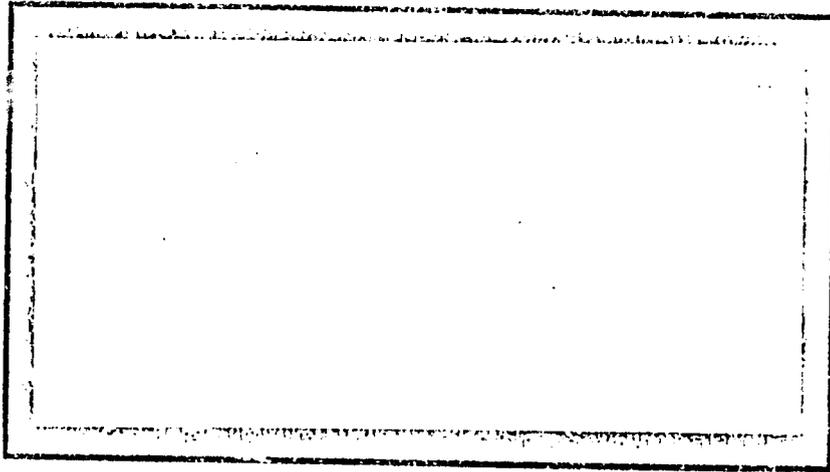


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AMERICAN PUBLIC HEALTH ASSOCIATION
International Health Programs
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Washington, D.C. 20005

POPULATION/FAMILY PLANNING/
ENVIRONMENTAL EDUCATION WORKSHOP
EGYPT

A Report Prepared By:
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During the Period:
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PREFACE

This report describes the activities of Professor Byron G. Massialas of Florida State University during the period of assignment August 19 to September 15, 1979. The report is distributed under the auspices of the American Public Health Association and is supported by the U.S. Agency for International Development, Office of Population, AID/Phac-1100.

The author is indebted to the following individuals in carrying out the various phases of the assignment:

Dr. Halim Grace, Director of Population Education Office, Ministry of Education, Egypt.

Madame Salha Awad, Director, Institute for Training and Research in Family Planning, Alexandria.

Dr. Adly Kamel, Mr. Mohamed Gamil, and El-Sayed El-Sheikh, all of the Ministry of Education.

Dr. Youssef Khalil, Director of the Center for Educational Research, MOE.

Dr. Stanley Applegate, USAID, Director of Technical Assistance.

Dr. Merrill Shutt, Ms. Laura Slobey, and Mr. Tom Reese, USAID, Cairo Health & Population Office.

Mr. David Piet, USAID/Washington Population Office.

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I. INTRODUCTION

The Population/Environmental Workshop which was held in Alexandria August 28-September 6, 1979 was, in general lines, a replication of the workshops held the previous two years. The main difference of this workshop from the others was its emphasis on the practical aspects of teaching and learning in the classroom, and the quest to integrate the various workshop components into one program. The workshop was a culmination of a year-long correspondence course on population and environment which involved some 300 participants. Of these, about 69 individuals were selected to participate in the workshop, having their expenses paid by project funds. The participants were drawn from a variety of teaching fields -- social studies, science, Arabic, philosophy, art, English, social work, etc.

The workshop staff comprised of MOE staff (Messrs. Halim Grace, Adly Kamel, Mohamed Camil, and El-Sayed El-Sheikh); Egyptian consultants and lecturers (e.g., Dr. Zahia Marzouk, Dr. Mansour Hussein, MOE Deputy Minister, Dr. Youssef Khalil, Director of the Center for Educational Research, MOE; Dr. Mustafa El Sammaa, Deputy Director of the Population and Family Planning Board; and others); the American consultants, Dr. George Lowe of USOE, an expert in environmental education and Professor Byron G. Massialas of Florida State University, an expert in population education. In general, the Egyptian staff was responsible for approximately one-third of the instructional time, spent primarily on lectures in demography, family planning and physiology of sex and reproduction; the American staff was responsible for the remaining two-thirds of the instructional time, spent in a variety of learning activities, e.g., small group work, inquiry teaching, role playing, lecturing, etc. Dr. Adly Kamel was the chief translator and Dr. Grace and Messrs. Gamil and Sheikh participated in all the sessions as needed to explain key ideas and processes.

In general terms, the chronology of events followed this sequence: August 20-August 28, 1979, Workshop planning sessions with MOE and AID officials in Cairo and Alexandria. August 28-September 6, 1979, Workshop implementation. September 7-September 15, Post-Workshop evaluation, analysis of workshop materials and data, preparation of report and consultation with MOE and AID staff.

II. WORKSHOP OBJECTIVES

During the planning period (August 20-August 28), the American consultants worked very closely with Dr. Grace, Mr. Sayed El-Sheikh and Mr. Mohamed Gamil to identify and clarify the major Workshop objectives. The overall goal was to train a cadre of leaders who could carry out similar population/environmental workshops in their respective governorates. The specific objectives included the ability of the participants.

