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Clearinghouse on Development Communication

Fourth Semi-Annual Report

Clearinghouse on Development Communication
FOURTH SEMI-ANNUAL REPORT

AUGUST 31, 1990

REPORT FOR THIS PERIOD

Services to A.I.D.

During this six-month period, the Bureau for Science and Technology's Office of Education was asked to organize a "Communication Cluster" in which experience in the application of development communication strategies to various sectors would be exchanged and evaluated with a view to broader adoption within the Agency. The CDC provided reporting services to the cluster at the first meeting to be held during this period.

USAID/Guatemala has bought into the CDC for three communication-related studies into the contribution of telecommunication and nonformal education to development.

In June and July, the Clearinghouse performed two special projects at the request of USAID, S&T/Ed.

First, we produced a series of overhead projections outlining highlights from the World Conference on Education for All, for presentation by Clifford Block and Frank Method at a White House briefing on the conference.

Second, we produced a series of bar graphs and pie charts presenting statistics on primary education in developing countries for use by Richard Bissell. Our computer equipment and staff knowledge of desktop publishing and computer graphics techniques enabled us to respond to each of these requests within a day.

The Clearinghouse has provided several sets of interactive radio scripts for the Radio Learning Project for Bolivia and Costa Rica.

Materials on project planning were provided to the Research Triangle Institute for an education conference in Togo arranged by the ABEL Project.

The DCR on the A.I.D.-supported Education For All Conference in Thailand was produced in close consultation with Cliff Block, Frank Method and Amalia Cuervo. All participants at the North American region's conference in Boston received copies of that DCR, mailed by Amalia Cuervo.

The DCR on the use of communication to increase opportunities for women to participate in development was designed in close collaboration with A.I.D.'s Women In Development Office.

Subscriptions

During the reporting period we have registered a total of 698 new subscriptions to the DCR (compared with the 395 new subscriptions acquired during the previous semester). This result is in part due to the Clearinghouse's promotional efforts:

- o We have aggressively sought the renewal of paying subscriptions to the DCR.
- o With the same objective of broadening the Clearinghouse's resource and increasing the CDC membership base, we have initiated a significant number of new exchange agreements with institutions involved in development work.
- o We are now using Electronic Mail to advertise the Clearinghouse's services and to exchange information.

Following is the break down of the new subscriptions:

	This semester	Previous semester
Exchanges:	41	(17)
Free:	345	(238)
Paying Renewals:	204	(90)
New Paying:	106	(50)
TOTAL:	698	(395)

Information Services & Publications

The CDC has taken a trial membership on the COSY computer conferencing network, an international system based at the University of Guelph in Canada. Through the system we have accessed information regarding telecommunications in Cameroon (the subject of an information request from a CDC member) from a correspondent in Senegal, and received requests for subscriptions to the DCR.

During the reporting period, we have answered to 86 information requests, 35 of which have come from the following LDC countries: Malta, Israel, Ecuador, Côte d'Ivoire, Malaysia, Kenya, Uganda, Philippines, Trinidad, Ecuador, Sri Lanka, Vanuatu, Nigeria, Nepal, Indonesia, Peru, Guinée, India, Ghana, Paraguay, Korea, Zambia, Mali, Bolivia and Tonga

Following is the breakdown by origin of information requests received:

Developing Countries:	35
U.S.:	33
Canada:	08
Others:	11
TOTAL	86

Of particular interest is a letter we received from the Manager of "Radio Onda Nueva", a community radio in Peru, who informed us that she was using in the station's daily broadcasts the Spanish transcriptions of articles published in the DCR. The letter is included overleaf.

The Clearinghouse also is helping UNESCO gather video tapes for its project of building up a video bank on innovative projects in basic education. We are providing them with the Interactive Radio Instruction and the Distance Education video programs, and are advertising its call for submission of video programs in the current issue of DCR #69.

5

Ames, July 26, 1990

Mr. Andre Roussel
Clearinghouse on Development
Communication
1815 North Fort Myer Drive, Suite 600
Arlington, VA 22209 USA

Dear Mr. Roussel,

I am glad to communicate you that I have finished the Master thesis which I have been working with the title of "River-radio: A case study of participatory radio education in Bolivia." I want to express my thanks to you and to the Clearinghouse on Development Communication for helping me with important information through the "Development Communication Report."

My thesis has been nominated to a special award of 1990 by the Journalism and Mass Communication Department of Iowa State University. I am pleased to report you this news which means a great personal encouragement and a recognition to the work which this rural medium "Radio San Miguel," Riberalta, Beni is doing for the development of the rural population of the Bolivian Eastern area.

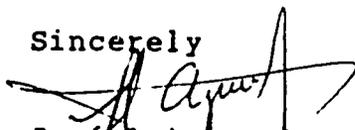
The Committee which constituted my thesis jury has recommended that I must compromise myself to write some articles to disseminate the findings of the case study related to a community radio located in the Bolivian Amazon. I have considered that the DCR could be an ideal source to share this experience. Therefore, I will try to send an article keeping contact with the Clearinghouse on Development Communication.

Finally, I want to request from you to keep my subscription to the DCR, which I consider of great importance to my future teaching activities back home. I am leaving U.S in the 10th of August and my Bolivian address is:

José Luis Aguirre Alvis
Casilla de Correo # 10052
La Paz - Bolivia
(591) 2 - 325116

I wish you the best, and once again thank you very much,

Sincerely



José Luis Aguirre A.
250 North Hyland Ap. 2
Ames, Iowa, 50010
(515) 292 0732

New Materials

Other efforts have resulted in the production of new information materials:

- o We have completed and catalogued four information packages:
 - o Communication for Women,
 - o Information Technologies,
 - o Management Information Systems,
 - o Script Writing for Radio, Environmental Education

- o We are advertising and started distribution of the 4 French Editions of the DCR announced in our previous report:
 - o Distance Education (from DCR #62 and #63)
 - o Local Radio (from DCR #64 and #58)
 - o Health Communication (from various editions)
 - o Environmental Communication (from DCR #65)

- o Alfredo Artiles, a native of Nicaragua studying at the University of Virginia, is finalizing the translation in Spanish of the same articles.

- o In response to frequent requests from overseas students and CDC members, we are finalizing the preparation of a "Directory of Training & Study Programs in Development Communication".



Mike
F11

Centre d'Etude du Déve.

rique Latine

Paris, le 10 septembre 1990

Monsieur André Roussel
Clearinghouse on Development
Communication
1815 North Fort Myer Drive, Suite 600
Arlington, VA 22209, USA

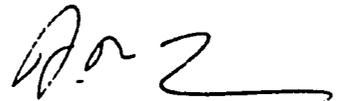
Cher Monsieur,

Nous avons noté dans le n° 68, 1990/1 du *Development Communication Report* une information selon laquelle les éditions du DCR étaient disponibles également en français.

Or nous touchons un public qui lit des langues différentes (espagnol, portugais, anglais, français). C'est pourquoi, devant le vif intérêt que suscite votre publication de par la qualité de ses articles et leur adéquation aux activités de nos partenaires, nous serions heureux d'en recevoir à la fois les éditions anglaise et française.

En vous remerciant à l'avance de votre réponse, nous vous prions d'agréer, cher Monsieur, l'expression de nos bien cordiales salutations.

 M.T. Andrieu
Documentaliste



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San Bernardo - Chile
Telefax : 56-2-8591405

PJ - Plaquette du CEDAL.

Visitors

During the reporting period, the Clearinghouse received the following international visitors:

Hali Adamou, Ministère des Affaires Sociales, Niger
 Ibrah Allou, Ministère des Affaires Sociales, Niger
 Taofiki M. Aminou, Director General, Ministère des Enseignements Moyens et Supérieurs, Benin
 Abacca Anjain, Ministry of Education, Marshall Islands
 Alfredo Artilles, special education consultant, Guatemala
 Birahim Ba, Directeur de l'Enseignement, Ministère de l'Education Nationale, Senegal
 Malam Ari Boucar, Secrétaire Général, Université de Niamey, Niger
 Indu Bushan, Director, Medical Services, Jaipur, India
 Patricio Cariola, CIDE, Chile
 Sergio Corvalan, Telecommunications consultant, Chile
 Firoozeh Derakhshani, Mahvi Foundation
 Victoria Drake, TV for the Environment, U.K.
 Dr. Alphonse Ekoua, Vice-Rector, Marien N'Gouabi University, Congo
 Abdoulaye Fatoumma, Ministère des Affaires Sociales, Niger
 Esther Galuma, USAID/Liberia
 Georges Gracieuse, Mauritius
 Ismid Hadad, REDECON, Indonesia
 Adam Kadidia, Ministère des Affaires Sociales, Niger
 Gloria Kim, Korean Women's Group
 Mowbena Kirmani, educational technology consultant, Kenya
 Jacques Lebib, Vice-Rector, Masuku Science and Technical University, Gabon
 Douglas S. Lubowa, Unicef, Kampala, Uganda
 Batundé Roland May, Cornell University
 Adamou Moussa, Ministère de la Santé Publique, Niger
 Nadjibuddin, Jakarta, Indonesia
 Anastase Nzibonera, Director, Curriculum Development, Miniprisc, Rwanda
 Professor Gabriel B. Ogunmola, University of Ibadan, Nigeria
 Rita Razakanaivo, Technical Advisor to the Ministère de l'Enseignement Supérieur, Madagascar
 Issaka Saïdou, Ministère de l'Information, Niger
 Suprpto, Bogor, Indonesia
 John Tsimba, Zimbabwe Broadcasting Corporation, Harare, Zimbabwe
 Olga Vargas, textbook consultant, Puerto Rico
 Kojo Yankah, Director, Ghana Institute of Journalism, Accra, Ghana
 Cyriaque Robert Yavoucko, Director of Economic Affairs and Cooperation, University of Bangui, Central African Republic
 Hachimou Zara, Ministère des Affaires Sociales, Niger

The Library

A further 850 documents were cataloged during this period. Emphasis was placed on the physical appearance of the library, labeling of stacks and sections, removing very old materials or those of



Cornell University

New York State College of
Agriculture and Life Sciences

Department of Communication

Academic I - South
Ithaca, NY 14853

607/255-2111
FAX: 607/255-7905

August 8, 1990

Dr. Michael Laflin
International Institute for Research
Clearinghouse on Development Communication
1815 North Fort Myer Drive
Arlington, VA.

Dear Mike:

Our CPS group's visit to Washington is becoming institutionalized because of people like you who make the time there so fruitful. The group was obviously impressed with the operations at IIR, and we appreciate very much your being available to give them a good briefing. Rolled in with stops at museums, embassies and other personal activities, the whole Washington program was quite a success.

We're sending a little something via separate mail to reinforce our expression of appreciation. *

Best wishes.

Sincerely yours,

ROYAL D. COLLE
Professor and Chairman

* A paperweight bearing the Cornell University Emblem

questionable relevance.

The use of part-time graduate students came to an end as their studies were completed, and one student, Karen Richardson, was hired as a full-time employee during the summer. At the end of this period she was replaced by Earlington McCletchie on a permanent basis.

Development Communication Report

During the present review period, three editions of the Development Communication Report were published. DCR no. 68 (1990/1), which focused on literacy, was published in early May. DCR no. 69 (1990/2), which focused on basic education, was published in early August. DCR no. 70 (1990/3), which focuses on women, was sent to the printer in early September and will be mailed later this month.

The idea to produce an issue on basic education grew out of the enthusiasm of all who had attended the Education for All conference in Thailand last spring especially those within USAID/S&T/Ed. Planning for the issue was carried out by Clifford Block, Amalia Cuervo, and Mike Laflin. Mike Laflin also edited this edition. Since this issue was planned concurrently with the most recent issue focusing on women, we have been able to catch up with our publication date and the DCR is now on schedule.

As a spin-off benefit of planning DCR issues, we have been building the Clearinghouse collection on the themes of each issue. Through the assistance of Stephen Anzalone, we collected considerable material on basic education from the Education for All conference. Likewise, as a result of the extensive networking carried out by the editor, Kathy Selvaggio, in planning the women's issue, we have considerably updated and expanded our resources on women and communication.

We have received very positive verbal and written responses to recent DCRs from both authors and readers. Following are comments received in correspondence to the editor:

"DCR #66 is outstanding! It is full of useful information, presented in a pleasing format with well-written articles. You continue the tradition of informative and highly readable material which is of direct use to communicators working in development worldwide." Donald Ely, Director, ERIC Clearinghouse on Information Resources.

"I found the article 'Tough Questions for International Literacy Year' excellent. One of the objectives of the year is precisely to provoke discussion and debate. The tougher the questions, the more spirited and useful the debate." John Ryan, Coordinator, International Literacy Year Secretariat in response to DCR no. 68.

"I am impressed with the high quality of all the articles in the Report, and learned much from each one. Congratulations to you on your fine editorial job." Sue Plimpton, Assistant Director, Area Health Education Center Program, University of New England, in response to DCR no. 68.

RADIO



ONDA NUEVA

OBX - 3L 990 KHZ
AMPLITUD MODULADA

URB. EL TRAPECIO G' - 18 - RUIZ 515 OF. 205 TELEF. 323200 - 331073 APTDO. 72 CHIMBOTE

Mike: F71

This station translates and
uses DCR for its educational
broadcasts to the community of
Chimbote in Peru.

*Answers
could you write
this up in a short
paragraph please
use it for the
annual report.*

Chimbote, 25 de Mayo de 1990

Señor:

André Roussel
Especialista en Información de
Development Comunicación Report
U.S.A.

Estimado Sr. Roussel:

Estamos muy agradecidos por la atención que nos brinda Ud. al enviarnos su material impreso, en donde incluyen temas de mucho interés, entre ellos la Experiencia de Alfabetización que se está llevando a cabo en Nepal y el artículo sobre Medio Ambiente, los que fueron traducidos e irradiados en nuestras programaciones diarias.

Estamos devolviendo la Hoja de Inscripción, como también les remitimos copia de programas sobre Contaminación Ambiental, Deuda Externa y DD.HH. los dos primeros se han preparado para apoyar el trabajo que se viene haciendo con los Comités de Lucha Contra la Contaminación Ambiental y las Organizaciones Populares.

Esto debido a que el índice de contaminación en nuestra ciudad es muy alta, se cuenta con 30 fábricas de harina de pescado y una planta siderúrgica que no cuentan con los correctivos técnicos de ley, ni cumplen los dispositivos legales, y por otro lado la contaminación por

RADIO



ONDA NUEVA

OBX - 3L 990 KHZ
AMPLITUD MODULADA

URB. EL TRAPECIO G' - 18 — RUIZ 515 OF. 205 TELEF. 323200 - 331073 APTDO. 72 CHIMBOTE

...///

deshechos y aguas servidas. Todo esto va en detrimento de la salud de nuestro pueblo.

Como somos una radio Educativa y de proyección a la comunidad, tenemos programados el desarrollo de varios proyectos, pero requiere para su ejecución contar con disponibilidad económica. Actualmente no contamos con ello, por lo que estamos abocados a gestionar apoyo financiero de Instituciones o Fundaciones que financien este tipo de trabajo; si Uds. conocieran de algunas de estas instituciones les agradeceríamos nos informen para contactar y enviar nuestros proyectos, ya que en nuestra ciudad hay mucho por hacer.

Con nuestro saludo para todos Uds. que realizan labores tan encomiables, como es la difusión de la problemática de nuestra sociedad, y agradeciéndoles por sus deferencias que damos de Uds.

Atentamente,
RADIO "ONDA NUEVA"


Juan F. Ruiz R.
GERENTE

Nota.- En los cassettes que les enviamos con los programas también encontraran cuñas y viñetas sobre Contaminación y DD.HH. les rogaríamos nos den sus opiniones a cerca de estos trabajos que han sido preparados por el personal de la radio.

CDC WEEKLY REPORT

June 15, 1990

Are the Clearinghouse's services useful to the poor communities in developing countries?

This week, the Clearinghouse has received a letter from Ms. Enma Ruiz, Manager of "Radio Onda Nueva", the community radio station of the town of Chimbote, Peru. She writes:

"We are very grateful for the Development Communication Reports you sent us. Of particular interest to us was the relation of the Nepal Literacy campaign (DCR Supplement #64), and the environment issue (DCR #65). We had them translated, and are using them in our daily broadcasts."

"Our city and people are subjected to high levels of pollution and contamination emanating from the 30 fish saw processing factories active in the area, and from waste waters run-offs. All this happens in violation of the law and because regulations are not enforced..."

"We are dedicated to educating our community and have plans to carry on various programs"... "As an example, I am sending you the transcripts and recordings of some of our broadcasts about the contamination of our environment, the payment of the external debt, and human rights"... "We are looking for funding sources to carry out our program."

International Literacy Year

Literacy yes! but...

In view of the great social and personal benefits of being literate, few would argue with the desirability of achieving universal literacy, a goal supported by the Education for All Conference in Jomtien, Thailand, last March. What is at issue is the likely efficacy and cost of programmes that teach reading and writing to the adult illiterate, especially in developing countries.

During the early 1970s, UNESCO and its member states undertook the Experimental World Literacy Programme as a pilot project, leading up to an all-out assault against illiteracy. The results of the pro-

by Stephen Anzalone

gramme were discouraging. Government and international donors were not as not been convinced that they could commit substantial resources to literacy programmes.

The fund during

communicating. Will "half a key" open the door to the social and personal benefits associated with literacy? We still do not know what half a key brings. This is troubling because the new imperative for literacy that we are now experiencing is really about relatively high levels of skill. The current

UNESCO maintains that the literacy of children and adults are two sides of the same coin. In an ideal world, this might be true. In the present world, however, developing countries are plagued by poor economic performance, high levels of debt and inflation and increased demand for education and other social services.

