DOCUMENT RESUME

ED 129 675 SO 009 449

TITLE	Global Studies Conference (Groton School, Groton, Massachusetts, June 11-13, 1976).
INSTITUTION	Global Development Studies Inst., Madison, N.J.
PUB DATE	76
NOTE	19p.; For a related document, see ED 113 267
EDRS PRICE	MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS	Case Studies; Conference Reports; *Curriculum Development; Development; Educational Objectives; Energy; Energy Conservation; Food; *Global Approach; Instructional Materials; *Interdisciplinary Approach; International Education; Natural Resources; Natural Sciences; Secondary Education; Social Sciences; *World Affairs; *World Problems

ABSTRACT

This workshop provided a meeting place for 35 secondary-school educators and resource leaders to share concerns, ideas, methodologies, and content in the teaching of global studies. The purpose was to bring together teachers from the social science and natural science departments to develop plans to integrate their respective departments for the teaching of global issues. Six goals for global studies were identified along with recommendations and suggestions for further action. The case study method was recommended as being particularly useful when focusing on topics such as food and energy. These four areas of common concern were recognized: skills and content, methodology, resources and materials, and obstacles to the planning and introduction of a new course. The document concludes with a list of conference papers, conference participants, and resource persons. The conference agenda is also included. (Author/DB)

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GLOBAL STUDIES CONFERENCE

Groton School

Groton, Massachusetts

June 11-13, 1976

The Groton Global Studies Conference was the direct result of an earlier workshop held by the Management Institute and the University of Massachusetts in the spring of 1975 in Amherst, Massachusetts, involving participants from nine universities and colleges and six secondary schools from the Northeastern area. The focus of that workshop at Amherst was on the implementation of global studies at these institutions and on the variety of ways to handle difficulties with both educational content and institutional structures. Without careful attention to these difficulties associated with academic innovation and change, conceptual agreement on the need for a less parochial and more transnational understanding of our world and our country's place within it rests in the category of what ought to be taught, rather than what in fact is taught.

Among the several recommendations of the Amherst Workshop were:

- the desirability of focusing on specitic topics or themes of global significance in order to bring expert knowledge to the teacher and the student;

- the encouragement of multi-disciplinary teaching through interdepartmental coordination.

Institutional structures at colleges and schools are significantly different and, to a lesser but still important extent, so are the professional approaches to teaching at the two levels. A subsequent conference organized around secondary school participation, using university faculty as resource leaders was therefore decided upon. The topics of food and energy were chosen as themes which can lead to an understanding of global development. These themes necessarily involve cognitive knowledge and the competencies of the natural sciences, combined with affective knowledge and the competencies of the social sciences.

Groton School, Groton, Massachusetts, offered its campus and facilities for a three day conference involving thirty-five participants and resource leaders; and the MIND staff, with much help from the University of Massachusetts, developed the terms of reference, agenda, participation, and overall design. The conference philosophy and purpose were stated in the terms of reference:

> "Courses in global education are designed to include both attitudinal and cognitive learning experience in preparation for a world of interdependence, confronted by transnational issues and problems of great complexity and importance, a world divided by enormous and growing gaps in social and economic well-being as well as one of multicultural relationships. A purely attitudinal approach, while perhaps successful in raising consciousness about such issues, tends to leave the student overwhelmed by the dimensions of inequity and his or her helplessness in addressing the issues. A purely cognitive approach, while perhaps successful in providing world facts and figures, tends to become an arithmetic experience of little relevance to the student's life style, career options, and orientation toward others.
>
> "Where complimentary departments, particularly in the social and natural science areas, are able to share in the implementation of global education, both essential facets can be handled effectively in a coordinated and mutually supportive manner.
>
> "Difficulties include curriculum development, coordinated teaching methods, materials selection, scheduling, and evaluation, among others.
>
> "This workshop is designed to bring together faculties from relevant departments and administrators involved in curriculum and scheduling, to share experiences in handling implementational problems, discuss alternative methods, and benefit from the thoughts of university-level experts."

As this conference report indicates, the purpose was well served by an enthusiastic, imaginative, and determined group of secondary school educators. There is little doubt that these schools will move ahead with new or expanded programs in global studies, and it is hoped that their work will help others.

