and how others affect them. It examines foreign study opportunities; on-campus opportunities to interact with international students; availability of international resources such as books, films, artifacts, etc., as well as the opportunity to participate in student chapters of international professional associations.

The instrument consisted of a total of thirty-six questions arranged within the five categories. Twenty-one questions were structured in a yes/no format; thirteen questions required fill-in-the-blank responses with the option of attaching a list if preferred; and a Likert scale was used for three of the responses.

The survey underwent two stages of review and revision. Initially six specialists in teacher education and international education reviewed the instrument to look for appropriateness, accuracy, and clarity of content. Secondly, a research evaluation specialist examined the instrument for format and clarity. Revisions were made in the questionnaire utilizing the suggestions of the specialists. In addition to the preliminary check that was done by specialists in the field to validate the questionnaire, a pretest was done by a Coordinator of International Education and two graduate students to determine any difficulty in interpreting items and the length of time needed for completion.

**Human subjects committee review**

The Iowa State University Committee on the Use of Human Subjects in Research reviewed this project and concluded that the rights and welfare of the human subjects were adequately protected, that risks were outweighed by the potential benefits and expected value of the knowledge sought, that confidentiality of data was assured and that informed consent was obtained by appropriate procedures.
CHAPTER IV

FINDINGS

The purpose of this study was to assess the internationalization of teacher preparation in Iowa's colleges and universities. Specifically, the purposes were (1) to assess the commitment of the institutions to broadening international dimensions; (2) to ascertain faculty development opportunities towards development of a global perspective; (3) to determine curriculum and program requirements and opportunities in regard to global issues; and (4) to identify other available resources on campus which may contribute to the development of a global perspective in the students.

To accomplish these purposes a questionnaire was developed by the researcher. The questionnaire was divided into five sections: (1) Demographics, (2) Institutional Commitment, (3) Faculty Development, (4) Curriculum, and (5) Student Internationalization Opportunities.

Collection of Data

Questionnaires were mailed to thirty-one accredited, four-year colleges in Iowa including the three public universities. They were addressed to persons identified as International Education Coordinators, identified as such by the Iowa State University Office of International Education. Four weeks later a follow-up postcard was sent to non-respondents. Three weeks later, follow-up phone calls were made resulting in a second mailing of seven questionnaires. Twenty-five questionnaires (80.6%) were returned, twenty-three of which were valid for analysis.
Description of Sample

Responses to Demographics questions (Part A) indicate that the twenty-three subjects responding to the questionnaire represented 100% of the public universities and 64.5% of the accredited, private, four-year colleges in Iowa.

The majority (66.4%) of the reported total student enrollment attend the public universities which represent 9.7% of the schools. One-third (33.6%) of the students reportedly attend private schools. The majority of the schools (82.6%) have less than 5000 enrollment. Also, the majority (60.9%) are located in communities with populations of less than 25,000 people. Approximately 80% of the schools reported awarding elementary and/or secondary teaching certificates in 1988. See Table 1.

Of the institutions reporting to have international students, the majority (66.7%) have fewer than fifty international students. The majority (65.2%) also reported having fewer than fifty American minority students. Although these two populations are represented in Table 1, a more detailed profile of international students and American minority students is found in Figure 1.

In Figure 1 the number of American minority students has been divided by total enrollment to calculate the percentage of minority students at each school. The same calculation has been made for international students. The average of the entries in Figure 1 is 4.3% for the minority distribution and 3.0% for the international student distribution.
Table 1. Statistical profile of sample

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>N</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total College Enrollment for Academic Year 1988-1989</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 - 1,000</td>
<td>7</td>
<td>30.4</td>
<td></td>
</tr>
<tr>
<td>1,001 - 5,000</td>
<td>12</td>
<td>52.2</td>
<td></td>
</tr>
<tr>
<td>5,001 - 30,000</td>
<td>4</td>
<td>17.4</td>
<td></td>
</tr>
<tr>
<td><strong>Community Size</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,200 - 25,000</td>
<td>14</td>
<td>60.9</td>
<td></td>
</tr>
<tr>
<td>25,001 - 100,000</td>
<td>4</td>
<td>17.4</td>
<td></td>
</tr>
<tr>
<td>100,001 - 350,000</td>
<td>5</td>
<td>21.7</td>
<td></td>
</tr>
<tr>
<td><strong>Minority Students of Total Enrollment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - 50</td>
<td>15</td>
<td>65.2</td>
<td></td>
</tr>
<tr>
<td>51 - 500</td>
<td>5</td>
<td>21.7</td>
<td></td>
</tr>
<tr>
<td>501 - 2000</td>
<td>3</td>
<td>13.1</td>
<td></td>
</tr>
<tr>
<td><strong>International Students of Total Enrollment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - 50</td>
<td>14</td>
<td>66.7</td>
<td></td>
</tr>
<tr>
<td>51 - 500</td>
<td>5</td>
<td>23.8</td>
<td></td>
</tr>
<tr>
<td>501 - 2,250</td>
<td>2</td>
<td>9.5</td>
<td></td>
</tr>
</tbody>
</table>
### Table 1. (continued)