Now more than ever countries are forced to choose one side of the coin, either education for children or education for adults. Almost always, they have former and invested avail

hard pressed to dispute the wisdom of this choice.

Some of the most extensive literacy programmes have been one-shot national campaigns, often occurring in a country that undergoes a major transition. Although considerable numbers of

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DEVELOPMENT

FORUM

... what? Literacy activities take place in addition to other training activities provided by organizations in other development sectors. This kind of linkage is sometimes dictated by logic, sometimes by the fact that there are no resources for free-standing literacy activities. Yet the marriage of literacy training to other development activities has often been contrived.

First, the connection is not always clear or mutually supportive. For example, there have been many attempts to link literacy training to income-generating activities. The thinking is that stimulating new income on the part of participants will stimulate a desire for acquiring new literacy skills. What happens is that participants often fail

... for literacy could well become an argument for expanding opportunities for secondary school education in developing countries—not for increasing basic education for adults.

expanding and improving primary school education. In so doing, the road to universal literacy is the one previously followed by industrialized countries, making primary school education universal. We would be

volume xviii no. 4
july—august 1990

in the

"I have just received edition 1990/1 [no. 68] of Development Communication Report. Congratulations on another fine issue. Could you possibly mail a copy to a person who is involved in a literacy project in the Solomon Islands?" Father Patrick Casserly, Suva, Fiji.

"The entire issue looks good, and I am very pleased with the way my article turned out. You did a good job." Paul Jurmo, author of "The Freirean Model," DCR no. 68.

"I like the article. You edited it really well, and I feel honored by your ability to read between the lines, so to speak, in order to really explain what I meant to say. I hope many people will read it and contact us about our project." Wambui Githiora, author of "Radio Education in Africa," DCR no. 68.

We have taken several steps to improve the quality of DCR production and appearance. Thanks to careful proofreading by CDC library assistants, Jim Hoxeng's close reading of each edition prior to publication, and the editor's review of "bluelines," the most recent DCRs have far fewer errors than those of the past. We have also experimented with greater use of color, shading and overlapping elements throughout the publication, as well as new design approaches, such as the collage presentation of quotes on the front cover of DCR no. 69.

However, we have received informal feedback that the style and format of the DCR are unattractive. Some complaints we consistently receive include: the publication's overall appearance is dense and formidable; the text type size is too small; there is insufficient use of white space, graphics and photos; the logo is old-fashioned; and italics are overused and difficult to read. For these reasons, we are taking steps toward adopting a new design for the DCR. In September, Kathy Selvaggio held an informal consultation with Beth Glover-Hudgins, the staff designer at Creative Associates, to discuss concerns about the present appearance of the publication and to share ideas for improvements, within the general constraints presented by the capabilities of desktop publishing techniques, the need to present a large amount of information in 16-20 pages, and the cost of mailing the publication overseas. They agreed that Creative Associates would present a proposal to the Clearinghouse for the effort involved in producing several prototypes for a new design.

We are in the process of changing vendors for both the page production and printing of the DCR. In July, we used the services of B&G Composition for page production after they provided cost estimates substantially lower than our previous vendor, Walden Graphics. In August, we learned that the Duquesne University Press, which has printed the DCR for the past two years, will be unable to print the publication in the future. As a result, the editor has solicited estimates from several local graphics and printing firms, including B&G Composition, that will be able to perform both the page production as well as the printing. All estimates received so far indicate considerably lower costs for page production and comparable costs for printing compared with the previous vendors.

Future editions

DCR no. 71 [1989/4] will focus on the role of the media and advertising in promoting unhealthy "lifestyles" in developing countries (e.g., smoking, dietary habits which cause heart disease, sexual

conduct which promotes the spread of AIDS) and, more important, how the media is consciously being used to promote healthier lifestyles. The advisory editor for the issue is Dr. Jack Ling, former Director of Information and Education with the World Health Organization and currently Director of the International Communication Enhancement Center, Tulane University School of Public Health. Dr. Ling has arranged for development communication specialists in Nigeria, Singapore, and Brazil to contribute to the edition. The DCR has already received the majority of the materials for the edition and will be preparing them for publication during the month of October.

Plans for future editions are still unclear. We must decide whether to proceed with the idea of producing an edition on the topic of evaluation of communication projects. We have also accumulated a large number of unsolicited articles, mainly from Third World authors and many of them addressing issues of the role communication in rural development. We therefore might consider devoting one issue to "readers' contributions." Perhaps most important, we are awaiting meetings with the heads of USAID regional bureaus in order to explore how the DCR can be made more useful resource to officers in AID missions. We have discussed the possibility of holding a meeting of the DCR advisory board in order to discuss these questions and to set broad editorial directions for the future.

Readership Survey

We have drafted a new readership survey which asks readers to assess the quality of both the substance and the presentation of material in the DCR. Before mailing it to all DCR readers, we need to resolve the following questions: whether to include it in a DCR mailing or to mail it separately; whether to make continued subscription to DCR conditional upon completion of the survey or, alternatively, to provide an incentive to completing the survey; whether to use the survey as an opportunity to update the mailing list.

Reprints

During the present review period, a number of publications have reprinted, or requested permission to reprint, articles and news items from Development Communication Report. They are listed as follows:

"Distance Education: The Promise and the Confusion," by Allan F. Hershfield, DCR no. 57 (1989/2) in Distance Education: A Spectrum, a volume of case studies to be jointly published by the Kogan Page Limited and Indira Gandhi National Open University.

"Videoleters" by Claire Burket, DCR no. 64 (1989/1), reprinted in Agricultural Information Development Bulletin vol 12, no. 2, June 1990.

"Popular Videos for Rural Development in Peru," by J. Manuel Calvelo Rios, DCR no. 66 (1989/3) in Development (by the Society for International Development) 1990:2.

"Helping to Reorient Artists to Rural Audience Needs" by Peter Chen, DCR no. 66

17

(1989/3) Agricultural Information Development Bulletin vol. 12, no. 2, June 1990.

"News -- by Yak or Electronics" by Carlos Arnaldo DCR no. 67 (1989/4), reprinted in Agricultural Information Development Bulletin vol. 12, no. 2, June 1990.

"Computers Print Newspapers in Thai," by Carlos Arnaldo, DCR no. 67 (1989/4), reprinted in Asian Mass Communication Bulletin, vol. 20, no. 3.

"Tough Questions for International Literacy Year," by Stephen Anzalone, reprinted in the new Journal of Development Communication, vol. 1, no. 1, June 1990.

"Tough Questions for International Literacy Year," by Stephen Anzalone, DCR no. 68 (1990/1), reprinted in the Development Forum, United Nations Department of Public Information, vol. 18, no. 4, July-August, 1990.

It should be noted that several of these publications, e.g., the quarterly journal by SID and the UN bimonthly bulletin, are known to have large circulations.

In addition, during the present review period, the DCR was written up in two publications: Soundings, a newsletter listing print and audiovisual resources for development, published by World Neighbors; and the Agricultural Information Development Bulletin, a quarterly bulletin. As noted in the previous semi-annual report, the latter publication had often reprinted articles from the DCR without mentioning the DCR or the Clearinghouse as the source of the information. Their article may have been motivated by a letter objecting to this practice from Mike Laflin.

Foreign Language Editions

The French-language translations of DCR articles on four topics -- distance education, community radio, health communication, and environmental communication -- were completed last spring and were produced using desk-top publishing in May and June. As mentioned in our previous report, we are photocopying editions in response to individual requests. A summer intern with the Clearinghouse, Alfredo Artiles, completed Spanish language translations of editions on health communication and environmental communication. These will be produced using desk-top publishing over the next two months. We have included notices about the French language editions in the past three issues of DCR. The most recent notice also mentioned the Spanish editions. However, we may want to carry out special promotional measures for both series, since we have received only a handful of requests for the French edition and since there are few DCR readers in Latin America.

Distance Education Bibliography

The bibliography on distance education, compiled by Andre Roussel and Desiree DeGraeve, will be produced using desktop publishing techniques during September. The long delay in producing this resource was due partly to the fact that completed sections of the bibliography were lost in the transition between editors and had to be recompiled.

Finances

The budget for the first two years totalled \$591,563. Expenditures were \$567,466, with a further \$12,000 spent but unbilled (subcontract and an issue of DCR).

Clearinghouse on Development Communication II

The First Two Years

After two years, it is worth taking stock of what we have accomplished. We have kept records of performance indicators that we believe portray accurately and objectively the real nature of our activities: the number of new CDC members, both free and paying; the number of library acquisitions and new exchange agreements with other organizations; the rate at which we are cataloging the collection; the number of information requests from overseas.

Qualitative data, such as feedback on the quality of the Development Communication Report and letters thanking us for services rendered, also are important but less easy to use to judge our performance.

INDICATOR	1988/89	1989/90
Total new subscriptions	884	739
New free subscriptions	741	583
New paid subscriptions	143	156
Renewed paid subscriptions	159	294
Total paid subscriptions	302	450
New exchange agreements	39	58
Acquisitions	1765	1377
Library entries catalogued	2276	4347
Information requests	221	187

The membership

The total number of subscribers is 6600, of whom 1200 live in the U.S.

A.I.D. recipients total 636, of whom 71 are categorized as working in education and human resources.

The 6600 members describe themselves in more than one way:

About two-thirds say that they work in communication.

About half work in education and training, about a quarter in health and population, and about 20% in agriculture.

The membership is dominated by practitioners. Of the 3614 members who work in education, 80% state that they work in administration, planning, evaluation or production. Universities and other formal education institutions account for 11% of the membership.

In terms of technologies, two-thirds work with print media and about one-third with radio. About 15% work with TV or video. The percentages of the readership working with other technologies are in single digits.

Our audience is heavily anglophone, 91% reading English. 19% read French and only 7% read Spanish. Arabic and Portuguese each show about 2% of the readers.

Although the number of users of the Clearinghouse on Development Communication service is increasing about 15% per year, and an increasing proportion are prepared to pay for the service, we are not yet funding the increased costs of a larger circulation out of subscriptions. We have only just reached the 450 paid membership that was claimed by our predecessors and which we used as a baseline in our proposed budget. Nevertheless, our outreach efforts seem to be paying dividends.

Clearinghouse on Development Communication: Priorities

The contract states CDC objectives as "to provide information and services related to the application of appropriate methods and technologies in development communication (print and non-print media) to A.I.D. and LDC planners and practitioners. Emphasis will be placed on:

- 1) development communication applications in the fields of education, agriculture, health, nutrition and community development -- especially for programs designed to reach large numbers of people with information and specific skills aimed at improving their quality of life.
- 2) development communication applications in the formal education sector, highlighting state-of-the-art innovations and encouraging in-school use of tested technologies which are underutilized.
- 3) improving communications among third world institutions such as universities and research centers, applying technology to foster direct regular linkages."

The essential elements of this brief, and our performance in responding, seem to us to be:

OBJECTIVE

PERFORMANCE

Reaching an audience of planners and practitioners

80% of our membership work in administration, planning, evaluation or production and are reached with the DCR four times per year.

Reaching A.I.D. and a Third World audience

A.I.D. staff comprise 10% of the 6600 membership; 80% of the readers live overseas. All are reached four times per year through the DCR.

Provide information and services about the application of development communication technologies

See list of DCRs for coverage of A.I.D. concerns, list of information requests for nature and origin of requests, and outline of conceptual approach to DCR.

Major issues of concern to A.I.D. that have been featured include: use of technology to improve educational quality; Education For All Conference; environment; women in development; decentralization; literacy and out-of-school equivalency programs.

Services to A.I.D. Missions are supposed to be at the level of nine months over the life of the contract. Buy-ins to date stand at 13 months.

Services include the following assistance: development of narcotics demand reduction communication and education program in Costa Rica; retrospective study of the effectiveness of nonformal education programs in Guatemala; study of the telecommunication sector in Guatemala; evaluation of a private sector agency producing popular education materials. Also assisting U.N. agencies (UNFPA, FAO, WHO, UNESCO) to develop development communication training courses.

Provide services to education, population, agriculture, health and nutrition sectors.

DCRs go to Mission Directors and each sectoral office in Missions: education, agriculture and health, population and nutrition. Also distributed in Washington. A total of 636 A.I.D. staff served.

Third World readership: half in education and training, 25% in health, population and nutrition, 20% in agriculture.

Sectoral coverage in DCR articles approximates this audience segmentation.

Reach programs designed to reach large numbers of people with information and specific skills aimed at improving their quality of life.

Within the mix of audiences and institutions served by the CDC, we have tended to cultivate grassroots organizations and broadcasters. The former tend to have closest contact with those most in need; the latter control the media most effective in reaching large numbers of people with information.

Emphasize development communication applications in the formal education sector, highlighting state-of-the-art innovations and encouraging in-school use of tested technologies which are underutilized.

Emphasize improving communications among third world institutions such as universities and research centers, applying technology to foster direct regular linkages.

Have provided regular coverage of interactive radio, although this has tended to be the limit of formal education systems coverage. Have done three issues out of eight specifically devoted to the use of technology to improve the quality and efficiency of education, and one on using technology for training.

Have looked at COSY electronic mail network to link with Third World institutions at low cost; have worked with LTP to develop PC-based "Communication Digest"; have assisted Malaysian-based group to identify writers for new journal on development communication; have met with representatives of institutions in Asia (AMIC, Asian Forum for Environmental Journalists, University of Philippines, Indian Institute of Management, Pakistan Director of Broadcasting etc), Africa (African Association of Communicators in Education, Panafrikan News Agency, Director General of Mauritius Broadcasting etc) and Latin America (IPAL, CINDE, INCAE, IITA etc).

24

Development Communication Report: Organizing a Conceptual Approach

The central brief of the Development Communication Report is to provide regular information to 6500 readers around the world on the application of communication and educational technologies and strategies to issues in development. We have used three reference points in identifying major issues and the particular focus for each DCR.

STRATEGIES

- #63 Distance education
- #64 Local radio

TECHNOLOGIES

- #64 Local radio
- #66 Technologies for training
- #67 Information technologies

THE APPLICATION OF COMMUNICATION AND EDUCATION STRATEGIES AND TECHNOLOGIES TO ISSUES IN DEVELOPMENT

ISSUES IN DEVELOPMENT

- #65 Environment
- #68 Literacy
- #69 Education for All
- #70 Women in development

DCR coverage of issues in education and training relating to A.I.D. programs

- DCR #63 The whole issue was devoted to distance education. Nielsen's article discussed BRIDGES research into distance training of teachers in Asia. Both Mayo and Coldevin referred to interactive radio projects in Kenya, Nicaragua, Lesotho, Nepal, the Dominican Republic and PNG, and Coldevin described the AID-supported distance teacher training in Kenya.
- DCR #64 DCR #64 focused on local radio for development, reflecting A.I.D.'s interest in decentralized approaches to the provision of adult education and development information. Four pages were devoted to USAID/Liberia's rural radio project.
- DCR #65 This issue was devoted to available experience in providing education and information about the environment. A.I.D. funded projects featured included the IMPACT project (Population Reference Bureau), the Children's Environmental Television Project (SUNY), The Environmental Education Project II in Ecuador (WWF), Development Strategies for Fragile Lands in Latin America (DAI) and the Natural Resources Management Project (EDI).
- DCR #66 DCR #66 focused on the use of technology for training, the ways in which it can improve quality and reduce costs. A.I.D. projects featured included the Communication for Technology Transfer in Agriculture activities in Honduras (AED), the Radio Learning Project's health education and training activities in Bolivia (EDC).
- DCR #67 DCR #67 focused on ways in which information technologies are making a difference in the least developed countries. A.I.D. projects featured included the use of desktop publishing for textbook production in Honduras (IIR), the use of computers for presentation purposes on the RAPID project (Futures Group), the USTTI project (AED), and POPLINE (Johns Hopkins/PCS).
- DCR #68 Adult literacy was the focus of this issue. USAID/Nepal's literacy project (World Education) was featured prominently, as was Learning Technology Project's research in Belize (IIR). The Radio Learning Project's Zimbabwe Conference on education by radio (EDC) was described, and Stephen Anzalone's "Yes, but..." piece has been reprinted widely in international journals, and has become part of UNESCO's package on literacy.
- DCR #69 The Education For All conference in Thailand triggered DCR #69, which was devoted to discussing practical next steps. A.I.D. staff members wrote for this DCR: Cliff Block discussed the use of technology to improve education quality and efficiency; Gary Theisen (now with AED) looked at the uses of social marketing; Frank Method wrote the "Yes, but..." feature. A.I.D. projects that were explicitly described included ABEL, IEES, the Radio Learning Project, the Radio Science Project, the Learning Technology Project and BRIDGES. U.S. based resources for international use were heavily featured (such as Sesame Street, the ERIC system, journals and

resources such as those for teacher training produced by the NorthWest Regional Education Laboratory.

DCR #70

Drawing heavily on the advice of A.I.D's WID Office, this DCR looks at the role communication and education can play to increase opportunities for women to participate in development. Rasmi Luthra's Bangladesh case study is of an A.I.D. sponsored project; OEF's Suzanne Kindervatter discusses income-generation projects that are largely A.I.D.-funded; May Yacooob draws on WASH Project experience; Marcia Griffith relates field research findings from the A.I.D.-funded weaning project.