Our special thanks to Drs. Stephen Guild and Joseph Marcus, University of Massachusetts, Dr. William Spencer, Florida State University, Mr. Roy Harrington, John Deere & Company, and Mr. Frank White, Thompson Education Center. Groton School, through the leadership of Rev. Rowland Cox, Headmaster, and Mr. George Zink, Science Department Chairman, went the extra mile to make the conference successful.

Finally, this report serves to note that the global development studies program of Management Institute for National Development is now formed into Global Development Studies Institute, so that our own structure and organization can better serve the rapidly growing attention to global education throughout the country. To those of us who have struggled since the late 1960's to bring about such education in our schools and colleges, these are extremely exciting times. This Groton Conference marks the final MIND program in global education and the first GDSI initiative. We thank you all for your past encouragement, support, and faith; we look forward to even more constructive and close relationships.

For the Staff,

Wilmer H. Kingsford
President

REPORT

Groton Global Studies Conference

The conference at Groton provided an opportunity for secondary school faculties from the public, independent, and Catholic sectors to focus together on common concerns, ideas, methodologies, and content in the teaching of global studies. The central purpose was to bring together teachers from the social science and natural science departments, to develop plans to integrate their respective departments for the teaching of global issues. This three-day meeting was not only a forum for the exchange of ideas and experiences, but challenged each participant or school team to prepare a written statement which would include the general objectives of a natural/social science interdepartmental plan to teach global studies concepts at their respective schools. Groton School provided warm hospitality, comfortable accomodations, and delicious meals, contributing greatly to the work of a demanding agenda in a relaxed atmosphere.

In his welcoming address, Rev. Rowland Cox, Headmaster, emphasized that one should not overlook the philosophical aspects of global issues and the ethical questions involved. His statement focused upon the essence of educational endeavor-- to teach about the world in humanistic terms.

Following Rev. Cox, Mr. Wilmer H. Kingsford, President of MIND, discussed the dilemma of a course that cannot be taught but must be taught. The "cannot" list includes:

> Teaching any subject assumes teacher competence in that subject, documented by degrees, certification, and experience. There are no such global studies teachers because global studies did not exist when they were students.
>
> The most familiar teaching methods do not work. As there are very few answers in global studies, a teacher cannot expect to teach answers and ways of confirming them.
>
> The fail-safe technique of relying on a hard cover textbook with lesson-planned chapters, appropriate questions for quizzes, and the teacher's copy with answers, does not exist and will not for the foreseeable future.
>
> Global Studies require input form multiple disciplines. That becomes complicated with neatly computerized schedules of classes by departments, providing little opportunity for coordinating teaching.

Outside the classroom there are additional reasons why global studies cannot be taught. Budget cuts, declining enrollments, and the "back to basics" push all argue against course innovation.

Such words as interdependence, global, transnational, development, are regarded with suspicion by some of those who are in powerful positions affecting education.

The "must" list can be summarized in six short sentences:

The prime purpose of general education is to train the young mind and equip it with the knowledge and understanding which that mind will need to draw upon in adult years.

Today's students will be about age forty in the year 2000, entering midcareers and moving into positions of leadership, whatever their chosen pursuits.

There is no pursuit that, over the next twenty five years, can remain insulated from global impact.

There is no nation, including our own, that can remain untouched by extraterritorial events.

There is no society or culture, including our own, which can stone-wall global thought and hope to survive.

If general education has meaning, global studies must be taught, for the world will not go away nor can we hide from it.

To address this dilemma of a course that cannot be taught, but must be taught, the conference agenda centered on the case study method. By focusing on the topics of food and energy, the workshop explored how two such global cases interact and affect development both at home and around the world.

The opening day included a panel whose members provided some of the hard knowledge needed to talk in practical terms about food, energy, and their interrelationships. There followed three intensive group discussions of the panel's comments, and additional development issues were suggested.

During the second day, the three groups began to think how food, energy, and other transnational topics could be taught in a secondary school between the natural and social science departments. The groups then met in plenary to discuss how schools can institute a new course into an established curriculum, using an interdisciplinary approach. During a working session that afternoon, each school prepared a written statement that included the general objectives of a natural science/social science interdepartmental plan to teach global studies concepts, a list of the obstacles to

achieving those objectives, plans to overcome them, and a proposed time line for implementation. The groups then prepared a summary of their deliberations for presentation at the final plenary on the third day.