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>N</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teaching Certificates in Elementary</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education Awarded in 1988</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>4</td>
<td>20.0</td>
<td></td>
</tr>
<tr>
<td>1 - 50</td>
<td>12</td>
<td>60.0</td>
<td></td>
</tr>
<tr>
<td>51-250</td>
<td>4</td>
<td>20.0</td>
<td></td>
</tr>
<tr>
<td><strong>Teaching Certificates in Secondary</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education Awarded in 1988</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>4</td>
<td>17.7</td>
<td></td>
</tr>
<tr>
<td>1 - 50</td>
<td>12</td>
<td>70.6</td>
<td></td>
</tr>
<tr>
<td>51 - 250</td>
<td>4</td>
<td>17.7</td>
<td></td>
</tr>
</tbody>
</table>
Average percent of minority students per school is 4.3.
Average percent of international students per school is 3.0.

Figure 1. Histogram showing the percentage of international students and American minority students per school

Institutional Commitment

Institutional Commitment (Part B) is manifested in many forms, some of which, but certainly not all, are addressed in this study. Faculty Development (Part C), Curriculum (Part D), and Student Internationalization Opportunities (Part E) subsume Institutional Commitment.
The on-campus presence of a designated Office of International Affairs may be one of the first questions asked in assessing an institution's commitment to broadening its international dimensions. In response to this question, the majority (60.9%) of the schools indicated that their institution does have an Office of International Affairs.

Also, the majority (65.2%) responded that their institution has a program or committee designed to bring together campus-wide resources in a collaborative effort towards infusing a global perspective in their students. These resources may include curriculum, activities with an international orientation, faculty development opportunities, and/or opportunities to interact with students of other cultures. However, institutional priority to such international programs was rated by the respondents as "some priority" by 50% of the respondents, and "high priority" by only 18.2%. See Table 2. The majority (87%) also thought such programs are a budget consideration by the institution. Questions 6-14 address this data. The reader should be cautioned in reading Table 2 because the item on faculty travel involved a negative statement therefore, the responses of yes or no need to be critically examined. A "no" for example, implies that the institution does in fact promote faculty travel thereby eleven responses reflect that the institutions in fact do promote faculty travel.
Table 2. Cross-tabulations of the extent of priority given by the schools to international programs (Question 13) with data from each section.

Institutional Commitment, Question 7: In your institution is there a global awareness program or committee designed to bring together campus-wide resources in a collaborative effort toward infusing a global perspective?

<table>
<thead>
<tr>
<th>Institutional Priority</th>
<th>None</th>
<th>Low</th>
<th>Some</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Awareness Program</td>
<td>Yes</td>
<td>1</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>1</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>missing observation</td>
<td>= 1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Faculty Development, Question 18: In what ways does the Education Department/College promote international travel for faculty?

<table>
<thead>
<tr>
<th>Institutional Priority</th>
<th>None</th>
<th>Low</th>
<th>Some</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty Travel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. does not promote</td>
<td>Yes</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>2</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>missing observations</td>
<td>= 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. travel grants</td>
<td>Yes</td>
<td>1</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>missing observations</td>
<td>= 1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2. (continued)

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>Low</th>
<th>Some</th>
<th>High</th>
</tr>
</thead>
</table>
c. leave of absence     |      |     |      |      |
| Yes                    | 2    | 8   | 4    |      |
| No                     | 1    | 4   | 3    |      |
missing observations = 1

Curriculum, Question 23: Are international/intercultural issues given priority by the curriculum committee?