REGIONAL COVERAGE IN DCR

DCR	AFRICA	ASIA	LAC
DCR 63	Chad Ghana Kenya Tanzania Zambia Zimbabwe	Burma Indonesia Pakistan Malaysia	Chile
DCR 64	Liberia	India Indonesia Malaysia Nepal	
DCR 65	Kenya Zambia	India Indonesia Philippines Thailand	Costa Rica Ecuador Guatemala Mexico Nicaragua
DCR 66	Zimbabwe	India	Bolivia Honduras Peru
DCR 67	Cape Verde Madagascar Nigeria	Bhutan Thailand	Brazil Chile Honduras Mexico
DCR 68	Zimbabwe	Nepal	Belize Dominican Republic
DCR 69	Gambia	Philippines Egypt Qatar Sri Lanka Thailand	
DCR 70	Cameroon Cote d'Ivoire Kenya Sudan Swaziland Togo Zimbabwe	Bangladesh India Indonesia Pakistan Philippines Thailand Yemen	Chile Honduras

15

INFORMATION REQUESTS

A list of the number of information requests by country and region appears on a separate page. Here, we describe the kind of requests to which we have responded.

Some were simple requests for CDC materials. For example, the *Development Communication Report* on environmental communication attracted many requests including requests for 20 copies from the World Resources Institute, 25 copies from S&T/Rural Development, 5 copies from A.I.D.'s Population Office, and 12 copies from the Manitoba Environment Foundation.

Other requests were for materials, project descriptions, bibliographies, sources of further information and materials on a wide range of subjects. These requests often took at least a day for research. Below, we list some of the requests for materials and/or information received in one six-month period:

- environmental education materials,
- how to communicate with Indian populations and information on video production techniques,
- AIDS public awareness campaigns,
- broadcasting for primary education in Africa,
- the bibliography on distance education,
- radio for rural development in Africa and Asia,
- financing telecommunications products in the Third World,
- hard data on telephone ownership worldwide (received from the A.I.D. PVO office)
- a bibliography on the transfer of technology (from IDRC),
- references on visual literacy,
- agricultural extension materials,
- drug abuse prevention materials and strategies,
- references on radio in Ecuador,
- materials on folk media and traditional knowledge in development communication,
- research on traditional communication in Papua New Guinea, references for health education materials,
- a bibliography on visual materials for women in primary health care and family planning, and
- referrals for health, agriculture and family planning video distributors.

The responses to requests vary. Three examples are provided below.

- o The National College of Nursing in Beirut, Lebanon requested the CDC to provide audiovisual materials and textbooks on training for nurses. This request was plainly outside our capacity, so we looked for organizations that could provide assistance. CDC staff researched book donation organizations and referred the petitioner to Interchurch Medical Assistance, Inc., to the Brother's Brother, and to HERU, the recently created Health Education Resource Unit at The American University in Beirut. A CDC publication list was also provided.

- o The Deputy Minister from the Ministry of Health in Nigeria, sponsored by UNICEF, requested assistance in conceptualizing and planning community health services, including training of health workers at a distance and communicating health information to rural families. The CDC packaged a set of documents which included:

Leadership for Primary Health Care, by Flahaut and Roemer, WHO
Assignment Children, UNICEF
Primary Health Care Issues: Community Financing; Community Participation, Progress and Problems: An Analysis of 52 AID-assisted Projects, APHA
Media Planning Frameworks for Community Health Promotion, Alexander, Stanford University
Pretesting in Health Communications: Methods, Examples and Resources for Improving Health Messages and Materials, DHSS/NIH
Organizing for Health, Int'l Council for Adult Education

- o Ms. Doe Mayer from Johns Hopkins Population Communication Program requested documentation on the difficulties encountered in using family planning educational video materials in the clinics/waiting rooms in Egypt, and information on audiovisual programming for family planning. Since no direct reference on the Egyptian family planning program is available in the collection, the search led to similar communication/ radio programs in Arab or muslim countries collected from the family planning and population periodicals. Copies were provided of:

Family Planning Resume, Vol.2, No. 1, 1978;
Content and Guidelines for TV producers;
Knowledge, Attitude and Practice Profile of a Bedouin Community in S.Arabia: Fertility in Rural Egypt;
Use of Radio in Family Planning, Radio scripts used in muslim countries;
DCR #51, A Communication Campaign in Egypt, p.13;
Population Reports, J 869: Family Planning on Radio in the N.E. & North Africa;
Studies in Family Planning, Vol 13, No 12, 12/82: Contraception and Community in Egypt;
Direction for USAID Communication Policies in Population, Stanford University.

REQUESTS BY COUNTRY AND REGION

Asia and the Near East		Latin America and Caribbean		Africa	
Bangladesh	3	Argentina	6	Benin	1
Burma	1	Barbados	2	Cameroon	4
Egypt	1	Belize	1	Côte d'Ivoire	3
Fiji	1	Bolivia	2	Ethiopia	1
India	26	Chile	2	Gambia	1
Indonesia	2	Colombia	5	Ghana	3
Iran	1	Costa Rica	2	Guinée	2
Israel	1	Ecuador	2	Kenya	4
Jordan	2	El Salvador	1	Liberia	4
Korea	1	Guatemala	1	Mali	1
Lebanon	1	Guyana	1	Mozambique	1
Malaysia	4	Honduras	4	Nigeria	12
Malta	1	Jamaica	3	Rwanda	1
Nepal	1	Mexico	2	Senegal	1
Pakistan	2	Panama	1	Sierra Leone	2
PNG	2	Paraguay	3	Somalia	1
Philippines	16	Peru	5	S.Africa	3
Portugal	1	Suriname	2	Tanzania	4
Sri Lanka	4	Trinidad	6	Togo	1
Thailand	1	Uruguay	3	Uganda	2
Tonga	1	Venezuela	1	Zaire	1
Tunis	1			Zambia	3
Vanuatu	2			Zimbabwe	2
W. Samoa	1				
Total	77	Total	55	Total	58

International visitors to the Clearinghouse on Development Communication

AFRICA

Benin: Marie Constance Egbo-Glele, Director of Radio;
Taofiki M. Aminou, Director General, Ministère des Enseignements Moyens et Supérieurs;
Julien Djosse, Director of the Bibliotheque Nationale of Benin
Burkina Faso: Tiao Luc-Adolphe, Director General of SIDWAYA,
Central African Republic: Cyriaque Robert Yavoucko, Director of Economic Affairs and Cooperation, University of Bangui
Congo Republic: Paul Ngatse, the Minister of Information;
Dr. Alphonse Ekoua, Vice-Rector, Marien N'Gouabi University
Ethiopia: Dr. Negussie Teffera, Council of Ministers, Information, Foreign Relations & Justice
Gabon: Jacques Lebibi, Vice-Rector, Masuku Science and Technical University
Ghana: Kojo Yankah, Director, Ghana Institute of Journalism, Accra,
Madagascar: Rita Razakanaivo, Technical Advisor to the Ministère de l'Enseignement Supérieur
Mauritius: Mr. Dulliparsed Suraj Bali, Director General of Mauritius Broadcasting Corporation
Niger: Malam Ari Boucar, Secrétaire Général, Université de Niamey;
Abdoulaye Fatoumma, Ministère des Affaires Sociales;
Adamou Moussa, Ministère de la Santé Publique;
Nigeria: Kayode Oyegbite, Deputy Director of the Nigerian Ministry of Health;
Dr. G.B. Ogunmola, Dean of the Faculty of Science, University of Ibadan
Rwanda: Anastase Nzibonera, Director, Curriculum Development
Senegal: Birahim Ba, Directeur de l'Enseignement Moyen/Secondaire
Swaziland: The Minister of Education and Director of Education
Uganda: Douglas S. Lubowa, Unicef,
Zimbabwe: John Tsimba, Director General, Zimbabwe Broadcasting Corporation

ASIA AND NEAR EAST

Bangladesh: Ali Asker Quoreshi, Executive Director of "Mukti" Drug Addicts & Care Center, Dhaka
Jordan: Mohamed Attiat, Director of Educational Technology
Pakistan: Nissar Hussain, Director of Pakistan Television
India: Indu Bushan, Director, Medical Services, Jaipur;
Mr. Rudrayya B. Gaddigamath, FAO Fellowship recipient;
Professor R.F. Ganapathy, Indian Institute of Management;
Indonesia: Nadjibuddin, Jakarta, Suprpto, Bogor
Nepal: Aditya Man Shrestha, Chairman, Asian Forum of Environmental Journalists
Philippines: Dr. Alexander Flor, Assistant Professor in Development Communication at the University of the Philippines;
Nora Quebral, Director, University of Laguna

LATIN AMERICA AND CARIBBEAN

Barbados: Sona Gill, Julian Rogers, Voice of Barbados
Brazil: Alan Poole, Instituto Electrotecnica e Energia of the University of Sao Paulo;
Gina Machado and Margarida Ramos, Funda'ao Roberto Marinho, Rio de Janeiro
Chile: Patricio Cariola, CIDE
Colombia: Marta Arango, CINDE, Medellin
Guatemala: Richard Martin, USAID
Guyana: Enrico Woolford, Film Centre
Honduras: Marco Tulio Mejia, USAID/Honduras;
Omar Roussel, Vice Minister, Ministry of Education
Jamaica: Patricia Cooper, Elaine Perkins, Jamaica Broadcasting
Suriname: Robert Wydenbosch, Suriname Broadcasting

Appendices

Adult Literacy: A Call to Communicators

Unesco has proclaimed 1990 as International Literacy Year. This initiative has raised the issue of literacy to the top of the international agenda once again, after years of being given low priority. There are at least two reasons for this renewed interest.

The first reason is the stubborn persistence of the problem of illiteracy, despite all the earlier efforts to eradicate it. The number of illiterates among the world's adult population is steadily growing, from approximately 963 million today to an estimated one billion over the next decade, if present trends continue. There is indirect evidence that illiteracy has dramatically worsened over the past decade as a result of deep cuts in educational spending made by many debt-burdened countries. More women are affected than men: one in three women in the world cannot read and write, while the ratio for men is one in five.

The second, more positive reason is the mounting evidence that literacy brings direct economic and social rewards for individuals and society. Contrary to earlier beliefs that educational investment was a "black hole" that produced no concrete results, recent research suggests considerable long-term benefits. Literate workers are more employable and efficient, and literate farmers produce greater agricultural output. Literacy appears to lead to better health and nutrition and longer life expectancy. The families of literate mothers are more likely to have fewer children, lower infant mortality and better nutrition.

In general, primary education through formal school systems has been favored as the most efficient means of obtaining universal literacy. However, there is increasing recognition that expanding and improving primary education will not alone suffice to overcome illiteracy. Armed conflict, nomadic lifestyles, cultural norms restricting

girls' activities, or the demand for labor at home and in the fields prevent many children in Third World countries from attending school long enough to acquire basic skills and knowledge. In other cases, uneven school attendance severely hampers learners' progress, not to mention the poor quality and scarce resources of many schools.

Intensive nonformal literacy programs are often a less costly, more efficient means of reaching those bypassed by the formal education system. They are also more easily adapted to the immediate needs of the

(continued on p. 2)

In this issue . . .

Adult Literacy: A Call to Communicators.....	1
Testing Literacy Materials – It's Worth It.....	3
Writing It Ourselves: Adult Beginning Readers as Authors.....	5
Speak & Math: Learning Electronically in Belizean Schools.....	7
TV Networks – A PLUS for Non-Literates in the United States.....	9
Eyes on the Prize: Competing for the Attention of New Readers in Asia.....	11
Two Literacy Strategies:	
The Laubach Model.....	12
The Freirean Model.....	13
Radio Education in Africa.....	16
Resources for Literacy Promoters.....	17
What's New, What's Coming.....	18
Tough Questions for International Literacy Year.....	20

New Commitment to "Education for All"

by Clifford Block

Nearly 2,000 educational and political leaders representing 156 nations met in Thailand March 5-9, 1990, where they made dramatic new commitments to improve basic education by the year 2000. New funding was pledged, and many nations agreed on the urgent need to revamp their own education systems. Several leaders noted that communication must play a central role in this effort.

The conference was jointly sponsored by the World Bank, Unicef, the United Nations Development Program and Unesco, with 22 cosponsoring aid organizations. The World Bank and Unicef both pledged to double their aid to basic education.

Participants set the following goals for the year 2000: at least 80 percent of all 14-year-old boys and girls should attain a common level of *quality* learning achievement set by each country; adult illiteracy and the disparity between male and

female literacy should be cut by half; and all citizens should have access to essential knowledge and life skills.

To achieve these goals, the power of communications should be tapped, in the view of such leaders as James Grant and Federico Mayor, the heads of Unicef and Unesco, respectively. Roundtable discussions on distance teaching, rural radio and social mobilization through the media attracted lively attention.

This new ferment provides a great opportunity for communications experts to plan education reforms, provide greater access for women, provide life skills information and mobilize support for these all-important goals. Further information on the conference will appear in the next edition of the *Development Communication Report*.

As a member of USAID's delegation to the conference, Clifford Block organized a major roundtable on distance teaching.



Development Communication Report

Development Communication Report, published quarterly by the Clearinghouse on Development Communication, has a circulation of over 7,000. The newsletter is available free of charge to readers in the developing world and at a charge of \$10.00 per year to readers in industrialized countries.

A center for materials and information on important applications of communication technology to development problems, the Clearinghouse is operated by the Institute for International Research, in association with Creative Associates International and supported by the U.S. Agency for International Development, Bureau for Science and Technology, Office of Education, as part of its program in educational technology and development communication.

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Reprinting DCR Articles

A prestigious international magazine recently reprinted no fewer than seven articles from a 1989 edition of the *Development Communication Report*. This same magazine had previously reprinted two additional articles from an earlier edition of the *DCR*. We regard this as a compliment. However, in both cases, there was no mention of the *DCR* as the source of the articles.

Please, feel free to use our material, but give us credit.

(from p. 1)

poor. Moreover, they can address the needs of today's adults and young people while the enormous task of providing quality primary education for tomorrow's children is being met.

This edition of the *Development Communication Report* addresses the issue of adult literacy and its achievement primarily through nonformal education programs from the perspective of development communicators.

Opportunities for Communicators

Literacy is a communication issue in the broadest sense of the term. Since ancient times, the introduction of the written word radically transformed the transfer of knowledge and information throughout society and over time. On the individual level, the ability to read and write text is a fundamental communication skill; mastery of this skill enables a person to engage in more advanced forms of communication. Therefore, the current drive to achieve universal literacy implies that each individual will enjoy the basic ability to communicate in the modern world.

On a more immediate level, the design and implementation of a literacy programs present a range of specific opportunities and challenges for communicators and media producers. These roles are briefly outlined below and many are addressed in the case studies in the following pages.

Literacy Policy and Program Design. One fundamental decision that confronts many policymakers in multilingual societies is the choice of language of instruction for literacy and education programs. National languages are usually favored, but there are cases where minority languages are used. The mass media may consciously or unwittingly legitimize and popularize one language, perhaps at the expense of another, simply by using it.

Approaches to Literacy. There are several models for adult literacy education, based in different theories about how adults learn and even different educational goals. The choice of a model will largely determine the types of materials developed, teaching methods employed, curriculum design and the organizational structure. Communicators can contribute to the ongoing debate over appropriate goals of literacy programs and which strategies work best to achieve them.

Literacy Promotion. To succeed, a literacy program requires broad participa-

tion as well as political commitment at the highest levels. Communicators can provide valuable assistance to literacy programs through media exposure and promotion. A promotional campaign can serve a number of objectives: raising public awareness about the extent of the illiteracy problem and the need for remedial measures, soliciting financial support for the program, recruiting volunteer instructors, mobilizing illiterate participants and sustaining the motivation of teachers and learners.

Materials Development. Materials that are easy to read, relevant to learners' lives and progressively build reading and writing skills are essential to any literacy program. One of the most important roles for communicators in literacy programs is to assist educators in developing printed and visual materials that clearly and logically present literacy lessons and exercises. They can also assist in pre-testing materials to ensure that learners are effectively mastering learning objectives.

Instructional Delivery Systems. Along with carefully developed materials, well-trained, conscientious instructors are a critical ingredient of success in a literacy program. The mass media can play a role in recruiting volunteer teachers, as mentioned above. Radio, videocassette or other instructional media might also be used to train literacy teachers or volunteers, although teacher training at a distance has yet to prove its effectiveness. Where there is a shortage of teachers, literacy instruction delivered through radio or television broadcasting, video-cassette or electronic media can supplement classroom instruction.

Post-Literacy Campaigns. Clearly, in order to sustain the gains made in literacy programs, new readers need a supportive environment and should have ample opportunities to practice their new skills. Here again, communicators, including the commercial press and private publishers, can assist educators in assessing the nature of the demand for materials and in producing low-cost materials which combine interesting stories with development messages.

In the past, literacy programs have been fraught with difficulties. These problems have been at least partly due to insufficient attention to the technical elements of designing and implement a literacy program. Once political and financial commitment is secured, communicators can help ensure that the program effectively strengthens the literacy and basic skills of individuals, families and communities.

Testing Literacy Materials—It's Worth It

by John Comings

Over the past decade, a national literacy program in Nepal has carried out extensive research, field testing and evaluation of literacy materials. Through a participatory process, it has engaged learners and communities in developing the materials and identifying educational messages. These sound principles of materials development are helping Nepal overcome a long history of failed literacy efforts and tackle the formidable task of reducing its 70 percent illiteracy rate.