At the concluding session, specific recommendations were considered for practical steps toward global studies teaching during the next two academic years. These recommendations are discussed in the next section, and are followed by descriptive summaries of the panel discussion on food, energy, and development, the plenary address on curriculum innovation, and the highlights of the group reports.

Conference papers, participants, and the agenda are found at the end of this report.

Recommended Plans for Further Activities

The most direct means of continuing the work of the conference is to schedule a follow-up meeting of as many of the same participants as possible, to review the progress made at each school, discuss problem areas, and exchange ideas for implementation. A one day meeting can be scheduled for the autumn.

An in-service workshop in cooperation with the University of Massachusetts, of approximately a week's duration in the summer is contemplated. The focus would be on curriculum, methodologies, and interdepartmental coordination. One or two pre-workshop meetings would be held during the academic year, in preparation. The in-service program would be open to an expanded number of schools.

Customarily, the regional centers of State Education Departments schedule meetings of area schools; the agendae can include global education. These centers can circulate announcements of such meetings and assist in distributing reports and papers.

There exist many professional bodies whose members are teachers and administrators, and through these members agenda topics related to global education can be recommended for inclusion at the scheduled meetings of these groups.

A further advantage of these professional bodies is that customarily they issue journals and newsletters. Articles and items of interest concerned with global education as it affects a particular discipline is a good method of communication.

Other communications media include the many educational newsletters of national organizations and resource centers. Topics of broad interest, such as curriculum development, materials selection, evaluation techniques, and coordinating methods are welcome by these associations.

The local community can become a valuable resource center for teachers and students. A skills and experience bank of local citizens who have global knowledge can be used for guest speakers. Local enterprises and organizations frequently have international interests. The local community itself is a microcosm of the global community, with cultural, religious, racial, economic, and similar distinctions.

The key word for these and further activities is Communication. There are many ways of assisting in communication : organizing meetings and university programs, getting assistance from State agencies and professional organizations, working with the educational media. But ultimately good communication remains the responsibility of each teacher and the continuous initiatives by that teacher to keep in touch with colleagues. In an innovative, interdisciplinary program of global studies, communication at the individual teacher level is essential. The simplest methods of letter, telephone, and visit, between schools, departments, and individual faculty members are the best methods of avoiding isolation as the pressures of the academic year build.

Panel Discussion on Food, Energy, and Development

The way had been paved for the panel discussion on Food, Energy, and Development by sending background papers on each panelist's topic to the conference participants in advance. The discussion itself provided basic information to serve as examples of factual knowledge needed to teach interrelations of global issues. But, more important, the panel emphasized key strategies for understanding and teaching global studies.

J. Carlisle Spivey, Assistant Director of MIND, opened the panel discussion on world food supply and addressed the question of why widespread hunger exists in the world today. She emphasized that the responsibility for world hunger belongs to no one factor. Rather, the issue is the result of many complex and multidimensional problems affecting every level of human society. Three categories were outlined as major factors affecting world food supply: the role of nature, the role of agricultural production, and the role of government policy. To the question of what is being done, Spivey cited the Green Revolution and other agricultural research programs, various types of aid programs, and, finally, the UN World Food Conference and resulting activities.

Dr. Jospeh Marcus, Associate Dean, School of Engineering, University of Massachusetts, next gave a presentation on energy supply. He stressed that technology must be included in any discussion of energy, as energy supply depends on it. Political and economic factors must also be taken into consideration. Marcus talked about the dwindling supplies of oil and gas reserves and stressed the need to pursue national energy policies. He outlined a number of national strategies that have been advanced to solve the energy

problem:

- -Reduction of energy waste and inefficiencies to ease the supply problems
- -Production of synthetic fuels from coal and oil shale resources to substitute directly for diminishing supplies of oil and gas
- -Emphasis on the alteration of consumption patterns, shifting from reliance on petroleum and gas to reliance on electricity available from domestically abundant coal sources
- -Encouragement of technical research on alternate energy sources: nuclear, solar, wind, thermal

Roy E. Harrington, Product Planning Department, John Deere & Company, dealt with the subject of technology and its impact on food supply and the contrasting roles of land, labor, and capital in the United States, Japan, West Germany, and the Punjab (often called India's Bread Basket). The use made of available land, labor, and capital determines whether the farmer will use mechanization, either to improve the productivity of his labor or the productivity of his land. This decision rests on the various conditions of agriculture and society in differing countries.