<table>
<thead>
<tr>
<th>Curriculum Committee</th>
<th>None</th>
<th>Low</th>
<th>Some</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Some</td>
<td>3</td>
<td>6</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
missing observations = 2

Curriculum, Question 24: Are undergraduate students required to take any courses with global or international emphasis?

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>None</th>
<th>Low</th>
<th>Some</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td>7</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>
missing observations = 2
Table 2. (continued)

International Opportunities, Question 33: Is there an international student center on your campus?

<table>
<thead>
<tr>
<th>International Student Center</th>
<th>Institutional Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

missing observations = 1

Faculty Development

Institutional commitment is also reflected in faculty development support. The Fulbright Program is reported to be emphasized at 78.3% of the schools. When asked in what ways faculty work abroad is encouraged, the majority (86.4%) said their school publicizes such opportunities, 40.9% said their school initiates opportunities, and 54.5% said funding is made available for work/study abroad. Of the schools which have an education department, 34.8% reported having education faculty working abroad in academic year 1988-89. The majority (65.2%) also reported that their education department has one or more faculty members with work-abroad experience in general. Fifteen schools (65.2%) reported that their institution promotes programs to bring foreign professors to their campus.

Symposia, workshops, seminars, and/or conferences on international issues are made available to the faculty on an on-going
basis as reported by 88% of the respondents. See Table 3.

Research of an international nature such as world food, population, global environment, etc., is reported to be conducted at their schools by only 17.4% of the respondents. Faculty development is addressed in questions 15-23.

Table 3. Faculty development opportunities

<table>
<thead>
<tr>
<th>Faculty Development Opportunities</th>
<th>N</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-campus symposia, seminars workshops and/or conferences on global issues</td>
<td>21</td>
<td>20</td>
<td>95.2</td>
</tr>
<tr>
<td>Institutional encouragement to work/study abroad</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>by publicizing information</td>
<td>19</td>
<td></td>
<td>86.4</td>
</tr>
<tr>
<td>by initiating</td>
<td>9</td>
<td></td>
<td>40.9</td>
</tr>
<tr>
<td>by funding</td>
<td>12</td>
<td></td>
<td>54.5</td>
</tr>
<tr>
<td>Fulbright Program emphasized</td>
<td>23</td>
<td>18</td>
<td>78.3</td>
</tr>
<tr>
<td>Institutions reporting one or more faculty working abroad in academic year 1988-89</td>
<td>23</td>
<td>8</td>
<td>34.8</td>
</tr>
<tr>
<td>Research in international/ intercultural areas</td>
<td>23</td>
<td>4</td>
<td>17.4</td>
</tr>
</tbody>
</table>
Table 3. (continued)

<table>
<thead>
<tr>
<th>Faculty Development Opportunities</th>
<th>N</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programs which encourage foreign professors to come to campus.</td>
<td>23</td>
<td>15</td>
<td>65.2</td>
</tr>
</tbody>
</table>

Curriculum

Curriculum in this study is also considered to subsume Institutional Commitment. A comparison of curriculum committee priority on international/intercultural issues with institutional priority on these issues, indicated that approximately one-half (54.5% and 50% respectively) reported "some priority", a minority (13.6% and 18.2% respectively) reported "high priority", and little more than one-fourth (27.3% each) reported "low priority" on international/intercultural issues.

Slightly less than half (43.5%) of the institutions reported that their school offers minors or secondary majors in international areas. However, most indicated that students are encouraged to enroll in courses which are part of international programs. When asked, "Is there a curriculum strand in international/global education that consists of courses with a global perspective," more than half (54.5%) indicated there is such a strand in their curriculum. However, little more than one-third (36.4%) reported that strand to be listed as such in the course catalog.

The majority (54.5%) of the schools are reported to require undergraduate education students to take at least one course with global
or international emphasis. However, when asked if there is an introductory core course available which focuses on global issues as they effect education in the U.S., the majority (76.2%) reported that there is not.

Only one-third (33.3%) of the schools who have a teacher preparation program expect their students, during student teaching experiences, to teach classroom lessons that are organized around a configuration of global concepts. Data are addressed in more detail in Table 4. Curriculum is addressed in questions 24-29.