1. To develop a program of studies in population/family planning/environmental education to be infused into the school curriculum.
2. To implement methodologies of teaching and learning which are consistent with the interdisciplinary, non-coercive nature of population education, especially those aspects dealing with population or population-related values and attitudes.
3. To develop inexpensive instructional materials on population and environment utilizing local and school resources within the framework of the subject to be taught as defined in the official MOE syllabus.
4. To develop a set of evaluation instruments which provide the participants the means to ascertain the effectiveness of their own instruction related to population and environment.

To implement the overall objectives above, it was decided during the pre-Workshop planning sessions to focus on the content of population/family planning/environment as they relate to economic growth and resource utilization. The emphasis, again, was placed on the local situation of the participants.

Prior to discussions and firming up the proposed Workshop objectives with the participants, there was administered a brief questionnaire which asked the participants to list, in order of priority, their expectations. The expectations, which appear in the Appendix were quite on target with the objectives that evolved by the planning committee. Certainly what is clear in the list of expectations is the idea that theoretical and practical considerations have to be worked out together so that students may have the maximum benefit of instruction.

III. THE CONTENT OF THE WORKSHOP ON POPULATION/FAMILY PLANNING EDUCATION

Professor Massialas devoted most of his time concentrating on population/family planning concepts as they relate to formal school instruction. From the very beginning the participating teachers were given to understand how important the age group between 3-16 is since most individual values and attitudes are acquired during this period. In this context the ideas of "population socialization," "population actor," "the school as laboratory" and "decision-making" on matters concerning population were extensively discussed. Supplemental articles, many of them translated into Arabic, were assigned. Population education was defined as the process of inquiry into the nature of human populations and the natural and human determinants and consequences of demographic change. The main purpose of population education is to help individuals make rational decisions about population matters as members of their families, their local communities, as well as national and world communities, utilizing appropriate information sources and inquiry skills. The means of population education is through the reflective use of formal school programs (multi-media materials, educational technology, etc.) or out-of-school programs (training for literacy, agricultural extension, mother and child care programs, family planning programs, etc.). After this introduction, the Workshop progressed through the pre-planned sessions as follows:

A. Curriculum Development

During this two-day session the participants were introduced to the following: a) concept of curriculum and definitions; b) sources of curriculum development; c) population education and curriculum development, divided into three sections -- characteristics of the educational system, characteristics of the content of population education, and characteristics of learners; d) approaches to curriculum development -- infusion, unit, separate course, e) tables of specification in population education. (See Appendix B for a model table which was translated into Arabic).

Following the presentation on curriculum, the participants were divided into three groups with a chosen leader and a reporter and were asked to perform the following tasks: a) describe in outline form the existing curriculum in their respective subjects, e.g., biology, history, math, etc.; b) match the present curriculum with approximately nine key population topics which could be infused into the school program; and c) develop a table of specifications, as per Appendix I to apply to their own situation and subject matter, emphasizing only the relevant skills and concepts.

During the small group work the Workshop staff acted as consultants to the participants who were further divided in groups of four to five persons based on subject matter specialization. At the end of the session, all sub-groups were able to produce valid tables of specifications which could provide

the basis for a curriculum infusion program in population education. The results of this activity were presented to the whole group and subsequently posted on the walls of the seminar room.

B. Instructional Methods

Given the nature of population education -- its interdisciplinary focus, its openness, and the fact that it deals with basic values and attitudes -- it is extremely important that teachers apply compatible instructional approaches. Through the use of two "springboards" -- a set of three age-sex pyramids (on Mexico, U.S.A. and Sweden) and an editorial on "Population and Poverty" (translated into Arabic from the Washington Post), Professor Massialas sought to demonstrate to the participants how to generate ideas about population, how to defend these ideas by producing evidence, and how to deal with social issues on population in a responsible way (especially with contraceptive utilization and acceptance of family planning services by various national groups). Participants were continuously encouraged to express their ideas freely and to have them discussed critically by the other members of the class. Through these two exercises, participants "learned by doing" inquiry techniques, techniques which could be used with their own students in their respective settings. One of the things to be learned was the idea that "springboards" for population education need not be expensive, the local community can provide most of them in the form of newspaper articles, artifacts, local maps, guest speakers, etc.

C. Materials Development

This session logically followed the previous sessions in assisting the trainees in their ability to implement a bona fide population/family planning program into their curriculum. Professor Massialas explained the sequence in which materials were developed given the identification of a population concept and a set of skills in the Table of Specifications. Participants went step by step through unit goals, behavioral objectives, hypotheses, springboard and materials needed, background information, procedures (including questions to be asked and student activities to be fostered) and evaluation. Both student and teacher materials were discussed through the case of a sample unit in the Florida State University materials entitled, Taking A Population Census.