Although research and pre-testing of educational materials and messages have long been a mainstay of health and family planning communication campaigns, they have seldom been applied to literacy programs. This is largely because the process is necessarily more expensive and time-consuming in the case of literacy. Pre-testing requires at least a year for full implementation of the program. Since reading and writing skills require extensive practice, hundreds of pages of reading material must be developed. Their messages must also be designed, tested and revised. In fact, the design and improvement of materials for the Nepal literacy program took nearly a decade and cost the government of Nepal, USAID, Unicef and other funding agencies several million dollars. But it's hard to argue with the result: effort and resources have not been wasted, materials are well-designed and culturally appropriate, and international agencies support the program.

A Decade of Progress

The literacy program in Nepal has been developed and implemented by the Ministry of Education and Culture in collaboration with World Education, a Boston-based private voluntary organization. It began in 1980 with research into ways to use simple visual materials to generate discussions around development themes among illiterate rural people. This process eventually led to the development of four 96-page books and a set of learning games that use discussion as the introduction to literacy. They teach written language and simple math skills and also provide information on health, family planning, agriculture and rural problems.

Once the adult literacy program was underway, it was noted that the classes were also attracting children who had no opportunity to attend primary school. In response, Action Aid, a British NGO, and Unicef adapted the adult materials to children and began child literacy classes. The Ministry of Education and Culture adopted and improved these materials and has now added a child literacy component to the program. After completing the program, children can enter the fourth grade of Nepal's five-year primary school.

In all, more than 350,000 men, women and children throughout the entire country have attended literacy classes over the last decade, and the program currently serves 100,000 people per year. The government of Nepal implements about 40 percent of the classes, while local and international NGOs provide the balance. World Education and the ministry have trained literacy teachers from government agencies and NGOs in the use of these materials and program staff in implementation of the program. They have also trained a core of government staff to develop additional literacy and post-literacy materials using the same approach (described below).

Encouraged by success, the Ministry and partner NGOs have now decided to begin a 10-year National Literacy Campaign. The campaign's goal is serve five million people over the next decade. Presently, World Education is assisting the Ministry in designing a monitoring system for the national program, developing post-literacy materials and planning the expansion of service. Campaign planning, too, is following the same model as the existing literacy program; it will involve a three-year pilot effort to expose and solve all the problems before large resources are put into the campaign.

Key Words, Comic Strips and Dramatic Stories

The fundamental skills of reading and writing are taught through a core vocabulary of key words, which are based on the important themes or situations in the learners' lives. These key words are also demonstrated in a simple drawing depicting the main theme or issue to be discussed by the participants. Through a process of discussion with villagers, field-testing

materials and examination of Nepal's national development goals, the following themes were identified: reforestation, work, nutrition, poverty, money, family planning and education of children. The key words, which include all the letters and basic sounds of the language, are analyzed or broken down into syllables, which are then used to synthesize new words. This design is eclectic: it drew in part from Freirean methods of identifying central themes and encouraging discussion (see p. 13), as well as from the Laubach emphasis on phonetics and Unesco's functional literacy approach.

Several stories depict women having opinions, making decisions, learning new skills and modeling a wide range of self-reliant behaviors.

The first book starts with simple letters and words, gradually advancing toward complete stories and informational pieces. By the end of the first book, learners have progressed far enough to read and write simple stories and do basic math. By the end of the fourth book, learners cover all of the letters, punctuation and sound combinations in the language and all mathematical functions. The later lessons have more substantive content than the earlier ones. This allows a learner to acquire and practice using skills at a measured pace. Under normal conditions, a learner should complete the entire course in 110 classes.

Reading passages and writing exercises are alternated with pictures so that participants are not overwhelmed with too much text. The size of the print used in the primers is large and the space provided for writing exercises is ample. Instruction is supplemented by games, discussions and activities that encourage the learners to analyze and synthesize the letter combinations, as well as to think critically about problems and issues in their lives.

In order to promote reading skills, the primers include practice in reading illustrated stories that follow a Western comic book format. Project staff found that participants enjoyed comics but needed to learn the necessary pictorial conventions.

These were introduced through a four-frame story without words, and participants were asked to invent a story verbally. The convention of dialogue "bubbles" to indicate a character's thought, speech, exclamations and questions was also taught by example. Participants enjoyed role-playing the characters, which further aided their understanding of the dialogue and comic convention.

Halfway through the first book, a full, multi-page story is presented in illustrated story format. This story tells of a man who drinks, gambles and treats his wife badly. He spends the money his wife has earned and saved, causing them to fight. Afterward, she leaves him and returns to her family. He follows and asks her forgiveness. The story ends with the wife trying to decide whether or not to believe him. To

comments. The four-book set of materials was produced in a format which is cheap and efficient for printing on a large scale. In 1986, the materials won the Nassib Habib prize awarded by Unesco.

Materials for New Nepali Readers

Presently, the Ministry is addressing the problem of a lack of good reading material in rural areas with a post-literacy program. As with the literacy materials, the post-literacy materials have been developed with adequate research and extensive field-testing, and with the involvement of users. In this way, the knowledge of experts is mixed with the knowledge of the target group. The post-literacy materials offer practice in reading, and also act as an effective vehicle for development messages.

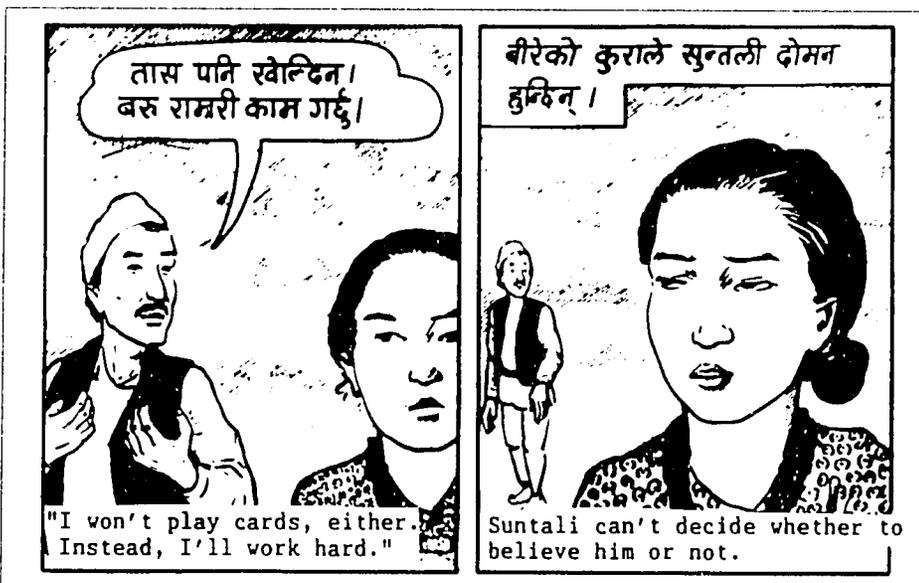
birth spacing and explore whether it was of interest to new literates and others needing family planning services. The concept of spacing births was well supported by mothers, fathers, grandparents and community leaders. Through a combination of focus group discussions and a contest to come up with a suitable term, the phrase *janma antar* (birth gap) was found to be better understood and more acceptable to both villagers and family planning administrators. Stories for new literates, using the phrase *janma antar* and depicting the benefits of a four- to five-year gap in births were drafted. Comic strips illustrating these stories and a crossword puzzle were also created. These draft materials were field-tested in several sites, and changes were made based on new literates' feedback.

Lessons Learned

Many education planners believe that literacy programs fail for reasons external to the literacy class. Common reasons given include learners' lack of free time, irrelevance of literacy skill to their lives and insufficient material to read after acquiring literacy. Evaluations of the Nepal program present a different picture: when the materials and instructional designs are correctly developed and instructors receive adequate training, external factors have little effect.

Between 40 and 50 percent of participants successfully complete the program. If classes that are taught by instructors who show up on an irregular basis (or not at all) are not counted, the success increases to nearly 80 percent. Tests of those who completed the course indicated not only did their reading, writing and numeracy skills improve considerably, but so did their attitudes and knowledge about forest conservation, family planning, oral rehydration and health care. Fifty percent of the children who complete the course enter fourth grade in the formal school system, thus adding to the internal efficiency of the primary schools. Preliminary data on participants two years after they complete classes shows that at least 50 percent maintain or increase their skills even without a post-literacy program. With the exception of instructor attendance, the techniques of good educational media development can solve the internal problems of literacy programs and contribute to their success.

As Vice President of World Education, John Comings manages literacy projects in Asia, Africa and the United States.



Comics from the first of four books developed for the Nepal literacy program (English translation added).

finish the story, the learner must continue with Book Two. Each of the remaining books has elaborate dramatic stories in comic format that are serialized between two books, thus adding to learners' motivation to continue with the cases. And, as in this story, several depict women having opinions, making decisions, learning new skills and modeling a wide range of self-reliant behaviors. Since women comprised the largest segment of learners, positive female role models were consciously woven into the stories.

In all cases, stories and dialogues used common spoken Nepali language, rather than the formal language used in writing. After the first draft of materials were developed and field-tested, they were continuously revised based upon participants'

One example can be seen in World Education's work with Program for Appropriate Technology in Health (PATH) to develop reading materials for new readers in Nepal on the topic of birth spacing. Research had shown that the term for "family planning" was widely believed to mean "surgical sterilization" in Nepal, and PATH was interested in developing new messages promoting birth spacing without reference to the idea of family planning as permanent.

As a first step, World Education staff examined all existing materials on family planning in Nepal for any existing references to the concept of birth spacing. We discovered that there was no phrase specifically referring to birth spacing. Therefore, we organized focus group discussions among Nepali villagers to discuss the notion of

Writing It Ourselves: Adult Beginning Readers as Authors

As we learn from the previous article, well-developed materials can be an important element of success in a literacy program. But learning to read and write doesn't necessarily require prepared, standardized materials. As Marilyn Gillespie describes below, the most effective reading materials can be those literacy students produce themselves. Using papers, pencils, sometimes computers—and their personal experience—middle-aged students wrote materials for one another in the process of learning how to read. This experience points to a low-cost, self-sustaining and empowering approach to producing literacy and post-literacy materials that new readers want to read.

by Marilyn Gillespie

A few years ago, the small literacy program that I directed through a public library in Massachusetts began using what is called a "writing process" approach to encourage students to write about their lives. Lidia was the first to begin. "My name is Lidia," she started off. "I was born in Italy in 1939, in the middle of the depression and in the middle of the war." Although Lidia had only completed the second grade in Italy and had never written as much as a single letter before, she was so engrossed in telling her story that she was able to "invent" her own spelling system. Page after page she reconstructed her own history: her father going off to fight in "the big war," washing dishes for the German soldiers, the terrible Christmas eve when her mother died of tuberculosis and, finally, the trip to America.

Soon other students began reading Lidia's story and from it gained the confidence to start their own. Any reservations we as teachers initially had about beginning readers' ability to write disappeared as people began to pour words onto the page. There were powerful messages in their writing: recollections of childhoods stolen away by having to leave school and go to work at an early age, histories of jobs found and lost, women's memories of abuse and desertion, genealogies of the births of children and grandchildren and thought-provoking reflections about what being unable to read had meant in their lives. Most of our students were able, in one form or another, to get words down on the page. Those who couldn't used a "language experience" approach to dictate their stories to a tutor. Their oral histories then became their first readers.

Our project is not unique. It is one of a growing number of programs throughout

England, the United States and Canada for which writing, publishing and the use of student-written texts has become a vital part of a curriculum for adult beginning readers.

From Pen to Publishing House

Writing and publishing by adult beginning readers is a grassroots movement. It has originated primarily in small, community-based programs. Many kinds of writing exist. For some programs, writing consists of having students dictate stories that then become the substance of reading exercises. In others, reluctant writers start by using dialogue journals, a way of "talking on paper" that allows students to make the transition from oral to written language by exchanging private notes or letters with a teacher or fellow student. Many programs form student review boards to read and select writing for in-house newsletters or anthologies. Still others, like ours, use computers for word processing and desktop publishing.

In England, where publications by adult literacy students are perhaps most well established, the movement has grown up as part of a larger tradition of "worker writing." In the early 1970s, Centerprise, a community center and worker publishing project in the heart of Hackney, was one of the first to undertake publishing books by and for beginning readers. A literacy teacher, discouraged by the gap between his students' lives in Hackney and materials available for beginning readers, approached Centerprise with his idea.

Soon, autobiographical writing such as *A Woman's Work*, *Maria's Trip through the System*, and *My Home in Jamaica* were followed by other, collective writings. *Breaking the Silence* gathered the impressions of Asian women living in an alien culture and their own process of coping with the changes. Across England small literacy schemes joined together in 1976 as members of The Federation of Worker Writers and Community Publishers.

In the United States and Canada, writing and publishing is a newer and more isolated phenomenon. East End Press in Toronto was one of the first groups in North America to publish and distribute student writings for sale. Books such as *My Name is Rose*, a story by a woman fighting back against physical abuse, and *Working Together*, a collective research project by adults who can't read and about problems they face, have circulated throughout North America—not just to literacy programs but to battered women's shelters and community housing projects. *Voices: New Writers for New Readers*, a new British Columbian-based magazine with contributors from the U.S. and Canada, hopes to attract a large readership with its high quality photographs and professional quality format. *New Writer's Voices*, a series by Literacy Volunteers of New York City, and *Need I Say More*, a Boston-based literacy magazine, are several others.

Why does student writing and publication deserve the attention of adult educators? Four reasons that highlight its value both as a process and as a product will be discussed here.

Writing as the Exercise of Literacy

Many programs, like ours, continually grapple with the problem of defining who decides what should be taught in a literacy program for adults. On the one hand, we

[This writing] presents a powerful alternative to the idea that writers are privileged, highly educated individuals who sweat out Great Works in the privacy of their own garrets. Writing and writers, for all the extraordinariness, become ordinary and everyday, open to anyone and everyone.

Centerprise Publications Brochure

want to provide our students with the hard skills they need to be "functional" in their worlds. On the other hand, we are often well aware of how seldom we and they are

challenged to consider for what purpose they want and need reading and writing. Instead of seeing literacy as the exercised ability to use reading and writing in one's own cultural context, too often pre-packaged commercial curriculum give the impression that becoming literate is simply a matter of completing a workbook series or passing a test. Students are passive consumers of dominant language, cultural and workplace rules rather than being encouraged to develop the creative capacity to produce their own knowledge and discover their own voice. Writing in literacy programs is a telling example. Seldom does writing move beyond handwriting, filling out job applications, and answering teacher-determined "comprehension questions."

Researchers such as Malcolm Knowles and Patricia Cross have shown that adult learning is most effective when it draws on the individual's previous experience, is related to immediate needs and involves the adult in decision-making about instruction.

I'm tryin' to learn how to publish a book - to write about some of the things in my life. My teacher told me that's the way a lot of writers started off, by writing about some things in their past...This is just the first step. Now I got to take the second step.

New author Luther Watson, from his autobiography "The Little Boy and the Hobo Man"

As our program began to use a writing process approach, we found writing became an effective means for individualized instruction. Sharing and discussion of the writing tended to focus attention on "generative" topics of immediate and often existential meaning to students themselves.

Writing as Effective Instruction

During the 1970s, frustrated that many students were not learning to write in school, researchers began to look for alternatives by observing what good writers do. They found writing to be a recurrent and collaborative process. Good writers discover their topics as they write. They think, plan and "prewrite" before ever beginning a piece of text. They write many drafts,

I think [writing] makes you stronger in lots of ways. I mean, we often think our life's very bad but when you listen to someone else's life, it's a lot harder and I think it give you more strength to carry on. Whatever I write down, I want to share it with the world.

New author Ellen Knada, from her autobiography *Conversations with Strangers*

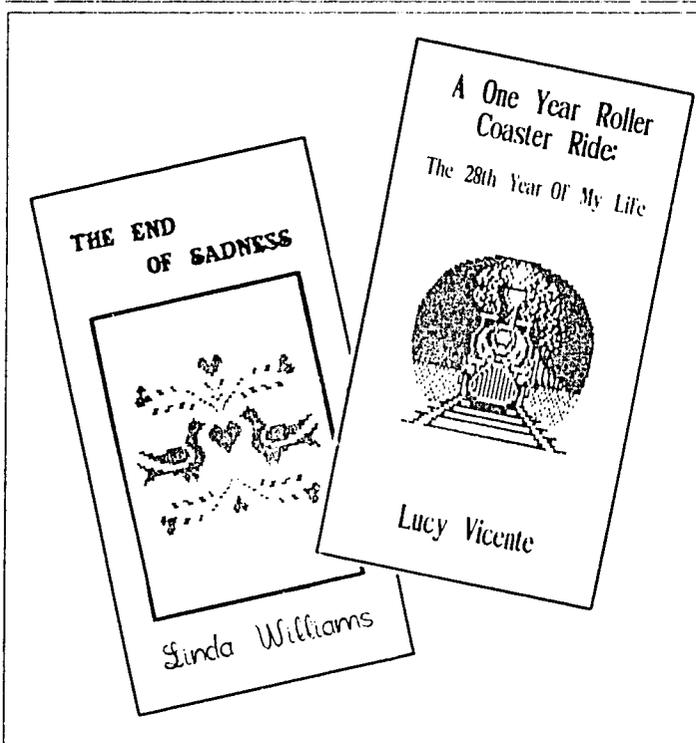
revising, rereading and talking with others. Attention to editing, punctuation and grammar comes later, after the content is clear. Soon teachers of both children and college students (Donald Murray, Donald Graves, Nancy Atwell, Lucy Calkins and others) began to find ways to apply this research to practice. They developed the "writing workshop." Students brainstorm ideas for topics, share drafts and revise at their own pace. Skills are taught in the context of students' own immediate writing. For example, during one draft students might learn about where to put periods and question marks. During the next draft, a "writing conference" might focus on strategies to correct spelling errors in the

same story. During the final drafts before publishing teachers and students together discuss issues of "final" editing and language. Decisions about whether to use "standard English" or the students' own dialect and whether to correct mistakes or leave them as written are made. Gradually, the more students write, the less assistance they need. Not only have they learned skills but they have developed the capacity and self-confidence to see themselves as writers and authors. Although the use of computers is not essential, for many programs getting computers and beginning to write and publish go hand in hand. In our program, we soon found that we could teach most students simple word processing using a commercial software package. Many learned to "hunt and peck" after a few weeks and preferred the appearance of typed text to their own handwriting, which they thought looked childish. A few, mostly very basic beginners, chose not to type, preferring to focus on handwriting and basic reading. After trying drill and practice software, we found that, in the long run, having students learn word processing was a more valuable use of their time. We have used computers to write collective stories, letters and book reviews; to format cookbooks, letters collections and poetry into small books; and to modify students' own writing so that it can be used for skill-building exercises. Computer graphics have provided an opportunity for students to make decorative covers for their books, programs for church bulletins, greeting cards, and newsletters they feel proud to show to others.