Table 4. International/intercultural curriculum opportunities

<table>
<thead>
<tr>
<th>International/Intercultural Opportunities</th>
<th>N</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority given to international/...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercultural issues by curriculum</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>committee.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>1</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>6</td>
<td>27.3</td>
<td></td>
</tr>
<tr>
<td>Some</td>
<td>12</td>
<td>54.5</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>3</td>
<td>13.6</td>
<td></td>
</tr>
<tr>
<td>Priority given to international/...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercultural programs by institution</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>1</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>6</td>
<td>27.3</td>
<td></td>
</tr>
<tr>
<td>Some</td>
<td>11</td>
<td>50.0</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>4</td>
<td>18.2</td>
<td></td>
</tr>
</tbody>
</table>
Table 4. (continued)

<table>
<thead>
<tr>
<th>International/Intercultural Opportunities</th>
<th>N</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minors or secondary majors available in international areas.</td>
<td>23</td>
<td>10</td>
<td>43.5</td>
</tr>
<tr>
<td>Availability of an introductory core course on global issues.</td>
<td>21</td>
<td>5</td>
<td>23.8</td>
</tr>
<tr>
<td>Requirement of an introductory core course on global issues.</td>
<td>22</td>
<td>12</td>
<td>54.5</td>
</tr>
<tr>
<td>Expectation that student teachers teach with global concepts.</td>
<td>18</td>
<td>6</td>
<td>33.3</td>
</tr>
</tbody>
</table>

Student Internationalization Opportunities

Many opportunities exist on campus for students to receive exposure to international/global issues, experiences, and people from other cultures. Some of these ways, but certainly not all, are addressed in this study. In addition to faculty with international/intercultural experiences, and curriculum which offers exposure to international/intercultural issues, the researcher was interested also in what other international/intercultural opportunities are provided by the institutions for students and future teachers.
The majority (87%) of the schools reported that their institution participates in a student foreign exchange program. Eighteen of the twenty schools (90%) responding to this question indicated that they had students studying abroad in academic year 1988-89.

Of the schools reporting to have clubs or organizations for international students (83.3%), 77.3% stated that these clubs promote cultural exchange programs. However, most schools (65.2%) reported that they do not have an international student center where students can meet and interact with each other. Also, resource centers which provide culture kits, films, slides, books, etc., on other cultures are reported available on only 39% of the Iowa campuses. See Table 5.

Most of the schools (95.2%) offer to students and faculty symposia, seminars, workshops, and/or conferences on global issues. See Table 3. And many (63.6%) report that the Education Department cosponsors international programs with other departments.

Opportunity to interact with students and/or faculty from other countries is available at most Iowa colleges (95.7%). The percentage of total enrollment who are international students is reported at 6.2% at public schools, and 1.9% at private schools. Opportunity to interact with American minority students is possible at all Iowa schools. And almost equally possible whether a student attends a private college or a public institution. Of the total enrollment at public schools, 4.68% are American minorities. At the private schools, 4.9% are minority students. See Figure 2.
Figure 2. The percentage of international students and minority students of total enrollment at public and private colleges in Iowa.

Table 5. Student internationalization opportunities

<table>
<thead>
<tr>
<th>Student Internationalization Opportunities</th>
<th>N</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. students studying abroad during academic year 1988-89.</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>2</td>
<td>10.0</td>
<td></td>
</tr>
<tr>
<td>1 - 25</td>
<td>9</td>
<td>45.0</td>
<td></td>
</tr>
<tr>
<td>26 - 100</td>
<td>5</td>
<td>25.0</td>
<td></td>
</tr>
<tr>
<td>100 - 350</td>
<td>4</td>
<td>20.0</td>
<td></td>
</tr>
</tbody>
</table>
Table 5. (continued)

<table>
<thead>
<tr>
<th>Student Internationalization Opportunities</th>
<th>N</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education department as co-sponsor of international programs with other departments on campus (e.g., cultural events, guest speaker, activities, etc.).</td>
<td>22</td>
<td>14</td>
<td>63.6</td>
</tr>
<tr>
<td>Presence of an international resource center on campus (culture kits, films, books, slides, etc.).</td>
<td>23</td>
<td>9</td>
<td>39.1</td>
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<tr>
<td>Presence of an international student center on campus</td>
<td>23</td>
<td>8</td>
<td>34.8</td>
</tr>
<tr>
<td>Clubs/organizations which promote social cultural exchange activities</td>
<td>22</td>
<td>17</td>
<td>77.3</td>
</tr>
</tbody>
</table>
CHAPTER V

SUMMARY AND CONCLUSIONS

"One of our challenges at Iowa State [University]...is to begin to educate our students for global comprehension" (Eaton, 1987). This intent expressed by the current president of Iowa State University, Gordon P. Eaton, at his inaugural address expressed the challenge taken up by many educators today. This concern is indicated in the current literature.