Harrington pointed out that both Japan and West Germany use high inputs of labor, fertilizer, and tractor power to compensate for shortage of land. In the U.S., the largest food exporting nation, farm sizes have more than doubled since 1940 while the number of workers per farm has remained rather constant. The Punjab is the most mechanized state in India with one farmer in fifteen now owning a tractor. As a result of these modern inputs of seed, irrigation, fertilizers, and power, the productivity of the Punjabi farmer's land has more than doubled since 1961. During that same period of time, the productivity of his labor has almost doubled while that of the nation as a whole remained stagnant. At the same time, the adaptation of modern methods in the Punjab has not decreased the farm population. Farm labor has actually increased along with farm incomes. The needs are in areas of agricultural infrastructure: roads, storage, credit systems, community service centers.

The three panelists and the participants discussed the intricate sets of conditions which determine methods of agricultural production in different societies. These include variations in land availability, population density and food demand, water and energy availability, climatic conditions, labor and capital productivity, and appropriate agricultural technologies. Less direct but equally significant are pricing structures and other governmental policies, the cultural and social patterns of the farm populations, land tenure, supportive community infrastructures, educational ser-

vices, and such international determinants as terms of trade and the cost of imported requirements-- petroleum, fertilizers, irrigation supplies, tractors and other farm equipment.

Out of this session came the recognition that teaching of food and energy, particularly to students from largely urban homes, requires multiple disciplines and the knowledge of many departments in the sciences and humanities. Simplistic approaches are inadequate for understanding these and comparable global issues, for there is no one "right" answer.

Curriculum Innovation and Implementation

Participants met in plenary to hear Frank White, Executive Director of the Thompson Education Center, Thompson's Island, Boston. He addressed his remarks to the key question of "how can you teach it?" How can schools, using a multidisciplinary approach, introduce a new course of study into a set curriculum? To illustrate how change can occur in formal education, Mr. White drew upon his own experience at the Thompson Education Center and its work with the Boston school system and inner city children.

Any innovation in education must start with "can do's," not perfection. It must be prepared to compromise with "real education"-- those sacred parts of formal education which are neither evaluated nor questioned, and which fill the whole teaching day. Whatever the components, the innovative program should be presented to the administration as a unified plan, and responsibility for specific goals must be taken. There must be a clear explanation and justification of what is to be accomplished. Finally, the development of certain basic skills and attitudes is necessary for the success of a new course.

A variety of compromises must be considered, as a head-on collision with "real education" is certain to fail. Some suggestions for compromise follow:

-Off-campus experiences, provided students meet on-campus real education requirements (papers, homework, tests, etc.)

-Spot teaching, via mini-units of a new subject injected into established courses.

-Squeeze the typical schedule to make room for new offerings. The typical school week takes only two and one half days of actual teaching. The rest is recesses, study periods, extracurricular activities, assemblies, etc.

-Increase the flexibility of traditional courses. Sectionalize "real education" courses into optional units that qualify for those courses. In other words, make room for change.

-Question the school year calendar-- who decided that all knowledge should be taught in one hundred and eighty days each year?

-Horizontal education is interdisciplinary; vertical education is disciplinary. If the study goals of horizontal education (evaluated through on-going analysis) can meet vertical study goals, the disciplines can be satisfied.

-On grading horizontal education, measurable results are needed as colleges expect them. Provide a good course description and take care to define means and objectives more carefully than usual. Colleges will accept serious descriptive grades.

-Team teaching can draw upon faculties during their free periods, community volunteers, and college resource people. Man-power hours are available and under-utilized, especially in independent schools with low student-teacher ratios. Such staff can act as facilitator or guide, rather than the traditional role of authoritarian.