Writing as Text

Recent findings of reading research have encouraged the notion that learning to read is often more—not less—difficult when it is stripped from its meaning and isolated in skills sequences. In schools, teachers are increasingly using story books and high interest non-fiction, referred to as "whole" texts. Within adult literacy these

(continued on p. 19)



Literacy students in Springfield, Massachusetts, used computer graphics and desktop publishing programs to make these covers for their autobiographies.

strategies to correct spelling errors in the

24



Speak & Math: Learning Electronically in Belizean Schools

by Pornjit Arunyakanon

It is math hour in a small primary school in rural Belize. The teacher has just finished giving a lesson in basic subtraction to a class of skinny, blue-uniformed first- and second-graders. Rather than spend the next half-hour drilling the students, the teacher groups the children by threes and distributes a hand-held electronic aid called "Speak & Math" to each group.

The children erupt into noisy activity, jostling with one another to work with machine first. When they have settled down, Speak & Math shows each user a subtraction problem and simultaneously speaks the problem aloud through a built-in voice synthesizer. Punching an answer onto the numeric keyboard, one boy looks crestfallen when the machine tells him, "Wrong. Try again."

Numeracy: A Building Block for Literacy

Acquiring numeracy is a key part of the literacy package. Skilled use of numbers is essential to success in school, on the job and in daily life. A basic education without numeracy is like a tent without poles.

Too often, however, basic computational skill is not mastered in school or during literacy training activities. Without sufficient practice, skills are either not acquired or not retained to an extent that enables

learners to solve the mathematics problems encountered in school and in daily life.

Skill in mathematics computation comes through practice, but practice opportunities are usually insufficient in textbooks and instructional activities, especially in developing countries. Teachers and students often find drill and practice to be time-consuming and boring. The result is that practice is avoided and skills are not mastered.

Electronic learning aids can provide more opportunities for practicing and mastering computation. The scenario described above occurred as part of a feasibility study currently underway in Belize, exploring the use of Speak & Math to improve mathematics skills in selected Belize schools where math skills have been found to be especially weak. Preliminary results of the study are encouraging.

Speak & Math, manufactured by Texas Instruments, Inc., provides drill and practice exercises in addition, subtraction, multiplication, division and some rudimentary word problems. The battery-operated machine, which costs about US \$40, measures seven by ten inches and weighs just over one pound. It generates about 100,000 problems, more or less randomly, at three levels of difficulty. Once users have selected the type of problem and the level of difficulty, it presents problems combining visual display with synthesized speech in English language. After the user indicates

the answer, the machine provides immediate feedback with one of the following responses: "That's correct," "Wrong. Try again," or, if the student has erred twice, "Incorrect. The correct answer is ..." It reports a score for each series of five problems.

The Speak & Math study is being conducted under USAID's Learning Technologies Project by the Institute for International Research and the Belize Education Laboratory. Assistance is being provided by the faculty of Belize Teachers College.

An African Precedent

The Belize study is building upon a study undertaken several years ago by the Center for International Education, University of Massachusetts, on the feasibility of using electronic learning aids in primary schools in a developing country. The study, conducted in Lesotho, looked at the use of the Speak & Math and a related learning aid called Speak & Read to improve sixth-graders' basic skills in mathematics and English. It suggested that electronic learning aids could be easily introduced into classrooms, that students and teachers accepted them quickly, and that students using them had higher achievement.

Although the Lesotho study demonstrated the feasibility of using electronic learning aids to improve achievement in a developing country, many questions were not answered, such as the long-term effects on computation skills, or comparative results for different grade levels. The Belize study focuses on younger grades, offers a more structured format for the use of the aids, analyzes students' achievement for the entire year instead of three months and will provide a formal cost analysis.

The Belize feasibility study will determine the impact of the use of hand-held electronic learning aids on math achievement of students in first, second and third grades. The study will compare changes occurring during the course of a school year in student achievement in mathematics in the classrooms using the Speak & Math with students in control classrooms receiving only conventional instruction. Eight schools (four experimental and four control), consisting of about 800 students, were selected from a group of fifteen small schools where performance on the Belize National Selection Examination in mathematics was below average. Average scores

on a pretest covering numeration and computation showed the experimental and control groups to be almost identical at the beginning of the study.

The study began in April 1989. Prior to introducing the aids in the classroom, teachers and principals in experimental schools received orientation on the use of Speak & Math and on prescribed procedures and time schedules. At orientation sessions, it was suggested that Speak & Math be used three times per week for about thirty minutes. But teachers, drawn to the experiment, expressed the desire to use it every day for periods of 30 minutes, and this is the course being followed. In most cases, teachers use the machines in place of classroom drills and practice.

In order to minimize costs, students work in groups of three, taking turns operating the machine, an arrangement that was successful in the earlier study. Those not operating the machine work alongside with paper and pencil, seeing and hearing feedback. Teachers review papers to identify any difficulties for additional remediation.

Preliminary Results

At the end of the two-month period, interviews and tests were conducted to determine teachers' views on whether the instruction provided by aids was effective, to gauge their interest in continued use of the aids during the 1989-90 school year, and to determine what learning gains had taken place.

The results were positive. The interviews showed teachers to be unanimous in the belief that instruction provided by the aids markedly improved students' performance and attitudes toward math. Following are some typical remarks:

- ⊗ "My children have gained in math; they are working much harder and better now."
- ⊗ "What impressed me is that after repeated practice on the machines, the kids would be able to do what they could not do at first."
- ⊗ "The children are cooperative *and* competitive. They engage in a contest to see who can finish first with all correct."

Many teachers cited additional benefits. Some noted that the machines freed them from supervisory responsibilities, allowing them to devote more attention to slower learners. One teacher claimed that the introduction of the machines had increased attendance in her class.

The students' enthusiasm was extremely high. Some arrived at school early, or stayed during the lunch hour, for the chance to work with Speak & Math. Student performance on addition and subtraction in the four schools that had been using Speak & Math *for two months* was dramatically superior to students in the control schools, as measured by a 20-item test. The average score of the experimental classes was 72 percent and the average for the control classes was 52 percent.

Cultural adaptation to the machine appeared to be a less serious obstacle than expected. At the outset, children were often extremely curious about how the machine worked. "Teacher, how the man get inside the machine?" asked many students perplexed about the artificial voice. "How is it that this machine knows the answer?" one inquired. At least one student refused to accept the machine's infallibility. "Teacher, sometimes the man tells me I am wrong and I know I am correct," he insisted. Some had initial difficulty in recognizing the voice's pronunciation as well as the shape of numbers or computation signs in the electronic display. Many were not used to viewing math problems in a horizontal format, since the teacher had usually written them vertically. However, these problems were quickly overcome and did not tend to interfere with students' progress.

Some teachers pointed out that, although the aids immediately told the student whether the answer was right or wrong, they did not tell him what he did wrong when he answered incorrectly. This made the quality of the feedback lower than it would have been with personalized attention from a teacher. However, only the most sophisticated educational computer software is capable of giving such feedback. The software, and the computers to run it, cost far more than the budgets of schools in developing countries can afford.

In the Long Run?

It is too soon to tell whether the initial gains will be sustained over the long run. This will be answered when the results are obtained from the tests given to students in May 1990. If initial improvement rates are not maintained, this might suggest the possibility that the aids were over-used. If this is the case, maximum long-term gain might occur by using the aids only two or three days per week, or by bringing out the aids periodically for intensive use.

Whether or not students who use learning aids score significantly higher on the

final test, there is reason to believe that they have benefited from use of the aids. Students and teachers alike are enthusiastic about use of the aids. The aids serve to break up the monotony of the school day. They also give students a taste of modern technology that they are unlikely to get elsewhere in their environment. Most teachers believe that students will not get bored with the aids until they have mastered the skills being exercised. The aids also assist teachers in pinpointing individual differences, helping them become more responsive to students' needs.

Pornjit Aranyakanon, from Bangkok, Thailand, is a PhD candidate in instructional design and technology at the University of Pittsburgh. For the past three years, she has served as a research assistant for USAID's Learning Technologies Project.

Using Radio for Literacy: A Conference

An international symposium on "Popular Literacy by Radio" will take place July 1-3, 1990, in Santo Domingo, Dominican Republic. The conference is being organized under the auspices of Unesco, adult education organizations in Latin America, national radio networks in the Dominican Republic and Spain, and ministries of education from several countries. Spanish and English are the official languages of the conference.

Throughout the three days, morning sessions are dedicated to panel discussions on basic education, literacy radio programming and post-literacy radio programming, with special reference to experiences in Latin America. Afternoon sessions will feature examples of radio programs used for literacy and post-literacy in countries in Latin America and Europe. Organizations that wish to present information and examples about their activities related to the use of radio for literacy should send a detailed proposal to the conference secretariat.

The registration fee for the symposium is US \$50. For information about registration, travel, or accommodations, contact the secretariat of the symposium at the following address: Federico Henriquez y Carvajal, 2 - Gascu, Apartado Postal 780-2, Santo Domingo, DN, Dominican Republic. Telephone: (809) 686-4178. Fax: (809) 686-4178.

Evaluation Guidebook

Evaluators trying to select an appropriate instrument for assessing adult literacy programs will appreciate *Measures of Adult Literacy*, a new, well-organized guide to evaluation tests and instruments.

The guidebook reviews 63 commercially available tests, grouping them into four categories: basic skills in reading, writing and mathematics; oral English proficiency; "affective outcomes," or personality characteristics such as self-esteem and self-determination; and critical thinking skills, such as logic and argumentation. Each entry covers the author of the instrument, the date it was published, its purpose, brief descriptions of test exercises and procedures, reliability and validity indices, price and availability. In the "comments" section, the author offers candid impressions of the strengths and weaknesses of the instrument – for example, whether it is biased toward middle-class or low-income people, adults or children.

The idea for the guidebook came to the author, Gregg Jackson, when he set out to evaluate a large number of adult literacy programs for the Association for Community-Based Education. He was soon overwhelmed by the diverse array of choices. "It was very difficult to know which instruments were suitable for our needs, since there was no one gate through which they all had to pass," Jackson says. Since he was forced to undertake a more comprehensive review, he decided to publish it, since "my dilemma was similar to that of other practitioners."

Although the book's target audience is US adult literacy evaluators, it may also prove useful to overseas counterparts. Entries indicate whether the instruments are available in different languages and, in many cases, review the test's cultural appropriateness. However, Jackson chose not to review instruments distributed by overseas publishers or the small number of instruments developed by community organizations, since the latter usually had not been subjected to reliability and validity analyses, and often are not available in large quantity.

Copies of the guidebook are available from the Educational Resources Information Center, "Learninghouse on Tests, Measurements and Evaluation, 3333 K St., NW, Suite 200, Washington, DC 20007, USA. Telephone: (202) 342-5060. The price is not yet determined.

TV Networks – A PLUS for Non-Literates in the United States

In September 1986, Capital Cities/ABC, one of the three major broadcasting networks in the United States, and the Public Broadcasting Service (PBS), a network of non-commercial television stations, joined forces to raise awareness about illiteracy and to stimulate public-private cooperation, private initiative and community action to help promote literacy. They launched "Project Literacy USA," commonly known as the PLUS campaign. Since it began, 222 ABC-affiliated stations and 313 PBS member stations have participated.

The campaign addresses one of the most urgent social problems in the United States today. Nearly one out of ten American adults, or 23 million people, are described as illiterate, lacking basic skills beyond a fourth-grade level. By some definitions, 13 percent of the workforce is illiterate. The US Department of Labor estimates that adult illiteracy costs society \$225 billion annually in lost productivity, unrealized tax revenue, welfare and crime.

The broadcasting networks did not attempt directly to teach people to read and write. The role of the media has been to create national awareness of the problem, provide information about local resources, recruit volunteers to teach, air regular feedback about individual successes and issue a national "report card." On the local level, 428 PLUS Community Task Forces comprised of media, business and community leaders assess local literacy needs and existing services, mobilize resources, and coordinate the expansion of programs or create new ones where necessary.

The results have been remarkable. Originally designed as an 18-month campaign, PLUS met with such a strong response that it has continued for five years. Nearly 600,000 people have called a national toll-free hotline for literacy information or to volunteer. Calls to state and local hotlines have increased 10- to 15-fold. Laubach Literacy Action, one of the nation's largest literacy service organizations, reports that the number of students has quadrupled over the last four years. Literacy Volunteers of America reports a 150 percent increase in enrollment and volunteers since PLUS

began. Through PLUS, ABC and PBS have demonstrated the enormous power of broadcasting to promote and influence social action.

The First Years

PLUS launched its campaign in 1986 with two attention-getting documentaries. ABC produced an award-winning documentary called "At a Loss for Words: Illiterate in America," narrated by Peter Jennings, an ABC News anchorman and a journalist of national reputation. A month later, PBS aired a one-hour documentary, "A Chance to Learn."

The ABC Office of Communication, which coordinated the campaign for the network, initiated links with senior producers and urged them to develop program responses to the campaign. A similar process occurred at PBS. Over the next several years, both networks aired a wide variety of literacy-related programming on the news (national and local, morning and evening), ABC sports, children's programs, and prime-time shows with stories lines about literacy. Public service announcements aired on ABC network channels 8 to 14 times per week. A major series called "PLUS Learner of the Month" was initiated in April 1987 and ran until December

Report Card

Not Making the Grade!

Name _____
 School _____
 School Year _____

From Youth/PLUS campaign material.

1988. Learners told in their own words how their lives were transformed by learning how to read and write. The PLUS campaign organizers also tapped ABC- and PBS-affiliated radio networks: 2,500 radio stations across the country ran PLUS public service announcements, news and longer stories.

Literacy was tied to national events. For example, the theme of civic literacy was linked to the 1987 bicentennial celebration of the American Constitution, emphasizing the importance of literacy for individuals in fulfilling the requirements of citizenship in a democratic society. A national report, "Workforce 2000," pointed out the inadequate level of skills in the work force, especially among young people, the steadily rising level of skills required in industry, and the diminishing proportion of young people in the population. PLUS reinforced the economic imperative of literacy among young people.

Among other initiatives, "The Unsung Americans" is a monthly series of public service announcements that recognizes community public service and promotes voluntarism. Each month a different individual is featured as an "unsung American" for volunteer activities that aid the development of young people. In November 1988, nationally televised literacy honors were presented to 20 PLUS Learners of the Month at a gala event and to Barbara Bush, the President's wife, who has been a longtime supporter of literacy activities in the nation. The second ceremony, broadcast from the White House in March 1990, honored teachers, literacy volunteers and community activists.

Youth/PLUS: Illiteracy in a Broader Context

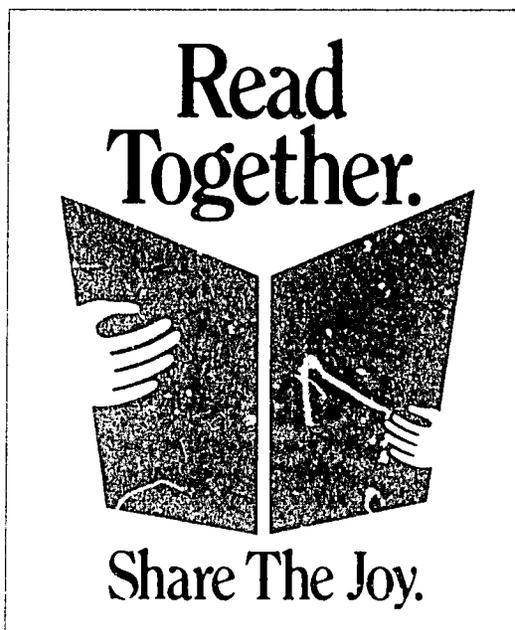
Experts agree that the major problems afflicting young people in America are so severe that it is no exaggeration to refer to them collectively as a "youth crisis." Studies have identified six key problems: substance abuse, teen pregnancy, illiteracy, crime, dropping out of school and unemployment. The incidence of these problems is greater in the US than in any other industrialized nation.

Project Overview, PLUS Campaign

As the PLUS campaign gained momentum, organizers began to recognize the need to address illiteracy as part of a larger web of interrelated social problems. In April 1988, Youth PLUS campaign began in

order to take a holistic view of the social crisis confronting American youth.

Youth/PLUS has two main goals. The first is to establish the link between illiteracy and the whole range of related problems cited above. The second is to build awareness of the positive ways that basic skills can be strengthened – promoting family reading, focusing on early childhood education, support for educational reform, and recognition of those who



Logo used in Youth PLUS family reading campaign.

overcome illiteracy and those who help young people to succeed.