The Iowa Department of Education has acted upon this concern by initiating the Iowa Global Education Standard. The Standard mandates that all school districts develop and implement a plan whereby teachers infuse a global perspective into all areas of their curriculum.

This concern of developing a global perspective in our students has emerged from the recognition that we as a nation are living in an increasingly interdependent world, a world in which America plays a major role. The changing demographics of the United States which include many diverse populations; a deteriorating global environment; stockpiles of nuclear armaments; and economic interdependence all contribute to common concerns with people beyond U.S. borders.

Global education, teaching with a global perspective, has emerged as a way to develop future citizens capable of making informed decisions in an interconnected, complex world. This development in part is dependent upon the preparation, skills, and attitudes of the teachers who teach our children.

The concept of global education is the basis for this study. The primary focus is on the ways available on a college campus which provide students, including future teachers, the opportunity to develop a global perspective. The study focused on (1) the commitment of Iowa
college administrators towards international issues; (2) faculty
development towards internationalization; (3) curriculum which
contributes to a global perspective; and (4) other on-campus
internationalization opportunities for students.

A survey instrument was developed by the researcher to assess the
above-mentioned areas of interest.

The questionnaire, along with a cover letter briefly explaining the
questionnaire and a prepaid return envelope were mailed to 31
accredited, four-year colleges and universities in Iowa. A follow-up
postcard and/or phonecall was made four weeks later. The contact
made was to Coordinators of International Education as identified by
the Iowa State University Office of International Education.

Of the original 31 educators contacted, 25 responded. A tri-college
department of education for three of the schools compiled one unified
response to the questionnaire bringing the total of valid questionnaires
to 23.

The questionnaires returned represent all three public universities
and 64.5% of the private accredited, four-year colleges and universities
in Iowa.

Findings

On the basis of the instrument used, the data collected in this
investigation of teacher preparation in the area of global education, the
following conclusions are drawn:

1. Based on this set of questions and one person's response from
each institution, it appears that there is an overall institutional
commitment towards internationalization of pre-service teacher
education in Iowa as reflected in Table 4 and in narrative on pg.
58. The reader is cautioned that the data reflect a collective response only.

2. The areas of faculty development, curriculum, and other student internationalization opportunities subsumed under the section on institutional commitment, suggest that collectively they support the positive response to institutional commitment, as reflected in Table 3.

3. The schools which have more international and minority students also tend to be more committed to internationalization through the curriculum and other programs.

Discussion

In this study the activities which promote internationalization, i.e., faculty development, curriculum, and other on-campus activities, subsume the question of institutional commitment. These activities significantly support the positive response to institutional commitment.

This study focused first on the presence or absence of an Office of International Affairs on campus. Generally speaking, this office coordinates all international activities of a college or university. These activities include, but are not limited to, responsibility for international and area studies; faculty and student exchange programs; development of new courses; recruitment of faculty in international related areas including foreign languages; recruitment of international students; and administration of foreign travel grants, scholarships, and fellowship awards. Because of the broad range of responsibility of such an office, this is an important component for providing international opportunities for students and faculty. In this study the positive response to this question is encouraging because it indicates that there
is sufficient international emphasis at the institutions to warrant such an office.

A significant correlation which also supports institutional commitment is a cross-tabulation of the presence of a program or committee which brings together campus-wide resources and the degree of priority to international issues of the school as reported by the respondents.

This researcher was especially interested in the percentages of international and American minority students of total enrollment because this is an opportunity to interact face to face with people of other cultures and different perspectives. It was expected that a greater percentage of minority students would be present on public school campuses because of expected recruitment practices. However, the opposite appears to be the case. This study shows that a slightly greater percentage of minority students are enrolled at private colleges indicating an equal opportunity to interact whether a student attends a private or public school. Opportunity to interact with students or faculty from other countries is possible at all Iowa colleges; however, opportunity at public schools is much greater because of the number of students and faculty from other countries present on the public school campuses.