Following the introduction, the trainees went into small group sessions with the task of preparing a sample lesson on a population topic of their choice. The lesson format presented earlier was to be followed. In spite of pressure to conclude other scheduled activities (e.g., participating in the daily 9-11 lecture series on demography/family planning, taking exams, and conducting field trips) all of the participants carried out the assignment and presented their lesson to the respective discussion group. Representative lessons were selected to be reviewed by the entire group.

D. Evaluation

The topic was introduced by Professor Massialas by discussing basic evaluation principles such as the idea of formative versus summative evaluation and the importance of specificity in developing learning objectives. Examples

of various evaluation techniques were given such as a self-administered instrument ("Am I an Inquiry Teacher" was translated into Arabic and given to the trainees) and test items developed in connection with the FSU Population/Education Materials Series.

Various techniques of evaluation related to a teaching module, "The Future and Population: What Will a No-Growth Society Be Like?" were explained and discussed in depth. Evaluative exercises included solving a population puzzle, observing and comparing countries at different population stages, matching exercises, decision-making situations, interpretations of cartoons, voting on a population problem, organizing national planning committees, making predictions, and expressing feelings. Following the discussion above, the trainees were asked to work in their small groups to develop one or two evaluation items to accompany the lesson on population which they had prepared previously. This task was executed well and the trainees reported to the whole group on the type of evaluation materials they had developed for classroom use.

IV. WORKSHOP EVALUATION

At the end of the Workshop period all trainees developed a number of products which demonstrated in a significant way the type of skills they acquired through their participation. These products, as mentioned before, included tables of specifications in various subjects, curriculum infusion plans, detailed lesson plans, development of local maps, and evaluation instruments. A review by the staff of the materials produced indicated that the trainees accomplished the overall program objectives of the Workshop.

The feedback forms and the pre- and post-attitudinal tests also indicated participant satisfaction and attitude change during the designated period. For example, the response of the trainees, changed from 80 percent 87 percent, strongly agreed (pre- and post-tests) with the statement: "The government should set up birth control clinics and provide contraceptives to anyone who requests them." Likewise, the attitudinal change of the trainees on the following item jumped from 65 percent to 94 percent: "Egypt should provide more money and effort into research for new, safe, and effective birth control methods." The more detailed results of the Workshop evaluation are available in Arabic at Dr. Grace's office.

Conclusions and Recommendations

1. Planning

C. The opportunity to have the core of the Egyptian and American instructional staff hold meetings a week ahead of the Workshop was very beneficial in that the program reflected the agreed-upon objectives and provided maximum use of existing talent.

R. Future planning sessions should include a more detailed specification of materials to be used and the activities of other consultants. There needs to be a set of key materials available for all the participants. Translations of key articles into Arabic should be made well ahead of time. Coordination of activities with other speakers should be carefully planned so that unnecessary repetition or instructional "overloading" is avoided.

2. Facilities

C. The Institute for Training and Research in Family Planning provides an excellent site for the Workshop. It has all the needed facilities for large and small group instruction, recreation, etc.

R. The facility cannot have more than 35 trainees. Even with the additional dormitory space no more than 70 trainees could be comfortably accommodated. The possibility should be explored of utilizing additional space in nearby facilities or dividing the activities including the lectures, small group discussions, audiovisual demonstrations, among several relevant facilities.

R. There should be a reading room, fully equipped with current books, journals, and audiovisual materials where participants can spend their time studying. A room for exhibiting current population education materials should also be made available.

3. Instructional Personnel

C. The Egyptian and the American core personnel were quite on target in meeting the goals of the Workshop and the expectations of the participants. Each instructional staff was an expert in a given field. Thus there was no significant overlap of knowledge or skill in Population Education/Family Planning/Environmental Education. The staff was able to work together -- they complemented each other and they worked as a team. The Egyptian staff and the staff of Mme. Salha Awad did an excellent job in: organizing the groups and scheduling significant events (including needed extracurricular activities); recruiting trainees; executing the administrative arrangements, providing transportation, and meals, etc.

R. There should be coordination between the lecturers on demography/family planning (usually scheduled between 9-11 a.m.) and the other instructional staff, including the American experts.

R. There should be more opportunity for informal, face-to-face sessions with participants (especially with the American experts). Opportunities for individual conferences should be scheduled.

R. Instructional personnel, especially foreign experts, should have a good knowledge of and experience in the Egyptian educational system, its promises and its problems. It should be recognized that a population/education program in order to succeed has to adapt to the system as is. Needless to say, model programs transferred without major adaptations are doomed to failure.

4. Target Audience

C. The participants during the 1979 Workshop were well chosen. All of them exhibited enthusiasm in learning and demonstrated an eagerness to engage in entirely new activities. The group was most congenial and very cooperative. A good spread of subject matter specialties was available.

R. Further Workshops should provide a balance not only among specializations but instructional levels as well, i.e., primary school teachers and more members of teachers' institutes are needed. Some university professors of education and zone administrators should be included in the audience.