To meet these goals, organizers identified several action strategies. One was coupling national media attention with plans for local action, so that the media focus was complemented by operational support. Another was bringing together groups that normally lack opportunities to work collaboratively, such as educators, business people and youth service providers. The campaign launched a series of initiatives, including the following:

- A family reading campaign called "The Summer of the Readasaurus" created two characters, twin dinosaurs Rex and Rita, who survived extinction because they learned to read. The goal of campaign was to encourage "millions of kids to read millions of books" during the summer of 1988. By summer's end, over one million postcards had arrived from children who had read a total of three million books. The theme was continued with public service announcements featuring celebrities who encouraged reading to children.

- "Breaking the Cycle" was the name given to a series of public service announcements designed to call attention to the cycle of illiteracy passed from generation to generation, and ways to overcome the problem.
- Mentoring was a scheme devised for children whose parents do not know how to read. It encouraged people who can read to act as mentors to children, thus breaking the cycle of intergenerational illiteracy.
- "Making the Grade: A Report Card on American Youth" featured a documentary TV program and related outreach efforts to examine problems facing the nation's youth and current efforts to help solve the problems. It included 400 "summit meetings" in town communities across the country to develop local action plans for confronting the same issues.

Critical Questions

Literacy service organizations are pleased that the PLUS campaign has finally raised the literacy issue to national prominence. Many have been forced to dramatically expand their services in response to rising demand, a situation other education groups would find enviable. However, this expansion has also created problems, particularly in the financial area.

"Growth in financial support has not kept up with the growth in demand for services," says Beverly Miller, Director of Communications for Literacy Volunteers of America. "People don't always realize that although we rely on volunteer tutors, we need funds for training volunteers, for materials, and for administration of our programs."

The PLUS campaign opened some doors to major corporate donors, but not enough to fill the gap. Ironically, for all PLUS's emphasis on private sector initiative and voluntarism, many literacy service organizations are setting their hopes on increased government funds to rescue their financially strained programs. As Peter Waite, executive director of Laubach Literacy International, remarks, "Illiteracy will not be solved with volunteers, but it will not be solved without volunteers."

For more information, contact: Capital Cities/ABC, 77 West 66th Street, New York, NY 10023, USA. Telephone: (212) 456-7227; or Public Broadcasting Service, c/o WQED, 4802 Fifth Ave., Pittsburgh, PA 15213, USA. Telephone: (412) 622-1491.



Eyes on the Prize: Competing for the Attention of New Readers in Asia

It is often said that a picture is worth a thousand words. But rather than replace words, a picture can help clarify their meaning – and interest people in reading them. Yet for many new readers in developing countries, it can be difficult to find well-illustrated materials that are written at an appropriate level of difficulty and are also relevant to their lives.

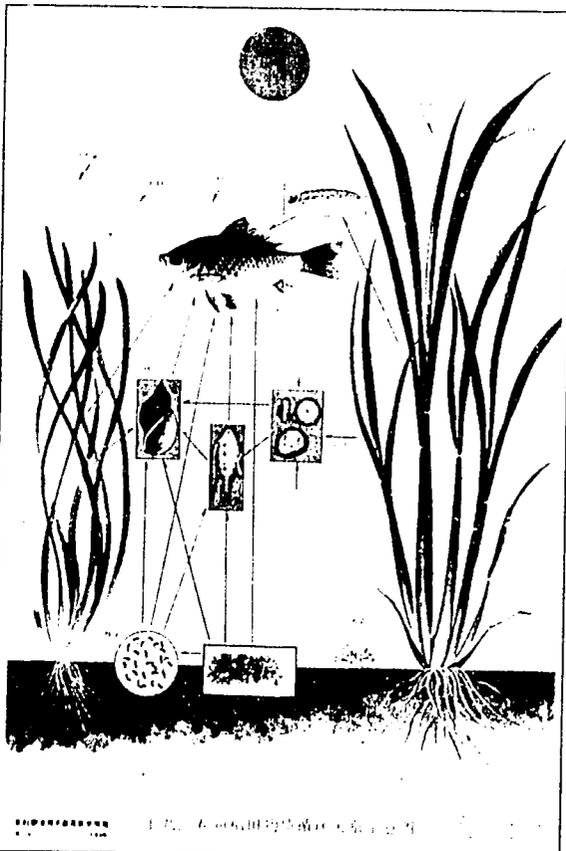
So, in order to encourage the production of attractive, informative materials for new literates in Asia, the Asian Cultural Center for Unesco (ACCU) in collaboration with the Unesco Principal Regional Office for Asia and the Pacific sponsors a contest for the best-illustrated post-literacy materials. The contest is open to governmental and non-governmental organizations, institutions and businesses in the 21 Asian member countries of Unesco.

In the first contest, held in 1988, 15 prizes were awarded to Asian groups ranging from government ministry offices, local resource centers, and private publishers.

The Malaysian daily *New Straits Times* captured first prize for its weekly supplement "Newspaper in Education." The supplement makes use of maps, diagrams, and comic strips both to give students a functional use of the English language and to train teachers how to use the newspaper as an instructional tool. Second prize went to the Chinese Curriculum and Teaching Materials Research Institute for its booklet, "Frogs Are Our Friends," which seeks to promote English literacy while also educating rural readers on frogs' ability to protect crops by eating insects. Among nine third-prize winners, a booklet from Bangladesh explores rural dwellers' income and land problems through a traditional Bengali folk-poem known as "punthi" and beautifully etched drawings of village life.

Selections were made on the basis of the appropriateness of the material for the target audience, the effectiveness of the illustration in clarifying meaning, the readability of the material and the visual attractiveness of the work. Winners receive a certificate of recognition and cash awards of US \$300 to \$1,500, drawn from an endowment established by the Japan Foundation and private donations. Submissions for the second contest closed in December 1989 and the judges expect to reach a decision on a new round of recipients in April 1990.

The contest is only one of a series of ACCU activities promoting the development of materials for new literates in Asia. Since 1980, education and illustration experts throughout Asia have collaborated to produce 37 English-language prototypes of materials for new readers – not only booklets, but also posters, games, maps, atlases, newspapers, pamphlets, slides and videos. After prototypes are field-tested, they are distributed to member countries, where they can be adapted according to the national language and culture. In order to facilitate mass production of local and national versions, ACCU is



A Chinese poster about aquaculture won honorable mention.



COVER



Selections from a third prize-winning Vietnamese booklet that tells the story of Huip, who overcomes his family's protests and plants a home garden to increase family income.

willing to supply each country with a set of positive films for color printing and provide limited financial assistance. ACCU also offers regional and national workshops to train artists and writers in the preparation of literacy materials. Over the past seven years, nearly 150 trainees from a dozen Asian countries have participated in these workshops.

More recently, ACCU has published a colorfully illustrated children's book in recognition of International Literacy Year. Through vivid illustrations, simple text and occasional games, *Guess What I'm Doing* captures a slice of daily life of 11 children in villages around the globe. For example, a beaded and braceleted Kallo from Eastern Africa helps his father, a craftsman, create clay figures. Radha from Southern Asia, a red tilak painted on her forehead, writes a riddle in Hindi for her classmates. Nineteen writers and artists from 16 industrialized and developing countries contributed stories and illustrations to the 50-page book. The fine illustrations not only make reading pleasurable, but also foster children's awareness of different lifestyles, cultures and natural environments throughout the world.

For more information, contact ACCU, No. 6, Fukuromachi, Shinjuku-ku, Tokyo 162, Japan. Telephone: (81-3) 269-4435. Fax: (81-3) 269-4510. Cable: Acculcentre Tokyo.

Two Literacy Models: Taking Stock

Over several decades, different models for achieving adult literacy have emerged, each based in a separate theory about how adults learn. Two have been most widely used in adult literacy programs in developing countries: the Laubach model and the Freirean model. The Laubach approach has traditionally emphasized skills in decoding written words through a highly structured curriculum and materials presenting picture-letter-word associations. It has promoted one-on-one instruction, by which new literates volunteer to teach another illiterate person until the entire community achieves literacy. The Freirean approach, on the other hand, has placed emphasis on the meaning of words, their relation to the larger context of learners' lives. It relies on a community-oriented and problem-solving method for literacy instruction, which becomes part of a larger process of local empowerment.

Both strategies have evolved in response to practice and continuing debate over effectiveness. This is particularly true of the Laubach approach, which has so broadened its conceptual foundation that one might reasonably ask what now distinguishes it from other approaches. We asked two authors who each have long experience studying and practicing one of these strategies to reflect on its significance for world literacy efforts over time.

The Laubach Model

by Lynn Curtis

This year is not only International Literacy Year, but also the 60th anniversary of the Laubach literacy method, an approach to literacy education conceived by Frank C. Laubach (1884-1970). Beginning with Laubach's pioneering efforts in the Philippines in 1930, literacy programs based upon his methods have since been developed in 105 countries and 314 languages. Laubach Literacy International, the world's largest private voluntary literacy organization, founded by Frank Laubach in 1955, continues to spread the Laubach vision in 13 developing nations and 750 US communities. Around the world, educators inspired by some aspect of Frank Laubach's approach claim to practice the Laubach method, which is best known by the slogan "Each one teach one" or, as applied in Latin America, "Let each one learn with others."

While these far-flung literacy efforts all claim to practice the Laubach method, their programs represent a range of different teaching techniques, learning materials, administrative structures and goals. If all practitioners of the Laubach method were assembled in a single room, some might accuse the others of heresy. In spite of zealous dedication by many to a particular technique or set of materials for teaching basic reading and writing skills, the Laubach method is in reality much more encompassing.

How can one literacy method embrace such diversity of practice? The Laubach approach is not a single technique but rather a body of fundamental concepts that Frank Laubach articulated or which later evolved from his practice. Given the concepts outlined below, many alternative applications are possible.

1. *All people are endowed with innate human dignity and potential to learn and achieve.* The desire for self-determination and freedom is universal, and literacy is a means to bring about individual and societal change among those who lack basic rights and needs. As Frank Laubach stated, "To promote literacy is to change one's conscience by changing his relation to his environment. It is an undertaking on the same plane as the recognition and incarnation of fundamental human rights."

2. *Literacy includes not only the acquisition of fundamental skills, but also cultural expression, critical thinking and action.* Learners must exercise listening, speaking, reading, writing and math skills not just at the most basic level, but at a level sufficient to solve problems they encounter in their daily lives. A person who is literate has the capacity to acquire information, skills and attitudes to bring about needed change.

3. *Literacy and development are closely linked.* Permanent community development is not possible when large segments of the community do not control the language of their lives. Conversely, people will not expend the necessary energy and time to learn to read and write if they aren't

convinced that the effort will have an impact in daily concerns such as health, income, nutrition, employment, environment, transportation, etc.

4. *The literacy learning process can generate bonds of solidarity and trust among all who participate.* These bonds can transcend otherwise insurmountable differences of religion, culture, language, and class. Literacy learning at its best involves a human interchange so positive that it has a universal, spiritual appeal. The literacy movement can be a profound force for peace.

5. *Priority should be placed upon those having the greatest need for learning.* The greatest need for literacy instruction exists among disenfranchised populations generally bypassed by existing development and educational efforts.

In its emphasis on self-determination, critical thinking, community development and reaching marginalized sectors, the Laubach literacy strategy has much in common with the approach associated with Paulo Freire. Indeed, over the years, the Laubach approach has moved closer to the Freirean approach, particularly in its application in developing countries. However, the Laubach practitioners would



A teacher uses Laubach methods to teach literacy in a remote jungle village in the Philippines.

generally put greater emphasis on developing specific reading and writing skills, rather than on the larger socio-political process of empowerment.

There are also a number of principles which guide the practice of Laubach literacy programs, outlined below.

1. *"Each one teach one" or "Let each one learn with others."* These slogans of the

(continued on p. 15)

The Freirean Model

by Paul Jurmo

For some 20 years, Paulo Freire has been a central figure in literacy and nonformal education efforts around the world. The Brazilian educator's written works have been widely disseminated, studied, debated and written about. Educators, community activists and others around the world who are consciously trying to develop approaches to education and community development which are more responsive to the realities of communities cite his ideas as key influence in their work.

Freire argues that the world social order is characterized by a host of oppressive forces which keep a large segment of the population in a dehumanized state: impoverished, desperate and without a voice in determining the course of their own lives. A more just social order would be democratic in nature, with each individual participating in the process of shaping his or her own personal development and the structure of the society as a whole.

For Freire, illiteracy is much more than just being unable to decode written language. It is

one of the concrete expressions of an unjust social reality ... [It is] not strictly a linguistic or exclusively pedagogical or methodological problem. It is political ... [On the other hand] literacy [is] ... a process of search and creation ... to perceive the deeper meaning of language and the word, the word that, in essence, they are being denied.

Despite the abstract language, Freire's writings have held a powerful message for educators. Education can be a tool to alter the social order, to create a more just system, or it can be a means of reinforcing oppression. True education is not a matter of getting the masses to absorb information and values pre-digested by the powers-that-be. Rather, Freire says that education must help learners move to a higher, "critical" state of awareness, where they learn how to think for themselves, analyze how they are shaped by larger social forces and decide how they can control their relationship with those forces rather than be controlled by them. This learning process is more than a mere fine-tuning of an individual's self-esteem and reading, writing and other "technical" skills, important as those goals may be. Freire says that education – and learners – must also be linked to a larger, collective effort to

change the society as a whole, because improved reading and writing skills or self-esteem are by themselves simply not enough to make the lives of most low-literate adults significantly better.

Freirean Practice: No One Right Way

Freire doesn't set out a "formula" by which these principles can be put into practice. Although he is known for having used pictures depicting "generative themes" – issues capable of arousing heated debate – as a stimulus for the kinds of analysis described above, he rejects the notion of a "Freirean method" in the sense of a pre-packaged, step-by-step curriculum that can be implemented in a given setting.

Creative educators inspired by Freire's ideas have not let lack of "a method" stop them from applying his thought.

This lack of a clear methodology is perplexing to many who want to know how to put Freire's ideas to work. It is sometimes seen by his critics as a sign that his ideas are impractical, lacking relevance to the demands of the real world. But creative educators inspired by his ideas have not let lack of "a method" stop them from trying to apply his thought in real educational settings. Whether calling themselves "Freirean," "participatory," "learner-centered" or "popular," these practitioners structure their programs to enable learners to go beyond the traditional role of student as passive "consumer" of information spoon-fed by teachers. Instead, learners are given multiple opportunities to participate actively in the program, taking on high degrees of control, responsibility and reward. These notions have become so pervasive that even educators who have never read his books are following practices consistent with his ideas.

Literacy programs in the United States reflect many of the participatory practices which are occurring in other places throughout the world. For example, many nonformal educators have replaced large, "top-down" classes and overly isolating one-to-one tutorials with interactive small groups, believing that they are conducive to achievement of important cognitive, affective and social goals. In California, educator Raúl Añorve tours workplace facilities with workers, taking photographs

of work stations and equipment. He then uses the photographs and ethnographic discussion methods to encourage learners to talk about their lives, to identify topics and uses of verbal and written language of concern to them. These interests, in turn, become focal points for verbal and written language instruction.

This example mirrors Freire's own practice of showing learners a picture as a "prompt" for such discussions. However, at the Door, a New York City program which provides basic skills, job training and health services to young people who have dropped out of school, educators ask open-ended questions like "If you could write to the President, what would you tell him?" The instructor notes the themes and uses of language which emerge from these discussions for later use in the group.

Or learners might work in teams to write their own essays, fictional stories, poems and songs about those topics. In a program in Ypsilanti, Michigan, sponsored by the United Auto Workers and Ford Motor Company, assembly line workers share writings and give feedback to each other, making suggestions, demanding clarification of a point. For advocates of this instructional approach, writing is seen as a particularly fertile area for development of learners' thinking and self-expression skills. (See p. 5 for another account of this approach.) In programs like Working Classroom, a family education-and-arts program in New Mexico, learners also develop self-expression skills through designing and performing dramas, dance, music, photo-novelas and other forms of artistic expression.

In these communication and artistic expression activities, learners achieve a number of objectives. They contribute actively to the creation of a meaningful curriculum. They get vital practice using a full range of language skills. And they learn that written language in its many forms is something which can be used to achieve real, meaningful purposes – whether for pleasure, to bolster friendships and family ties, to learn a technical skill, or to influence public policy – rather than something one does merely to "please the teacher" or "pass the exam."

Participatory groups can help learners develop vital social and community development skills as well. Participants can learn how to debate and analyze the issues they are concerned with. In the process, they develop a "team problem-solving" identity which they can carry with them

into their lives outside the program. Nicaragua-born educator Klaudia Rivera tells how, in a literacy program she directed for Hispanic immigrants at LaGuardia Community College in New York, learners did group research on topics like "housing," "immigration" and "jobs." They recorded information and shared strategies for dealing with these issues and invited outside experts to speak with them. In a women's education program sponsored by Lutheran Settlement House in Philadelphia, learners write letters to public officials and newspapers on causes close to their heart. Program coordinator Kathy Reilly explains that, although some of the topics chosen by students might be controversial, "these are issues which they are thinking about anyway, so you might as well come out into the open with them."

These instructional methods have even been carried over into programs which link basic mathematics instruction with community concerns. In West Africa, Gambian farmer co-op members worked in groups to learn how to perform a basic arithmetic task that was critically important to all of them: how to properly weigh their produce and calculate how much they should get paid for it. Group meetings provided a context in which farmers could also discuss questions like "How can we be sure we don't get cheated in our transactions?", "What other tasks can we apply our new math skills to?" and "In what other ways can our co-op help us?"