It is the opinion of this researcher that faculty work experience in another country is a major contributor towards teaching with a global perspective. This study indicated more support for these experiences by the institutions than was expected by the researcher. The Fulbright program is emphasized and institutional funding is also reported as positive. The promotion to bring foreign professors to Iowa campuses is also emphasized.

Consistent with the indicated institutional commitment is curriculum. Most schools indicated that students are encouraged to
enroll in courses with international emphasis and the majority of the
schools require an international course of some type. It was not
questioned if these requirements are mostly language requirements.
Although availability of majors in international areas is not questioned in
this study, secondary majors and minors in these areas are reportedly
not available for the most part. It was noted that those schools which
require courses with global or international emphasis also tended to be
the schools with average or greater percentages of minority and
international students. Inconsistent with the positive emphasis on
courses with global emphasis is the lower expectation of the schools
who have a teacher preparation program that their student teachers
teach with a global perspective during student teaching experiences.

The results of this study indicated a positive orientation towards the
development of a global perspective through faculty experience and
curriculum available in most Iowa colleges. Congruent with this are
other forms of internationalization activities and opportunities available
on campus. For instance, seminars, symposia, workshops, and
conferences of a global nature occur on a regular basis on most
campuses. The education departments co-sponsor many of these
programs.

Opportunity to study abroad and/or meet people from other cultures
on Iowa campuses is reportedly possible on all campuses. Interaction is
encouraged through clubs and organizations whose activities promote
interaction. However, most of the campuses do not have an
international center for such interaction to occur. And most of the
campuses do not have a resource center which offers use of films,
slides, culture kits, etc., on other countries.

The opinion of the respondents on the priority given by their
institutions to internationalization is congruent with supporting
evidence indicated by responses in the sections on faculty development,
Repeating this study with a different set of respondents from Iowa schools could result in data indicating much different results. Coordinators of International Education may be much more positive than other faculty and staff about their institution's efforts towards developing global perspectives in their students.

Students who will become the teachers of our children are influential members of society. Their ability to impart a global perspective to their students is dependent to a great extent upon their teacher preparation and experiences in college. If a global perspective is essential in this society, our teachers will be influential in bringing it about. All teachers of every subject at every level can play a very important role in infusing a global perspective if they are prepared to do so.

Limitations

1. A limitation of this study is that the instrument was mailed to only one person in each institution who may or may not have knowledge of all activities and opportunities available in their institution. It is suggested that, besides coordinators of international programs, teachers providing classroom instruction would be an appropriate source of information.

2. If this survey instrument is used for further research it should be expanded to include teacher-related items and some items should be refined.

Recommendations for Future Research

1. Determine the impact of global education instruction on the perspectives, knowledge, and skills of students.
2. Identify the critical instructional skills for the teaching of global education.

3. Conduct a needs assessment of school districts for implementation of the Standard.

4. Determine the attitudes of practicing teachers towards global education.

5. Identify global education resources and materials.
BIBLIOGRAPHY


Study Commission on Global Education. (1986). The United States prepares for its future. New York: Global Perspectives In Education.


ADDITIONAL REFERENCES


Braisted, P.J. No date. *Toward a new humanism* New Haven: The Hazen Foundation, 400 Prospect Street, New Haven, CT.


Coleman, W.T., Jr. & Cannan-Selby, C. *Educating Americans for the 21st century: A plan of action for improving mathematics, science and technology education for all American elementary and secondary students so that their achievement is the best in the world by 1995*. Publications, Room 232, National Science Foundations, 1800 G Street, NW, Washington, DC.


ACKNOWLEDGEMENTS

An academic undertaking such as this is not completed alone, but rather reflects the efforts and support of many, only a few of whom can be mentioned here. Many thanks and sincere appreciation are extended to my committee members, Dr. William Wolansky, Dr. Sally Williams, and Dr. Dominick Pellegrino for their continued guidance, and support.

I would like to thank my husband, Kenneth Lassila, for his constant encouragement and support in every way.
APPENDIX A: CORRESPONDENCE
May 20, 1989

Dear Participant:

In order to help school children acquire the knowledge and skills needed to become responsible, informed citizens of today's world, our teachers must be prepared to teach with a global perspective. As you are probably aware, the Iowa Department of Education has issued the Global Education Standard 4.5(11) in order to help meet this need.

The Iowa State University Office of International Education is conducting a study to determine how undergraduate teacher programs in Iowa are preparing our future teachers to meet the Iowa Global Education mandate.