R. To enlarge the potential of participants the audience should consist of two groups: (a) the preselected group following the correspondence course through the year; (b) trainees who join the Workshop as auditors or observers. The latter group may consist of educators in the ministry who need to be brought

to a level of population awareness so that they may be informed when they make decisions affecting population awareness so that they may be informed when they make decisions affecting population-related programs. People working with out-of-school youth and adults should also be given the chance to participate in the Workshop. The second group as stated above, need not be provided with stipends, accommodations, etc. since they would be primarily commuters from the local community.

5. Program and Format

C. The program content as well as format for 1979 was very good (as evinced by participant feedback on the questionnaires and by observations and individual consultations). Given the shortness of time the program components -- demonstration lessons, field trips, map exercises -- seem to have been very effective. The expectation that these activities will be replicated by the participants is quite realistic.

R. The program should provide more flexibility to adapt more to the needs and interests of the audience. Straight lectures should be minimized. Memory tests on year's content should not be given during this period because it contributes to participant anxiety and fatigue. No grades should be directly associated with the Workshop per se.

R. Presentations by guest speakers which are in written form should be made available to the trainees ahead of time and the sessions should be devoted to questions and answers and implications for individual teaching situations.

6. Administration

C. Dr. Grace's office provided excellent leadership in planning, staffing, and implementing the Workshop. Every detail of the nine-day stay of the trainees was accounted for.

R. Since other workshops are scheduled and the activities of Population Education in the schools are rapidly expanding, Dr. Grace's office needs to expand proportionately to meet the new demands. With only a three-member staff (the Workshop and all other activities in Population Education in Egypt) the achievements to date of this small group constitute a great accomplishment. Dr. Grace's office of Population/Environmental Education in the MOE needs to be upgraded to include (a) a cadre of a 15-member team, half of them to be Ph.D's in Population Education with considerable experience in program development, implementation, and evaluation; (b) a cadre of experts in the field to be distributed in the various governorates to administer population education programs in their district and maintain liaison with the central office in Cairo; (c) a complete office staff including secretaries, librarians, and staff assistants; (d) appropriate space to house personnel and materials collection.

R. To implement the recommendations above, the MOE needs to allocate its funds to provide substantial support for the activities of the Population

Education Office. Unless such support is given and the status of the office is elevated in the administrative hierarchy, outside agencies will hesitate to give the office their full support.

7. Evaluation

C. The instruments which were administered to the participants were appropriate to ascertain whether or not Workshop objectives were met. Feedback forms and pre- and post-test attitude questionnaires indicated general participant satisfaction and a change toward desirable directions.

R. Instruments should be designed and administered to tap knowledge retention and attitude change of the trainees. These instruments should be administered periodically after the completion of the Workshop to establish long-term Workshop effects.

R. Evaluation procedures other than paper and pencil instruments should be used during and after completion of the Workshop. These procedures could include structured observations, interviews, written reports, site visits, etc.

8. Follow-Up Activities

C. It is currently anticipated to have a follow-up advanced Workshop during late December for 20 to 30 participants chosen from the 1978 and 1979 Workshop memberships. It is also anticipated to develop a linkage system with all participants who have completed the program and are scattered throughout the country.

R. The advanced Workshop should focus on one particular topic in population education, e.g., how to make rational decisions on population matters such as age at marriage, family size, spacing of children, etc. In addition to the projected participants an equal number of observers and auditors chosen from the local educational leadership should be encouraged to attend.

R. A series of regional Workshops for leadership training should be scheduled in the near future. These Workshops should attract local talent and should stress the importance of Population Education/Family Planning in community development. It is recommended that at least three such Workshops be scheduled one in each of the regions, upper, lower, and middle Egypt.

R. A complete communication network with workshop graduates should be established so that the momentum of the experience is not lost. A monthly newsletter should be established immediately. Regional conferences of participants should be encouraged. An up-to-date roster of graduates should be kept and materials and news items should be sent regularly to the group. This group needs to develop an esprit de corps and the feeling that their work and their mission are important.

APPENDIX A

**Workshop Agenda Objectives Content
and Processes**

APPENDIX A

WORKSHOP AGENDA* OBJECTIVES,

CONTENT AND PROCESSES

Environmental and Population Education Office, Ministry of Education, Cairo
Workshop held in Alexandria, Egypt from 28 August 1979 to 6 September 1979.

In the Fields of Environmental and Population Education and Family Planning.

Introduction

This Workshop was the conclusion of the second course of training by correspondence in the field of Environmental and Population Education and Family Planning. The purpose of the Workshop was to prepare leaders to carry out in-service training courses in local governorates and to assist teachers in introducing population/environment concepts into the curriculum of the local schools. The Workshop was held in the Training and Research Institute for Family Planning in Alexandria.