Beyond these "classroom" activities, some programs have also applied Freire's democratic principles to management. For example, learners at Push Literacy Action Now, a community-based program in Washington, DC, operate a committee which advises program staff on curriculum and other management decisions. Learners at Bronx Educational Services in New York City recruit new learners, select and orient new staff, decide on program policy, raise and manage funds for the group, and act as liaisons to traditional community institutions. Such learner involvement in "extracurricular," management-related activities can bolster group members' morale, group identity, cooperative spirit and interest in the program.

How Many Programs Exist?

It is virtually impossible to know how many groups worldwide use such practices or with what frequency. Attempts to quantify the number of Freire-influenced programs are hampered by a number of

factors, including weak information-exchange networks among nonformal educators and, in some cases, a natural reluctance by educators to identify themselves in a way that invites closer monitoring or even suppression by authorities.

The "democracy movements" now springing up worldwide are a sign of potential support – and need – for participatory education.

Despite the lack of hard figures, there is much anecdotal evidence of participatory education efforts on every continent; in industrialized and non-industrialized countries; in countries undergoing major social changes and in relatively more stable nations. Throughout Latin America, the "popular education" movement pre-dates Paulo Freire, but has gained considerable strength and direction from his ideas. Local groups in the Philippines, India and Thailand have been active in applying Freirean concepts for literacy, health, workplace and other forms of education, while similar applications are well established in at least a dozen African countries. In South Africa, Freirean methods are used in alternative education programs provided by anti-apartheid groups.

In the majority of cases, programs have been carried out by non-governmental grassroots organizations. However, a Freirean approach does not imply rigid opposition to government involvement. The Nicaraguan literacy campaign of the early 1980s stands out as one example of a state-sponsored effort to apply Freirean approaches to literacy on a national scale. More notably, the recent appointment of Paulo Freire himself as education minister for the Brazilian city of Sao Paulo, following many years in exile, suggests that educators should seize opportunities to exert power at the government level in support of participatory approaches.

What Needs To Be Done

While there appears to be considerable interest in Freire's ideas, the programs seen as models of participatory education remain relatively small in number and generally isolated from each other and from mainstream education and development efforts. In order to develop the par-

ticipatory approach as a strong education and development alternative, there are a number of things we can do.

1. *Build communications among supporters of a participatory approach.* We need to overcome the isolation which now exists between educators – and learners – who already support a participatory approach. This can be done by strengthening mechanisms through which educators and learners can share experience and build solidarity: informal study teams, teacher and student exchange programs, conferences, referral services and information clearinghouses, telephone hot-lines, newsletters and professional journals.

2. *Reach out to new sources of ideas and support.* For example, the fields of reading and writing research, linguistics and ethnography have produced considerable thinking which effectively supports many of Freire's basic positions. Those same disciplines have produced many participatory research, evaluation and instructional techniques which can be adapted for use in literacy programs and the converse is just as true. And the "democracy movements" now springing up in nations worldwide are a sign of potential support – and need – for participatory education. Encouraging such cross-fertilization among disciplines and social movements will require minds open to new ideas and a readiness to break down traditional territorial barriers. While purists may argue that "Freire's ideas" will be watered down or co-opted in such a process, they too must guard against making his ideas dogma, and, in effect, turning Freire into an icon to be worshiped.

3. *Learn how to deal with social, political and economic constraints.* It is naive to imagine that social institutions committed to more traditional forms of education will readily accept participatory education alternatives. As Freire himself argues, we need to understand the socio-political contexts in which we work and develop strategies for dealing constructively with potential obstacles or conflicts.

For example, if governmental or education officials perceive a participatory literacy program as a threat to the existing power structure, they might very well withdraw support to that program. In some cases, learners who become more willing to think and take action find themselves cut off from friends, family members, fellow learners – and even from some teachers – who feel threatened by their emerging strengths. Educators must be aware of distribution of power not only within society

as a whole but also within educational systems, within the cultures and families of the learners they work with, and among learners and staff participating in literacy programs.

Educators must also learn to respond to demands by funders and planners for accountability. Too often, literacy educators are expected to justify their existence by producing "numbers" – student enrollments, grades on standardized tests and so on – as evidence of their effectiveness. But participatory programs find those kinds of measures relatively meaningless. Learner-centered programs are instead building new forms of assessment which focus on measuring how well programs are helping learners achieve what they want to accomplish with their lives – e.g., informal feedback from learners, periodic review of learning contracts, observation of student involvement in various activities, student learning logs. Nonformal educators – and learners, too – must learn how to use these alternative measures, while funders must encourage their use.

Finally, even the most sound methodology and tolerant political climate cannot substitute for lack of resources. Literacy programs have traditionally suffered from lack of funds to pay for salaries, materials and administration. Learners themselves need extra supports like transportation, daycare and job opportunities to encourage participation. Literacy groups will have to struggle to promote local self-reliance. But recognizing the limits on their ability to generate material resources, especially in Third World countries, they must also take on the role of lobbyist for support from outside funding sources.

4. *Institute a research and development system.* No field, including adult literacy, moves forward without considerable ongoing research and development work. While promising participatory research work is already underway, practitioners must document what theory and practice already exists and develop a new "R&D" ethic: to remain fresh, relevant and vital, we will have to continually analyze and revise not only our practice but the thinking which underlies it.

Paul Jurmo is a Senior Program Associate at the Business Council for Effective Literacy in New York, where he focuses on issues related to workplace literacy. In 1989, he co-edited *Participatory Literacy Education, a study of learner-centered literacy efforts in the United States*.

(CURTIS, from p. 12)

Laubach method indicate that literacy learning is based upon mutually supportive human interactions among learners and instructors. Adults can learn. Those who have learned can teach those who want to learn. Even if new literates do not directly teach literacy skills, they can support community literacy programs in other ways, e.g., by building a resource center or library. Volunteers and peers are essential to a successful literacy effort.

2. *Learners pass from a "learn to read" to a "read to learn" phase of literacy.* Learning moves from known images and ideas to unknown symbols and concepts. For this reason, many basic reading primers using the Laubach method use introduce letters and characters through culturally relevant pictures. For example, the letter "f" might be presented with an illustration of a fish drawn to correspond to the shape of the letter.

3. *New readers need easy-to-read, adult interest materials.* The development and maintenance of reading and writing skills requires that learners have access to printed materials at a level that matches their cultural perspective and reading vocabulary.

4. *Basic reading involves specific skills in decoding as well as a broader understanding of the meaning and context of given passages.* Effective reading instruction requires a balance of sequential skill development (learning how to sound out words through a phonetic breakdown of vowels and syllables, or "attacking" a word by identifying roots, suffixes or prefixes previously learned) and learning to read for meaning.

5. *Literacy programs are effective when instruction is based upon students' stated and unstated goals for learning and when they experience success with learning.*

Applications of the Laubach Method

By definition, programs that bear the name "Laubach method" identify with some if not all of the conceptual and practical principles listed above. Similarly, different literacy programs address different needs in varying cultural and socio-economic settings. Each program develops its own unique mix of educational materials and techniques, learners served, instructors, decision-making structures, funding and program philosophy. For this reason, concepts underlying the Laubach method are appropriately applied to a range of pro-

gram types. Robert Caswell, President of Laubach Literacy International, describes a continuum of five distinctly different program types which can apply the concepts of the Laubach method.

Mass Literacy Programs. Typically, such programs are conducted on a national scale, but occasionally on a provincial or community level. Decision-making, materials selection, and program delivery tends to be centralized. For example, the leader of Centro Laubach de Educacion Basica de Adultos, Laubach's Colombian center, served as director of planning for Colombia's national literacy campaign and last year helped apply the Laubach approach in hundreds of rural village sites throughout the nation. Laubach Literacy Action, Laubach's US program, participates as a leader in the Coalition for Literacy, which in connection with the national media campaign Project Literacy US (PLUS, see p. 9) is mobilizing community and national resources to develop or strengthen literacy programs throughout the United States.

Literacy through Existing Structures. For instance, in the United States, Laubach approaches are used in literacy classes taught on the job site and programs sponsored within libraries and churches. In developing countries, local cooperatives, village action committees and non-governmental agencies sponsor literacy classes based on the Laubach method. As with mass literacy programs, decisions about program goals, learning content and resource allocation are usually made by already literate people.

Problem-Solving Literacy. Learners identify their own problems, probe and analyze these problems, and identify common links between individual and group issues. They gain command over spoken and written language through educational materials that evolve from this process. For example, in Kenya, among the Gabbra ethnic group, the nomadic people developed literacy materials based upon immediate issues such as income, women's roles, and the clash of Western values and cultural traditions. These learning materials became the basis for reading and writing instruction as well as a forum for addressing community problems.

Literacy for Community Development. Effective problem-solving programs often evolve into longer-term community development initiatives among marginalized populations. For example, in 14 neighboring villages in central Mexico, landless campesinos used literacy learning as the

basis for organizing community initiatives, including new wells, clinics, roads, home improvements, income-generating cooperatives, preventive health programs, aquaculture projects, a new bus service and many other needed changes. Similar examples can be found in Nepal, India, Bangladesh, Thailand, Philippines, Haiti, Bolivia, Mexico, Sierra Leone, Kenya and Tanzania.

Movement-Oriented Literacy. This program evolves as people in literacy and community action projects join with other learning communities to pressure for literacy action and changes in public and private-sector policies. For example, in Colombia, Laubach-sponsored groups have come together to form mutual support networks based upon their shared commitment and involvement in popular education.

Lynn Curtis, who holds a PhD in adult education, is Director of International Development for Laubach Literacy International.

Wanted: Positive TV Messages about Children

Unicef is collaborating with World Media Partners to prepare a videotape of television program segments that convey positive messages about children and families. The final version will be distributed to TV producers and national communication planners worldwide to demonstrate the range of possibilities for promoting children's interests through the medium of television. An accompanying manual will provide guidance on using various TV formats toward this goal - e.g., serials, game shows, musical programs, documentaries, public service messages, talk shows, news inserts and more.

Presently, the project coordinators are seeking examples of TV programs for screening purposes, particularly those from developing countries. They are especially interested in programs that promote health and child survival practices among families. In addition, they request evaluation studies and descriptive information about their use for advocacy, if available. Videocassettes in any format will be accepted; originals will be copied and returned promptly.

Please send all tapes and correspondence to: Edward L. Palmer, Radio/TV Services, Unicef H 2-F, 3 United Nations Plaza, New York, NY 10017. Telephone: (212) 326-7000. Telex: 175989TRT.

Radio Education in Africa

In January 1990, educators and planners from 15 African countries gathered in Harare, Zimbabwe to share their experiences with the use of radio in formal and nonformal education. The conference, which was cosponsored by Zimbabwe's Ministry of Education and Culture and the USAID-supported Radio Learning Project, marked the first African regional meeting on this topic.

For African distance educators, the conference signalled a general trend away from earlier experimentation with educational television, because of television's prohibitive costs and high technical requirements and a renewed commitment to radio. Participants agreed that radio is a more efficient and cost-effective medium for achieving educational goals. Although technical problems interfere with transmission and reception, radio is still the most accessible technology throughout the continent. Most families in Africa's rural areas, where the vast majority of people live, have a radio set. They rely on radio programs as an important source of information on agriculture and government policies, as well as a source of entertainment and cultural enrichment.

The participants generally placed top priority on the use of radio for basic education, both in primary schools and out of school. For example, in Botswana, the educational channel broadcasts lessons for primary school children on social studies, science, current affairs, English speaking and storytelling in 15-minute segments for seven hours a day. Children in the six primary grades in Nigerian schools receive regular radio instruction in English, math and social studies. Beyond school walls, radio programs such as "Health," "The Changing Rural and Agricultural World," "Calling the Women" and "Kid's World" seek to educate villagers in Cameroon about key issues pertinent to development. Zimbabwe's Channel Four is specifically designated to broadcast educational programs for out-of-school audiences and in Mali, programs such as "Green Sahel" and "Agriculture on the Air" are broadcast in local languages every Friday for peasants, fishermen and shepherds throughout the country. In Ghana, Guinea, Kenya, Liberia, Lesotho, Mali, Nigeria, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe, daily or weekly radio programs are aimed at specific

target groups such as farmers, youth, women and children at the lower grades. Officials in African ministries of health, education, agriculture and social service agencies have demonstrated growing interest in using radio to reach populations with their information and messages.

Although radio often serves as an alternative to printed materials, especially for illiterates, in some cases radio is being used to promote literacy and numeracy skills. For example, in Botswana, the national Educational Broadcasting Unit airs weekly literacy lessons and news to illiterate youth and adults in rural areas. These programs aim to develop learners' functional literacy skills as well as communicate government policies and programs. The Radio Learning Project's demonstrated success with using interactive radio instruction to teach Kenyan school children English-language speaking, reading and writing skills aroused great interest. Currently, Lesotho is implementing a national English-language program and Swaziland is implementing a pilot project, both modeled after the Kenyan project. By departing from the traditional practice of lecture-based radio programs and engaging the learner in oral and written exercises and responses, interactive radio instruction effectively develops learners' functional literacy and numeracy skills.

Participants discovered that radio education often faced similar problems from country to country. Most common are technical difficulties caused by lack of high-quality broadcasting equipment and insufficient trained personnel and, at the household level, a lack of radios, batteries and repair services. In some cases, radio programs are poorly designed or there is a lack of coordination between various ministries using radio education. In schools, teachers sometimes did not understand how to use radio programs to complement classroom instruction and often lacked supplementary materials. Yet, participants closed the conference by resolving to foster closer collaboration in order mutually solve such problems in the future.

- Wambui Gitbhora

Wambui Gitbhora is an associate of the Radio Learning Project. Conference proceedings are available from the project at the Education Development Center, 55 Chapel St., Newton, MA 02160, USA.

Resources for Literacy Promoters

→ The National Clearinghouse on Literacy Education, one of 16 US clearinghouses affiliated with the Educational Resources Information Center, was launched in September 1989 in order to meet the special needs of the immigrant population in the United States. Its purpose is to provide information, materials and technical assistance to US literacy service groups working with people whose proficiency in English is limited. For more information, contact the clearinghouse at 1118 22nd Street, NW, Washington, DC 20037, USA. Telephone: (202) 429-9292. Fax: (202) 659-5641.

→ World Education and the University of Massachusetts Literacy Support Initiative jointly host an annual "Summer Institute for Literacy Professionals." This year's institute will be held June 25-August 3, 1990. Following a review of literacy theory and practice, participants focus on one of three areas: development of literacy materials and curriculum; training of adult literacy teachers; or management and evaluation of literacy programs. The course fee, including accommodation, is \$3,995. To register, contact: Literacy Support Initiative, 285 Hills House South, University of Massachusetts, Amherst, MA 01003, USA. Telephone: (413) 545-0747. Fax: (413) 545-1263.

→ The Unesco Institute for Education distributes a series of six publications on learning strategies for post-literacy and con-

tinuing education in developing countries, and two on functional illiteracy in industrialized countries. To obtain copies, contact: Unesco Institute for Education, Feldbrunnstrasse 58, 2000 Hamburg 13, Federal Republic of Germany.

→ During 1990, Unesco's International Bureau of Education will produce a series of 40 publications on "Literacy Lessons" from leading researchers and practitioners in the field worldwide. The 16-page booklets are intended to present a broad spectrum of international experience.

Copies are available in English or French from the Publications Unit, IBE, P.O. Box 199, CH-1211, Geneva 20, Switzerland.

→ In observance of International Literacy Year, World Education's *Reports* magazine is publishing a three-part series on literacy. So far, two editions are available: "Literacy and the Learner," no. 26, which examines literacy from the perspective on the individual in his or her immediate surroundings; and "Towards a Fully Literate World," no. 28, which examines innovative mass efforts that reach out to people bypassed by traditional education. The publication is distributed free of charge to overseas non-governmental organizations engaged in education for adults. The annual subscription fee is US \$10 for individuals in developing countries, \$15 for institutions. Contact: World Education, 210 Lincoln Street, Boston, MA 02111, USA.

→ *Convergence*, the quarterly journal of the International Council for Adult Education (ICAE), has made literacy one of its primary concerns, along with related issues of popular and nonformal education and participatory research. With Paulo Freire serving as honorary president of the ICAE, the journal brings his perspective to many of its articles. The first edition of 1990 focuses on International Literacy Year and contains an interview, in Spanish, with Freire himself. The annual subscription rate for readers in Asia, Latin America, and Africa is US \$25.20, for those in other continents, \$30. Contact: ICAE, 720 Bathurst Street, Suite 500, Toronto, Ontario, Canada M5S 2R4. Telephone: (416) 588-1211. Fax: (416) 588-5725.

→ The ICAE and the Indian Adult Education Association jointly coordinate the International Task Force on Literacy, which mobilizes activities by regional and local non-governmental organizations prior to, during and after International Literacy Year. In January 1990, the Task Force officially opened the year in Thailand by launching a "Book Voyage": a series of blank books will

travel from village to village throughout the world so that new literates can write or draw their messages of hope in their own language. At year's end, the books will be presented to the United Nations. The Task Force distributes posters, pins, and guidebooks for action and publishes a 6-page bimonthly newsletter, free of charge, in English, French and Spanish. See the above listing for ICAE address and phone.

On File at ERIC

by Barbara Minor

The following documents are available from the Educational Resources Information Center (ERIC), Document Reproduction Service, 3900 Wheeler Ave., Alexandria, Virginia 22304, USA. Please note ED number and send full payment.