We are asking for your assistance. Please set aside approximately 30 minutes within the next seven days to complete the enclosed questionnaire. An addressed, postage-paid envelope is enclosed for return of your questionnaire. Please return it by June 2, 1989. Your response is valuable to our study.

Survey responses are confidential. The results will be summarized and the data will be reported in such a manner as to not allow individual identification. Questionnaires are coded only to allow for follow-up of non-respondents.

We appreciate your participation very much! If you have any questions about this study, please call or write either of us.

Thank you in advance for your cooperation.

Dr. William Wolsky
Professor
International Education
Iowa State University
(515) 294-7350

Graduate Assistant
Dean of Students Office
Iowa State University
(515) 294-1020
July 28, 1989

Dear Educator:

I am asking for your assistance. Several months ago a questionnaire on global education was sent to your institution. As yet, we have not received the information from your school.

As you probably know, the Iowa Department of Education has issued a mandate requiring all school districts to develop a plan for infusing a global perspective into all areas of instruction at all levels. The purpose of the questionnaire sent to your school is to help the Iowa State University Office of International Education assess the ways in which undergraduate teacher programs in Iowa are preparing our future teachers to teach with a global perspective.

Will you set aside approximately 30 minutes within the next few days to complete the enclosed questionnaire or forward it to the appropriate department for completion? An addressed, postage-paid envelope is enclosed for return of the questionnaire.

Because we want very much to include your school in our study, your answers are important to us. If you have any questions about the questionnaire or the study please call me collect at (515) 292-8870.

Thanks very much!

Susan Schulzinger
Graduate Assistant
International Education
Iowa State University
APPENDIX B: GLOBAL EDUCATION: TEACHER PREPARATION INSTRUMENT
GLOBAL EDUCATION: A STUDY OF
PRE-SERVICE TEACHER TRAINING IN IOWA

THE IOWA GLOBAL EDUCATION STANDARD

The Board shall adopt a plan which incorporates global perspectives into all areas and levels of the educational program so that students have the opportunity to acquire a realistic perspective on world issues, problems, and prospects for an awareness of the relationship between an individual's self-interest and the concerns of the people elsewhere in the world. The plan shall include procedures for review of its effectiveness.

DEFINITIONS

A Global Perspective consists of the information, attitudes, awareness, and skills, which taken together, can help individuals see the world as interrelated systems. It facilitates an understanding of the world and how people affect others and how others affect them.

Global Education is the process by which people acquire the ability to conceptualize and understand the complexities of the international system; a knowledge of world cultures and international events; and an appreciation of the diversity and commonalities of human values and interests.

FOCUS OF STUDY

- Institutional commitment to internationalization
- Faculty development
- Curriculum and education program requirements
- Student internationalization opportunities
PART A: DEMOGRAPHICS

1. Total college/university enrollment for academic year 1988-89.  
   Number __________

2. Community size excluding college population.  
   Number __________

3. Total number of minority American students enrolled for academic year 1988-89.  
   Number __________

4. Number of international students majoring in Education.  
   Elementary __________  Secondary __________

5. Total number of students who graduated and obtained a teaching certificate in calendar year 1988.  
   Elementary __________  Secondary __________

PART B: INSTITUTIONAL COMMITMENT

6. Is there a visible Office of International Affairs in your institution?  
   Yes ___  No ___

7. In your institution is there a global awareness program or committee designed to bring together campus-wide resources in a collaborative effort toward infusing a global perspective?  
   Yes ___  No ___

8. In your institution is there a center or any groups organized for conducting international research?  
   Yes ___  No ___

   If yes, in what areas? (Please circle letter(s) of your response)
   a  world food/population  e  indigenous knowledge
   b  human rights/human values  f  global education
   c  environment/natural resources  g  other: ______________________
   d  global interdependence


9. Does your institution participate in consortia efforts on international education programs (e.g., Iowa International Trade Center, Iowa Peace Institute, etc.)
   Yes____ No____

10. Is your institution involved in any International Sister-State Programs?
    Yes____ No____

    If yes, with what states or provinces? (Attach list if preferred)

    ______________________  ______________________
    ______________________  ______________________
    ______________________  ______________________

11. Are minors or secondary majors in international areas available from your institution?
    Yes____ No____

12. Does your institution offer the following opportunities regarding global issues for students and faculty on an ongoing basis:
    (Indicate response(s) with an X).