Objectives

1. To be exposed to a variety of new methods in teaching Environmental and Population Education and Family Planning.
2. To develop teachers' skills through demonstration of approaches to the teaching of Environmental and Population Education and Family Planning.
3. To thoroughly evaluate the participants in the second correspondence courses. They are expected to be leaders in the conducting of similar Workshops in their governorates in interrelated fields of Environmental and Population Education and Family Planning.

Content

1. The Theoretical Side (Lectures)
 - The Physiology of Reproduction
 - Concepts of Population Education and the Role of Demography
 - Practical Methods in Environmental and Population Education
 - The Population Explosion and Its Effect on Education
 - Egyptian National Policy for Population and Family Planning

*This Agenda and related materials is based in part on a translation supplied by the Ministry of Education and modified by Lowe and Massialas for greater clarity.

- Population and Development Projects
- An Environmental Ethic Related to "The Care and Stewardship of the Environment vs. The Exploitation-Destruction of the Environment."
- How to Prepare a Training Course in the Field of Environment and Population Education.
- Analyzing the Research Papers Written by the Participants During the Exam.
- Testing the Participants on the Past Year's Work.

The Practical Application

- How to develop the curriculum to enrich the interrelated concepts of Environment and Population Education and Family Planning.
- How to construct a base map of the local community in order to demonstrate environmental problems, aesthetic, biotic and cultural factors.
- How to carry on field work related to environmental problems.
- How to prepare lessons in the field of Environment and Population Education.
- How to evaluate lessons in this field.
- How to teach in the field of Environmental and Population Education using the "inquiry method."

Supervisors

1. Dr. Byron Massialas, Professor at Florida State University.
2. Mr. George E. Lowe, Expert in Environmental Education. USOE/HEW.
3. Dr. Martin Ballard, the MacMillan Company (publishers).
4. Dr. Halim Grace, Undersecretary, Ministry of Education, Cairo.
5. Dr. Adly Kamel, Expert in Environmental Education ALECSO.
6. Mr. El-Sayed El-Sheikh, Supervisor of Environmental and Population Education, Ministry of Education.
7. Mr. Mohamed Gamil, Supervisor of Environmental and Population Education, Ministry of Education.

Methods of Training

- Field work in the local environment.
- Practical work in preparing lessons from the curriculum infused with Environmental Population Education and Family Planning concepts.
- Films and other audiovisual aids in the fields of Environmental Population and Family Planning.
- The use of books, articles and other written materials in the fields of environmental and population and family planning.
- Lectures
- Discussions
- Games
- Simulations
- Riddles
- Use of literature and poetry.
- Use of case studies. (The ecological impact of the Aswan High Dam).
- Creative use of the blackboard.
- Use of newsprint and cardboard for display of ideas and materials.
- Use of the daily newspaper and TV.
- Oral reporting.
- Display tables.
- Directed questions relating to films.

Methods of Evaluation

- A general test for all participants, written.
- Research papers prepared by the participants.
- Oral questions and discussions.
- A questionnaire to reveal participants' views concerning the correspondence course.
- A daily feedback forum.

- A pre- and post-attitudinal test.
- Participants' expectations and needs form.

The Workshop Schedule

Tuesday, August 28

The Opening Ceremonies

1. 9:00-10:30 - Mrs. Zahia Marzuk, head of the Administrative Council of the Institute of Research and Training
 - Mr. Fahmy Gabr, Undersecretary of the Ministry of Education, Alexandria
 - R. M. El-Samma, Deputy Director, Population and Family Planning Board
 - Dr. Merrill M. Shutt, Office Director, Office of Health and Population, USAID - "The Challenge of Population Growth and Family Planning"
 - Mr. George Lowe - "Overview of the Four Problems Facing The World 1979 - 2000"
 - Dr. Byron Massialas - "Two Dimensions of Population Education"
2. 10:30-11:30 - Egypt's National Policy of Population and Family Planning (Lecture by Dr. M. El-Samma)
3. 11:30-12:15 - Population and Development Project (Lecture by Mr. Ahmed Abu El-Fetouh)
4. 12:30- 1:30 - Random selection of participants into working groups A, B & C.
 - The Concept of Population Education (Dr. Massialas)
 - The Concept of Environmental Education
 - The Expectations of the Participants (Dr. Massialas, Mr. Lowe and Dr. Grace)
5. 5:00-7:30 - "The Tragedy of the Commons," film, questions and discussions on the idea and concept of the commons, carrying capacity and applicability to Egypt (George Lowe)

Wednesday, August 29

1. 9:00-10:00 - The Efforts of the Ministry of Health in the Area of Population Education and Family Planning (Dr. Helmy El-Bermawi)
2. 10:00-11:00 - Analysis and Report on the Written Papers of the Participants
3. 11:30- 1:30 - Constructing Curriculum in Population Education Including how to use Tables of Specification in the Curriculum Infusion Approach (Dr. Massialas)
 - Natural Systems, The Biosphere, the ABC's of Ecology and Their Relationship to the Environmental Problems of Egypt (George Lowe)
4. 5:00-7:00 - Curriculum Construction Activity by Small Work Groups Designed to Develop Population Curriculum to Match Existing Curriculum. (Dr. Massialas and George Lowe)