-Teaching style needs attention, for innovative education and summer in-service workshops can help with methodologies. They can build on the staff's own experiential strengths.

Internal resistance is real; educational change must recognize such resistance and deal with its several aspects. Examples are:

-Fear for jobs

-Fear of funding losses

-Disciplinary interests

-Protection of seniority

-Need of familiar props and structures

-The challenge: Is the new course education?

-The winning of professional respect

Finally, the innovator must plan around and involve decision makers and as early as possible, gain their active involvement.

A major benefit of educational innovation is that it brings faculties, administrators, and decision makers together. In Mr. White's words, "It brings adults together to do adult things together." Much of the time, educators meet only to discuss schedules, grades, disciplinary problems, and similar mechanics of the system. These

topics do not utilize the educational mind.

Group Reports

While the plenaries served as a resource and guide for content and methodology, group sessions allowed the participants to explore in depth their own and other methodologies, refine and expand the content of global studies courses, using input from the social sciences and natural sciences. Not only did each group include practitioners from both disciplines, but also a mix of public and independent schools. In addition, schools in each group were at various stages of implementation. Several had already been teaching global studies in one department from one to three years, while only one had been team-teaching it during the past year within the social studies and biology departments. Still others had made innovations and broadened the scope of their traditional social or natural science courses in an effort to make them more relevant to a changing world. Finally, there were those who felt a need for change in their teaching approach and came, eager to learn what others were doing.

The final reports generated by the three groups indicated that much hard thinking had gone into how each school might institute a global studies course on an interdepartmental basis. There were four areas of common concern: skills and content, methodology, resources and materials, and obstacles to the planning and introduction of a new course.

The groups stressed the importance of developing certain basic skills, without which students would be unable to cope with the concepts basic to a global issues course. Some of the necessary skills are:

-Map usage and a basic understanding of physical geography.

-Math and the use of statistics to read and interpret data.

-Reading and writing skills; use of non-U.S. authors.

-The inquiry method for understanding global concepts.

These traditional skills can be brought together and applied to the understanding of global problems, such as population, food and energy. The understanding of global issues requires a multidisciplinary approach since the factors comprising them are multifaceted in scope. Therefore, areas of knowledge can be drawn from the social sciences and natural sciences and carefully integrated to form the content of a global studies course. By integrating content from both disciplines, a global issues course will be greatly strengthened. As an example, the biological sciences could provide a wholistic view of the eco-system and a model of

the life cycle. The concept of interdependence could be demonstrated by viewing man as a part of the total environment. Social science input could come from economics, political science, and history.

Methodologies and approaches to implementation were discussed at length. Some participants questioned the need to create a separate new course and thought, given their particular situations, it might be easier to inject all courses with global content. This could be accomplished by identifying existing global units or areas in each course, enriching them with additional material, or inserting global units in courses that are non-global in content. Others felt that a pilot program could be started using a core of three or four faculty members who would integrate content and materials from several disciplines.

It was generally agreed that traditional methods of teaching were not adequate for teaching complex topics which have no definite solutions or right/wrong answers. Rather, a laboratory approach might be tried in which both teacher and student explore the facts together and think through alternatives. The use of a case study approach was considered a good method, and some teachers already had had experience with it. They said it is a good means of helping students develop new perspectives to tackle the complex issues of development. The case study approach also develops a better understanding of the concept of interdependence by breaking an issue down into its various components and demonstrating how each interrelates with the whole.

Faculty must start at the students' level, begin with what is familiar to them, and then proceed with more difficult concepts. Both affective and cognitive knowledge are needed to master global concepts. Students should develop an emotional awareness coupled with cognitive understanding. A motivational technique, such as a simulation game, is a good way to start but students must not be left naively empathizing and crusading for reform without having some hard facts to understand the realities.

As there are no textbooks or lesson plans in existence for teaching global studies, new materials and resources must be developed. Here, the local community can become a valuable resource. By arranging student participation in community service groups and inviting community leaders into the classroom as speakers, students will begin to understand how their community fits into the larger picture of the state, nation, and finally the world community. Foreign students from local colleges were considered another good resource. They could be invited to speak informally about their own way of life and could provide a first-hand insight into other value systems and cultures. Local minority groups could also be used in a similar fashion. Field trips were considered worthwhile as were novels dealing with other cultures, newspapers, and audio-visual materials. There seemed to be a general consensus

among those already teaching global studies that the off-campus project was particularly valuable for students to actually experience global influences in their daily lives.