    Symposia ______
    Seminars ______
    Workshops ______
    Conferences ______

    These programs primarily focus on: (Please circle letter(s) of your response)

    a specific geographic areas  e human rights/human resources
    b international women's issues  f. global peace/conflict resolution
    c global interdependence  g. other: ____________________________
    d environment/natural resources

13. In your opinion, to what extent does your institution give priority to international programs in the determination of institutional policy?
    none____ low priority____ some priority____ high priority____

    If international programs are given any priority, are they a consideration in the budget?
    Yes____ No____
14. Does your institution encourage faculty study/work abroad programs by: (Please circle letter(s) of your response)

   a. investigating such programs
   b. publicizing information
   c. initiating faculty exchange
   d. providing funding
   e. other

PART C: FACULTY DEVELOPMENT

15. Does the Education Department/College have a faculty foreign exchange program?  
    Yes ___  No ___

16. Number of Education faculty with work/study experience in a foreign country.  
    Number ___  Out of total of ___

17. Number of Education faculty working or studying in a foreign country during academic year 1988-89. Please specify by country. (Attach list if preferred)

   Country  Number  Country  Number
   _________  _________  _________  _________
   _________  _________  _________  _________
   _________  _________  _________  _________

18. In what way(s) does the Education Department/College promote international travel for faculty? (Please circle letter(s) of response)

   a. does not promote
   b. tuition exchange
   c. travel grants
   d. professional leave of absence
   e. attendance at international conferences
   f. other: ______________

19. Does your institution promote programs to bring foreign professors to your campus?  
    Yes ___  No ___

20. Is the Fulbright program emphasized/encouraged?  
    Yes ___  No ___
21. Are funds and travel time provided annually to Education faculty to support overseas travel to present papers on international topics? (Indicate response with an X)
never ___ rarely ___ occasionally ___ frequently ___

22. Does the Education Department cosponsor international programs with other departments on campus? (e.g., guest speakers, cultural events, student activities, etc.)
Yes ___ No ___

23. Are international/intercultural issues given priority by the curriculum committee?
none ___ low priority ___ some priority ___ high priority ___

PART D: CURRICULUM

24. Are undergraduate education students required to take any courses with global or international emphasis in their content concentration?
Yes ___ No ___

If yes, what courses?
________________________________________________________
________________________________________________________
________________________________________________________

25. Does your institution emphasize foreign language study for students intending to study abroad?
Yes ___ No ___

26. Is there an introductory core course available which focuses on global issues as they affect education in the United States?
Yes ___ No ___

27. Are students encouraged to enroll in courses dealing with multinational corporations, international economics, international human rights, and world politics?
Yes ___ No ___
23. Is there a curriculum strand in international/global education that consists of courses with a global perspective?
   Yes____  No____
   Is there a list compiled from the college/university catalog especially for such a strand?
   Yes____  No____

29. During student teaching experience are students expected to teach classroom lessons that are organized around a configuration of global concepts such as change, conflict, communication, or interdependence?
   Yes____  No____

PART E:  STUDENT INTERNATIONALIZATION OPPORTUNITIES

30. Total number of international students registered during the 1988-89 academic year? Please record by country. (Attach list if preferred)

<table>
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<tr>
<th>Country</th>
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31. Number of U.S. students participating in a foreign study or exchange program during academic year 1988-89. Please record by country. (Attach list if preferred)

<table>
<thead>
<tr>
<th>Country</th>
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</table>

32. Is there an International Resource Center on your campus? (e.g., books, films, kits, etc.)
   Yes____  No____
33. Is there an international student center on your campus?  
   Yes ___  No ___

34. Please list clubs/organizations for international students. (Attach list if preferred)
   __________________________  __________________________
   __________________________  __________________________
   __________________________  __________________________

35. Do the above organizations promote cultural exchange activities? (e.g., international fairs, social activities, etc.)  
   Yes ___  No ___

36. Please list student chapters of international professional associations available on your campus (e.g., Society for International Development).
   __________________________  __________________________
   __________________________  __________________________
   __________________________  __________________________
   __________________________  __________________________

ADDITIONAL COMMENTS: ____________________________________________  
   ____________________________________________________________  
   ____________________________________________________________  
   ____________________________________________________________  
   ____________________________________________________________  

THANK YOU FOR YOUR PARTICIPATION!