Thursday, August 30

1. 9:00-11:00 - Physiology of Reproduction in Humans (Lecture and Film by Dr. Shaban Gorreen, Naval Medical Officer)
2. 11:30- 1:00 - Small Working Group Activity in Tabulating Population/ Environmental Concepts with a Broad Range of Cognitive Affective and Psycho-Motor Skills (Lowe and Massialas)
3. 5:00- 7:00 - Tabulating Concepts Display and Small Group Reporting to Full Group (Lowe and Massialas)

Friday, August 31

- All Day Field Trip to Alexandria and Agami. This trip was based on a field exercise worked out by George Lowe relating to A, B, C's of ecology to Alexandria and Agami with stress on urban life support systems.

Saturday, September 1

1. 9:00-11:30 - Population Education and Demography (Lecture by Mohamed Gamil)
2. 11:30- 1:30 - Methods of Teaching Population Education Including two inquiry lessons: "Learning about Age-Sex Pyramids" (three different diagrams used) and "Population and Poverty" article in Washington Post (Dr. Massialas)

3. 5:00- 7:00 - A Variety of Methods of Teaching Environmental/ Population Education, based on the nature of Exponential Growth in Various Areas and Explained by Various Curves, Equations, Games, Riddles, and Student Exercises
 - Two Showings of the Film "Spots" on Exponential Growth and World Population Explosion (George Lowe)

Sunday, September 2

1. 9:00-11:00 - Written Exam
2. 11:30- 1:30 - Actual preparation of a classroom lesson in population education related to Existing Curriculum in the Schools (Dr. Massialas)
3. 5:00- 7:00 - Making a Map of your local community. How and Why it should be done and What types of Information can be displayed from local communities. (George Lowe and El Sayed El-Sheikh)

Monday, September 3

1. 9:00-11:00 - The Population Explosion and Its effect on Education (Lecture by Dr. Mansur Hussein, Deputy Minister of Education)
2. 11:00- 1:30 - How to use a Variety of Existing and New Educational materials in Population Education including Material on Breast vs. Bottle Feeding. The Nature of the Fertilization Process and the Use of the Diaphragm (Magnetic boards). Dr. Martin Bollard)
3. 5:00- 7:00 - Environmental Field Work in An Urban Area, How to Do it, What to look for and How to Display it. Lecture and Summary on Land Use, Urban Systems and Urban Problems and Assets. (Lowe, El Sheikh and Mr. Gamil)

Tuesday, September 4

1. 9:00-11:00 - Preparation of An In-service Teacher Training Program in Population Education (lecture by Mrs. Salha Awad)
2. 11:30- 1:30 - Preparation and Discussion of model lessons in Population Education. (Small group activity,) Dr. Massialas
3. 5:00- 6:15 - Evolution of model Pop. Ed. lessons (Dr. Massialas)
4. 6:15- 8:00 - Lecture and Small Groups Activity on the Evolving Nature of an Environmental Ethic based on the Care and Protection of the natural and man-made systems vs. the Destruction & Exploitation of the Environment. (Search for Biblical & Koranic References). (George Lowe)

Wednesday, September 5

1. 9:00-10:00 - Field Work in Environmental and Population Education. Lecture by El Sayed-El Sheikh
2. 10:00-11:00 - How to Evaluate Population and Environmental Education Materials and Activities including the preparation of Paper & Pencil Instruments, puzzles, matching exercises, value clarification, etc. (Dr. Massialas)
3. 11:30- 1:30 - Small Group Reports on Env. Ethics Activity/References for Env. Stewardship from Koran & Bible; lecture on Solar Energy's Potential for Rural Self Sufficiency in Egyptian Villages. (Lowe)
4. 7:00-11:30 - Banquet (Speeches including Population Ed. Game "Food for Thought")

Thursday, September 6

1. 9:00-11:00 - Evaluation of Workshop and Recommendations by Participant and Egyptian Staff