Whenever innovation is attempted, there are inevitably obstacles that must be surmounted, and global studies is no exception. Though participants cited some of these, their school reports indicated that they could eventually overcome those obstacles. Some current difficulties are:

-The "back to basics" push, resulting from a reaction to inadequate skills training as shown by lower college board test scores in recent years.

-Declining enrollments which curtail curriculum choices and make resources scarce for launching innovations.

-Departmental isolation caused by scheduling, particularly in the public schools.

-Attitudinal resistance on the part of faculty and administration who are apathetic to change.

It is here that the implementational experience of the schools already teaching global studies was most valuable. These teachers stressed that faculty integration is the key to implementing an interdisciplinary curriculum.

Conference Papers

Roy E. Harrington

"Agricultural Engineering and Productivity"

"Reorganizing Productive, Energy-Efficient Agriculture in the Complex U.S. Food System," by L.F. Nelson, W.C. Burrows, & F.C. Stickler

Wilmer H. Kingsford

"Introductory Remarks"

Joseph Marcus

"A National Plan for Energy Research, Development & Demonstration: Creating Energy Choices for the Future," ERDA-48, Vol. 1

"The Utilization of Solar Energy to Help Meet Our Nation's Energy Needs," Ronald L. Thomas, NASA, TMX-68230

Pamela M. Ramsden

"Toward an Interdisciplinary Approach in Teaching Global Development Studies"

John Ripton and Francis J. Koppeis

"Implementation and Evaluation of an Interdisciplinary Approach to Global Development Studies at Portledge School"

J. Carlisle Spivey

"Hunger" What Does It Mean?" excerpted from World Food Supply: A Global Development Studies Case Study.

University of Massachusetts and Management Institute for National Development

"Report: Global Studies Workshop," Amherst, Massachusetts, 1975

Participants

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Mt. Hermon, Mass.

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Groton, Mass.

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Frank White
Thompson Education Center
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Observers

Rosemarie Cassels-Brown
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J. Malcom Forbes
Cambridge, Mass.

Agenda

June 11

2:00 PM — Plenary I

Welcome, agenda adoption, announcements.

Opening speakers. Overview of need for teaching global concerns and focusing on interrelated issues.

Rowland Cox, Headmaster, Groton School

Wilmer H. Kingsford, President, M.I.N.D.

3:30 PM — Plenary II

Panel discussion on Food, Energy, and Development.

A. Critical factors in world food supply.
J. Carlisle Spivey, M.I.N.D.

B. Critical factors in world energy supply.
Joseph Marcus, University of Massachusetts

C. Interrelationship of food and energy in developing and developed countries.
Roy E. Harrington, John Deere & Company

8:15 PM — Group Workshops I

To explore further the panel discussion and additional interrelated development issues. Each of the three groups will have a participant chairperson and rapporteur, with one of the panelists as resource person.

June 12

9:00 AM — Group Workshops II

To think how the topic areas can be taught in a secondary school using both the natural and social science departments. Draft report for Plenary IV.

11:00 AM — Plenary III

How schools can institute new courses into a set curriculum, using an interdisciplinary approach.
Frank White, Thompson Education Center

From 2:00 PM The participants from each school to confer on implementational methods and problems at their school, and to prepare a written statement which should include general objectives of a natural science/social science interdepartmental plan to teach global studies concepts, a listing of the obstacles which seem to stand in the way of achieving those objectives in that school, plans to overcome those obstacles, and a proposed timeline for achieving the objectives. Sole representatives from a school will be paired with colleagues from similar schools.

4:30 PM Group Workshops III

A. Discussion of school implementation statements for mutual suggestions, critique, and comments.

B. Final review of draft report for Plenary IV.

June 13

9:30 AM Plenary IV

Rapporteurs from each group present report and lead and discussion which might ensue.

11:00 AM Summary Conference Statement and planning for future steps.

12:30 PM Adjournment.