APPENDIX B

Table of Specifications

TABLE OF SPECIFICATIONS: POPULATION

Appendix B

BEHAVIORAL	BEHAVIORAL (STUDENT)																																		
	Cognitive										Evaluative					Participatory			Normative		Affective (Attitudinal)														
	A	B	C	D	E	F	G	H	I	J	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	EE	FF				
(Substantive and Procedural) (Content, Method, Experience)	Making Distinctions	Demonstrating Conceptual Understanding	Identifying a Problem	Stating a Problem	Forming a Hypothesis	Exploring Consequences	Collecting Relevant Data	Analyzing Data	Testing Ideas	Making a Generalization	Applying a Generalization	Identifying an Issue	Taking a Defensible Position	Grounding a Position	Observing	Supporting	Proposing	Mobilizing	Organizing	Cost-Benefit Analysis	Bargaining/Negotiating	Rule Making	Voting	Empathizing	Being Fair	Promoting Equality	Applying Justice	Being Objective	Showing Interest	Showing Trust	Being Efficacious	Showing Sense of Social Integration			
1.0 Concept of Population and Population Change																																			
1.1 Fertility																																			
1.2 Mortality																																			
1.3 Residential Mobility																																			
2.0 Determinants of Population Change																																			
2.1 Factors affecting fertility (e.g., educational bio-medical, family planning, etc.)																																			
2.2 Mortality																																			
2.3 Residential Mobility																																			
3.0 Population Structure																																			
3.1 Population Composition (e.g., age, sex, ethnicity, etc.)																																			
3.2 Population distribution																																			
4.0 Consequences of Population Change																																			
4.1 Population changes and the individual																																			
4.2 Population changes and the family																																			
4.3 Population changes and education																																			
4.4 Population changes and the economy																																			
4.5 Population changes and the natural environment																																			
4.6 Population changes and political development (e.g., public policy, electoral behavior).																																			

APPENDIX C

**List of Participants at POP/Env
Workshop in Alexandria**

APPENDIX C

LIST OF PARTICIPANTS AT POP/ENV
WORKSHOP IN ALEXANDRIA
August 28 - September 6, 1979

No.	Name	Home Address	School	Job
1	Nefert George Iskandar		Nahda Prep. of Girls - Assiut	Social Studies Teacher
2	Samia Ali El Saied Al Ashram		Khaled Ebn El Walied Prep. Tanta	Librarian
3	Halim Aziz Michail		Naser Secondary School	S. Master Science
4	Nazmy Iskander Guirguis		Sohag Educational Directorate	S. Master Science Supervisor
5	Ramzy Michel Marcus		Behera Educational Directorate	S. Inspector Supervisor
6	Abd El Wanis Abd El Gelil Abu Saef		Commercial Secondary School	Geography Teacher
7	Yehia Zakaria Fated		Shahid Saihy School	Social Officer
8	Raga Moustafa Abu Taleb		Saida Khadiga Secondary School	Philosophy
9	Husnia Mohamed Meky		Teacher's Training in Raml	S. Master Geography
10	Abd El Razek Adam Hussein		Deshna Secondary School	Arabic Language Teacher
11	Ismail Atef Mohamed El Abadi		Mit Ghamr Educational Directory	Statistics Specialist
12	Rafat Badi Shenuda		Commercial Secondary School in Maragha	Philosophy Teacher

Name	Home Address	School	Job
13 Maher Hafez Kamal		Ismail Kabany Secondary School Abassia	S. Master Science
14 Awaterf Ahmed Maamoon		Mit Ghamr Educa- tional Directorate	Statistics Spe- cialist
15 Rahma Ibrahim Monsef		Teachers' Naser Training Direc- torate	Curriculum Expert
16 El Said Mahdi Ali Mousa		Siwa (Naser Seco- ndary school) Metruh	Social Studies Teacher
17 Zaki Ibrahim El Menufi		Desuk Education- al Directorate	Inspector of Social Studies
18 Mohamed Abd El Salam Mohamed Abda		Agricultural Secondary School	Philosophy Teacher
19 Mohamed Ahmed Sakr		Om Khenan Seco- ndary School	Geography Teacher
20 Mohamady Mansur Mohamed Ali		Estanha Secondary School	Arabic Language S. Master
21 Mohamady El Said Hassan Seda		Sharabas Prep. School	Social Office
22 Ahmed Emad Mahmoud El Kelsh		Sawahe1 Prep. School	Fine Arts Teacher
23 Zakaria Hassan Ali		Rahba Prep. School	Science Teacher
24 Taha Mohamed Eid Mustafa		Bene Swaif Educa- tional Directorate	Social Studies Inspector
25 Mohamed Kame1 Ali Selim		Akbat Prep.School Nakada	Arabic Language Teacher
26 Ahmed Abd El Rahman Ahmed Saleh		Bab El Sharia Prep. School	Social Studies Teacher
27 Ahmed Abd El Rehim El Shaer		Teachers' Training School in Mansura	Geography Teacher
28 El Said Abd El Latif El Bigermi		Gohar El Sekely Prep.School	S.Master Social Studies

Name	Home Address	School	Job
● Hamida Mohamed Mohamed Mansour		Teachers' Training Directorate	Curricula Expert
30 Moustafa Mohamed Abu Wafa		Teachers' Training School	S. Master Arabic Language
31 Samir Mohamed Hussain		Teachers' Training School	Education Teacher
32 Mohamed Abd El Ghani Abd El Gawad		Tera Prep.School	Social Studies Teacher
33 Fathy Abd El Khalek Mohamed Abdel El		Eiman Prep.School in Hehia	Social Studies Teacher
34 Fathy Abu El Hassan Tisysef		Sarai El Kuba Secondary School of Girls	S. Masters Social Studies
35 Saed Mohamed Hamdi Mohamed		Sharkia Educational Directorate	Philosophy Inspector
36 Mohamed Farid Ahmed El Said		Educational Directo- rate	Social Officer
37 Fathy Hussain Lashin		Ismail Kabbany Secondary School	Social First Officer
38 Said Galal El Said Omar		Almadia Secondary School	Science Teacher
39 Abd El Rahman Ahmed Badr		Zamak Prep.	Social Studies Teacher
40 Latif Atala Kusa		Teachers' Training School in Sahe Selim	S. Master
41 Safwat Butros Al- Kommos		Maraga Secondary School	S. Master
42 Fawzi Abd El Hamid El Nakhsawangi		Ministry of Educa- tion Public Rela- tions	Supervisor
43 Momamed Mohamed Ali Bekhit		Wasta Secondary School	Supervisor

Name	Home Address	School	Job
44 Sabry Youssef El Adwi		Agricultural Secondary School in Gerga	Teacher
45 Kaisar Kaldas Salib		Suhag Directorate	Supervisor of Science
46 Ahmed Wahbala Mahmoud		Suhag Directorate	Social Studies Supervisor
47 Fayez Rageb Kheir		Bani Mour School	English Teacher
48 Mahmoud Mohamed Kamel Al Hebery		Teachers' Training School in Benha	Science Teacher
49 Adel Mohamed Ahmed		Teachers' Training School in Dekernes	First Specialist
50 Ahmed Mohamed Abd Allah Hamid		Zagazig Educational Directorate	Social Studies Supervisor
51 Fathy Abu El Hassan Youssef		East Cairo Educational Directorate	Social Studies S. Master
52 Fouad Fahim Guirguis		N. Cairo Educational Directorate	F. Officer Social Affairs
53 Wahba Abdula Shehata		S. Cairo Educational Directorate	S. Inspector Social Affairs
54 Abd El Wahed Ahmed Farag		Ministry of Education Teachers' Training Directorate	Expert
55 Ahmed Ibrahim Abd El Moteleb		Bene Swaif Educational Directorate	Social Studies Supervisor
56 Kamel Emam Youssef		Teachers' Training School in Isna	S. Master Education
57 Georgait Georgi Guirguis		Agricultural Secondary School in Sahe1 Seliem	English Language Teacher
58 Raof Ilia Said		Dairot Secondary School	English Language Teacher

Name	Home Address	School	Job
59 Khalaf Mohamed Hassan		Islamia Prep.School	Arabic Language Teacher
60 Nabil Guirguis Guirguis		16, Naser Agricultural School in Beni Swaif	History Teacher
61 Mahmoud Abu El Abu Nagi		Shuhada Secondary School	Science Teacher
62 Mohamed Khaled Naser		Shuhada Secondary School	Social Studies Teacher
63 Makram Mohamed Gharib Amer		Teachers' Training School in E.Zagazig	Teacher of Agr.Education School
64 Aida Ali Gabr		Domiati Educational Directorate	Press-Supervisor
65 Ahmed Desuky Morsi		Special Education School in Heliopolis	Social Studies Teacher
66 Said El Bakury		Kasem Amin Commercial Secondary School	Arabic Language Teacher
Alfi Sifain Al Komos Sawires		Teachers' Training School in Sahel Selim	Social Studies Teacher
68 Mohamed Fahmy		Saidia Secondary School - Giza	S. Master of History
69 Mohamed El Said Gamil		Population Education Office	Supervisor

APPENDIX D

**List of Materials Used and
Exhibited at the Workshop**

LIST OF MATERIALS USED AND EXHIBITED AT THE
WORKSHOP

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Massialas, Byron G., Nancy F. Sprague, and Joseph B. Hurst. Social Issues Through Inquiry: Coping in an Age of Crises, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1975.

Massialas, Byron G., Charles B. Nam and Mary Friend Adams. Changing Population Through Immigration. (Episode #8) Florida State University, Tallahassee, Florida, 1974.

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and "Population can be Fun and Games" and the ZPG Population Education
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APPENDIX E
Summary of Participants
Expectations

SUMMARY OF PARTICIPANTS

EXPECTATIONS

1. Knowing about the Population Problem and How to Solve it.
2. Conveying Population Concepts to my Students and my Local Environment.
3. Gaining skills and Experiences in Population Education & Environmental Education.
4. Developing Skills in My Students.
5. Linking the Curricula with Environmental and Population Education.
6. Working in Small Groups.
7. Discussions.
8. Preparing Audiovisual Aids.
9. Changing Attitudes Concerning Environmental and Population Education.
10. Learning How to be a Leader.
11. Gaining Foreign Experience.
12. Learning How to Plan.
13. Gaining New Methods of Teaching.
14. Learning How to Prepare an In-Service Training Program.
15. Constructing Curricula Reinforced With Environmental & Population Education.
16. Learning New Techniques in Evaluation.