Literacy for Development: An African Perspective (Notes from a Sabbatical) by H.S. Bhola. (1986) 46 pp. ED 273 782.

Written by a leading figure in the literacy field, this short report presents the author's personal impressions of the state of adult literacy in Ethiopia, Malawi, Kenya, Tanzania and India. He finds that Ethiopia's continuous literacy campaigns are paying off despite a desperate lack of resources, while the progress of literacy efforts in India is stifled by corruption and official neglect. In Kenya, literacy efforts are slowly reaching larger numbers of women, but official support appears to be waning. Available in microfiche for \$8.86 or in paper copy for \$4.06.

Radio for Literacy by Josef Muller. (1985) 413 pp. ED 265 372.

This compilation of background articles and documents covers issues and case studies on the use of radio as a medium for developing and supporting functional literacy. A section on planning includes a two-part questionnaire on the use of radio and TV in literacy sent to education and broadcasting authorities throughout the world; it could serve as a checklist for project planning. Another section describes the "Rural Farm Forum," an organized group listening approach that has become a classic strategy in many radio-supported literacy programs. Available in microfiche for \$8.86, or in paper copy for \$34.51.

Barbara Minor is Publications Coordinator for the ERIC Clearinghouse on Information Resources.

Wanted: Health Materials for Basic Readers

A medical school in New England is seeking printed materials on health topics appropriate for low-level readers in rural areas. The school's health promotion center hopes to locate existing materials written at a third- to sixth-grade reading level before collaborating with the state literacy council to produce its own. If you have materials to contribute, please send them to: Area Health Education Center Program, University of New England, College of Osteopathic Medicine, Hills Beach Road, Biddeford, Maine 04005-9599, USA. Telephone: (207) 283-0171.

What's New, What's Coming

Conferences

Distance Education

The International Council for Distance Education will hold its fifteenth world conference November 4-10, 1990 in Caracas, Venezuela, marking the first time the conference takes place in Latin America. In addition to a full schedule of presentations, the conference will feature two days of pre-conference training workshops and a two-hour audio and video link-up by satellite with sites around the world, in order to demonstrate the possibilities of these tools for distance education. Contact: ICDE XV Conference Office, Apartado 797, Caracas 101A, Venezuela. Telephone: 582-573-1346, Fax: 582-573-6642. Telex: 26111 UNAVC.

Workshops

Communication for Social Change

People in Communication, a network of Philippine groups and individuals involved in communication and development, will offer a "Seminar on Communication for Social Change," April 5 to June 6, 1991. The course is directed at community development and church workers in Asia who use communication strategies for their work. First offered in 1989, the seminar covers general theories of communication and development, tools for socio-cultural analysis, and techniques of video production. Participants will apply their new skills in visits to rural and urban communities. The course fee is US \$1,800; those interested in participating are encouraged to begin seeking assistance from funding agencies. Applications will be accepted through mid-1990. Contact: People in Communica-

French DCRs Available

You can now read major articles from several recent editions of the *Development Communication Report* in French! French editions are available on the following themes: distance education, community radio, environmental communication and health communication.

Each edition is available for US \$2.50 (free for readers in developing countries) from the Clearinghouse at the address and phone numbers listed on page 2.

tion, 3/F Sonolux Asia Building, Ateneo de Manila University, Loyola Heights, Quezon City, Philippines.

Agricultural Extension

"A New Look at Knowledge Transfer" will be the focus of a four-week course offered September 3-28, 1990, by the International Program for Knowledge Systems of the University of Illinois. The course will train extension managers in management and organizational skills to improve the performance of agricultural extension systems. Course fees are US \$2,550, not including travel or living expenses. For more information, contact: INTERPAKS, University of Illinois, 113 Mumford Hall, 1301 West Gregory Drive, Urbana, Illinois 61801, USA. Telephone: (217) 333-3638. Telex: 206957. Cable: INTSOY.

COURSES

Distance Education

The Institute of Education at the University of London, known for its intensive training courses in distance education, also offers bachelor's and master's degrees in distance education. What's more, starting in 1991 students can attend either in the London campus, or in their home countries. The latter will make use of print, audiotape, and electronic media and occasional face-to-face regional meetings to bring courses to students. For more details, contact: Academic Registrar, Institute of Education, University of London, 20 Bedford Way, London WC1H 0AL, UK.

Information Technology

With assistance from Unesco and the International Development Research Center, Addis Ababa University has established Africa's first graduate program in information science. The goal of the master's degree program is to help African countries "harness their information resources for effective use in socio-economic development." The university is currently carrying out a search for faculty and will accept its first class of information science graduate students for the fall of 1990. Scholarships will be awarded to six qualified candidates from Eastern and Southern Africa. For more information, contact: Dean, School of Graduate Studies, Addis Ababa University, PO Box 176, Addis Ababa, Ethiopia. Telephone: 251-1-110-860, Fax: 251-1-550-911. Telex: 21205 AANIV ET.

Health Communication

Montreal University in Canada has launched an interdisciplinary training pro-

Campaign for International Broadcasting

Concerned about the impact of pending deregulation of the broadcast industry, nearly 30 British private voluntary and environmental organizations have joined forces to pressure the British government to protect coverage of Third World and environment issues on television and radio. They have launched a campaign urging members of parliament to take measures, first, ensuring that high-quality documentaries continue to air during prime time and, second, strengthening coverage of international issues on educational television.

Presently, producers associated with government-funded Independent Television (ITV) stations must inform and educate the British public. This legal requirement has encouraged in-depth documentaries and current affairs reports that in the past have exposed the Ethiopian famines or documented global pollution and deforestation. By replacing government financial support with fees collected from advertising and subscriptions, deregulation will force independent channels to compete with commercial channels. Campaign organizers are concerned that international programs will be scrapped, since they are more costly to produce than domestic programs.

For more information, contact: Third World Environment Broadcasting in the '90s Project, c/o IBT, 2 Ferdinand Place, London NW1 8EE, UK.

gram in family health, communication, and demography, held from May through February annually. The course is aimed at promoting family health activities in French-speaking developing countries. Each year, 15 candidates will be selected for a fellowship covering tuition and travel costs. Candidates must submit an application through the United Nations Development Program office in their home country by October 30. For further information, contact: Programme Interdisciplinaire de Formation en Santé Familiale, Unité de Santé Internationale, Université de Montréal, D.P. 6128 Succursale "A" Montréal (Quebec), H3C 3J7, Canada. Telephone: (514) 343-7228. Fax: (514) 343-2309 and (514) 343-2207. Telex: DMD 05 125 134.

(ANZALONE, from p. 20)

mation may not be fastest or best means available. Such learning may be better facilitated through mass media channels, visual and oral communications strategies, "hands-on" training, group dynamics or other techniques of nonformal education.

Third, linking literacy training to other development activities often requires the coordination of effort between two or more government agencies or organizations operating in different sectors. The prescription of such coordination is problematic under the best circumstances and has led to the failure of countless development projects. When coordination involves budgetary commitments, ministries are invariably unenthusiastic about national literacy coordinators telling them how to spend their money.

5 How feasible is a post-literacy environment?

Literacy practitioners have long been aware of the importance of ensuring appropriate materials for new literates to consolidate and retain their skills. Materials written at a level appropriate for new literates must be carefully designed if they are to be effective. Even more difficult is finding the resources to produce and distribute these materials. Who organizes and who pays for post-literacy materials? That the production and distribution of post-literacy materials might be mediated through the market is often no more than wishful thinking. The market for these materials is often small and tends to be comprised of those who are not in a good position to pay for them.

It has been nearly two decades since the conclusion of the Experimental World Literacy Program and the subsequent reluctance of the international community to embark on a global attack on the problem of adult illiteracy. Whether the time is now right for a large-scale mobilization of international effort remains to be seen. But during International Literacy Year we must face the hard questions that have so far gone unanswered. Not to ask them now might cause us to succumb to amnesia and miss the opportunity for critical thinking that could lead to finding new possibilities for effective action on behalf of literacy. ■

Stephen Anzalone is Director of the USAID Learning Technologies Project at the Institute for International Research. He is coauthor of Making Literacy Work: The Specific Literacy Approach (1981).

(GILLESPIE, from p. 6)

same theoretical foundations are beginning to create a greater demand for more and better adult reading materials. Critics see many existing commercial materials as overly simplistic, assuming adults have only the cognitive capacity of children. Many books insult students' knowledge and cultures by prescribing middle-class values. They ignore the realities and contradictions of readers who survive and support their families despite precarious economic conditions and racial and cultural prejudice.

Materials written by adult learners are particularly suited to filling this new market. These true stories reveal the complexity of their authors' lives in ways commercially prepared stories cannot. New writers often naturally use language that makes their stories accessible to beginners. But perhaps more important, knowing that these books were written by other new readers helps students gain the self-confidence they need to believe they can become readers and even writers, encourages them to read critically and helps them develop a deeper understanding of authorship.

Writing to Revitalize Culture

Until now what has been written about literacy has come from "experts." They have become the gatekeepers of knowledge about what it means to live without literacy and what it is like to learn to read and write. Ordinary literacy students have rarely been considered knowledgeable or capable of knowing about their own reality. There have been few mechanisms through which they could contribute their perspectives, not just about literacy but about the cultures in which they live. Attention has been deflected away from the cultural knowledge and "common sense" wisdom of many communities, causing members of those communities to feel isolated and their history to become lost.

Involving students in writing allows them to recover, discuss and revalidate their own history, cultural traditions and values. Autobiographies, family and com-

munity histories, poems, songs and collective research projects have the potential to become reading materials not just for literacy students but for their families, for school children, for community groups and for policy makers.

Sharing Our Experience

The success of our project led us to produce a handbook for literacy instructors and volunteers, *Many Literacies: Training Modules for Adult Beginning Readers and Tutors*. Rather than impart specific teaching skills, the handbook provides guidance in facilitating students' involvement in their own learning. Interwoven into the training modules are examples of the writing and opinions of participants in the program. In addition to practical suggestions for work-

*... there's the power of language. Anytime you speak in someone else's language other than your own, then the emphasis is where they want to put it. That's why I get excited when I read a book like **Need I Say More**. There's a different spin on language. Do you know? There's a spin poverty places on language. There's a spin culture places on language.*

Sharon Cox, former literacy student and now a literacy instructor

ing with beginning readers and writers in small groups, each activity also contains a research note, which provides a capsulized view of recent research findings related to literacy.

Although special training may be needed and the work may be staff-intensive, such an approach may also have a role in developing countries. Student written materials could serve the dual purpose of an instructional process for adults as well as a way to fill the vacuum of culturally and linguistically appropriate post-literacy materials of interest to adults living in local villages. Perhaps their greatest contribution can be in promoting an awareness that, as one British "new author" put it, "Beginning writers are not beginning thinkers." ■

Marilyn Gillespie is the former manager of the Read-Write-Now Project of the Springfield Public Library in Massachusetts. The handbook is available for US \$10 from the Publications Director, Center for International Education, Hills House South, University of Massachusetts, Amherst, MA 01003 USA. Telephone: (413) 545-0465. Telex: 955355.

Tough Questions for International Literacy Year

by Stephen Anzalone

Literacy, yes! As we begin the 1990s with observation of International Literacy Year and a renewed commitment to providing education for all, the importance of literacy has never been clearer.

Literacy's importance is becoming more evident in economic and social life, in societies rich and poor. We have evidence of literacy's contribution to productivity in various sectors of the economy. We find literacy associated with the advancement of women, the well-being of children and the size of families. We see that the literacy of teachers affects the achievement of their students. We have evidence that employers often look to literacy rather than specific technical skills in hiring workers for modern industries, since literate workers are more likely to be "trainable."

In industrialized societies, recognition of the importance of literacy has grown in part with the emergence of the "information society" and the proliferation of sophisticated information tools in the work place. Even a decade ago, we might have predicted the opposite – that the messages and images conveyed by channels of mass communications reduce the importance of the written word. Instead, we find the ability to read and write becoming more rather than less important, as the use of computer-related technologies that require basic reading skills becomes common in the work place.

Literacy, yes! *But...*

In view of the great social and personal benefits of being literate, few would argue with the desirability of achieving universal literacy. What is at issue is the likely efficacy and cost of programs that teach reading and writing to the adult illiterate, especially in developing countries. During the early 1970s, Unesco and its member states undertook the Experimental World Literacy Program as a pilot project, leading up to an all-out assault against illiteracy. The results of the program were discouraging. Governments and international donors were not and have not been convinced that they should commit substantial resources to adult literacy programs.

The fundamental question we must ask during International Literacy Year is: have conditions in developing countries and the state of the art of literacy practice improved

sufficiently since the 1970s to make adult literacy activities more worthy of investment? The international community should also ask the following five questions:

1 What is the value of "half a key"?

René Maheu, former Director-General of Unesco, insisted that "literacy is the key that opens doors. What interests us is what lies behind those doors." Unfortunately, the typical outcomes of adult literacy programs are the acquisition of rudimentary skills in reading and writing, not the ability to use the written word as a tool for thinking and communicating. Will "half a key" open the door to the social and personal benefits associated with literacy? We still do not know what half a key brings. This is troubling because the new imperative for literacy that we are now experiencing is really about relatively high levels of skill. The current imperative for literacy could well become an argument for expanding opportunities for secondary school education in developing countries – not for increasing basic education for adults.

2 Children, adults or both?

Unesco maintains that the literacy of children and adults are two sides of the same coin. In an ideal world, this might be true. In the present world, however, developing countries are plagued by poor economic performance, high levels of debt and inflation and increased demand for education and other social services. Now more than ever countries are forced to choose one side of the coin, either education for children or education for adults. Almost always, they have chosen the former and invested available resources in expanding and improving primary school education. In so doing, the road to universal literacy is the one previously followed by industrialized countries, making primary school education universal. We would be hard pressed to dispute the wisdom of this choice.

3 Can literacy programs achieve significant outcomes on a large scale?

Some of the most extensive literacy programs have been one-shot national campaigns, often occurring after a country un-

dergoes a major political transformation. Although campaigns often reach large numbers of illiterates, the lasting benefits of such episodic interventions are by no means clear. The announced outcomes of such campaigns are often part of a public relations or propaganda agenda that requires a "will to believe" on the part of well-wishers within the international community. On the other hand, more intensive literacy efforts, many of them undertaken by committed and competent non-governmental organizations, demonstrate more lasting benefits. But often the instructional strategies used make it difficult to achieve these results on a broader scale, particularly if broader scale implementation requires an expanded reliance on voluntarism or greater reliance on government resources and bureaucracy.

4 Literacy as part of what?

Typically, literacy activities take place in relation to other training activities provided by organizations in other development sectors. This kind of linkage is sometimes dictated by logic, sometimes by the fact that there are no resources for free-standing literacy activities. Yet the marriage of literacy training to other development activities has often been contrived. First, the connection is not always clear or mutually supportive. For example, there have been many attempts to link literacy training to income-generating activities. The thinking is that stimulating new income on the part of participants will stimulate a desire for acquiring new literacy skills. What happens is that participants often fail to see the connection – gaining additional income tends to stimulate a desire for more income and not literacy. Furthermore, ministries responsible for providing employment, health, agricultural extension and other services view literacy programs as a time-consuming and costly burden that is merely tacked onto existing programs and does not provide them with immediate benefits.

Second, there is the belief that literacy is a prerequisite or a necessary tool for learning new skills and development-related information. It can be, but it doesn't have to be. Using the printed word to promote the learning of new skills and important infor-

(continued on p. 19)

Education for All – What the Leaders Said

Media

"New possibilities exist today which result largely from the convergence of the massive explosion in information and the unprecedented capacity to communicate. We must seize them creatively and with a determination for increased effectiveness."

"The technology surrounding communication is advancing while its costs are going steadily down. The time is ripe to take selective advantage of these technological breakthroughs to enhance the quality, outreach and cost-effectiveness of basic education."
Federico Mayor, Director-General, UNESCO

Learning Achievement

"... our new yardstick of success – namely that of learning achievement, not merely enrollment and access."

James P. Grant, Executive Director, UNICEF

Finance

"The annual cost [of providing basic education] by the mid-1990s is roughly equivalent to the amount that the world now devotes to military expenditures every two days."

James P. Grant, Executive Director, UNICEF

"In an effort to improve its own performance and effectiveness, the Bank will double its educational lending over the next three years to an annual figure of more than \$1.5 billion. ... Support for basic primary education will be the dominant priority."
Barber Conable, President, World Bank

On March 5-9, 1990, the World Conference on Education for All was held in Jomtien, Thailand, bringing together political and education leaders in a new spirit of commitment to expand and improve basic education. By the conference's end, participants had launched a global effort to meet the basic learning needs of all children and adults. In the following pages, the DCR asked various authors to consider the role that communication, media and educational technology can play in achieving this goal. We begin below by excerpting remarks from the directors of the four agencies that cosponsored the global conference.

Special thanks are extended to Clifford Block, Amalia Cuervo and Michael Laflin, who collaborated in planning this issue.

Local Initiative

"No world conference on global strategy can substitute for local initiative. Any plan that is not rooted firmly in its own soil will not long endure."
William Draper, Administrator, UNDP

"Third Channel"

"... all education channels including the mass media, other forms of modern and traditional communication. What I call the 'third channel' of education."

"The third channel, in addition to transmitting life-sustaining and life-enhancing knowledge, can be used to mobilize a society to participate in the basic education effort."

"Besides the well-acknowledged revolution which has occurred in the capacity to communicate ... another dramatic change has occurred in the amount of information there is to communicate."
James P. Grant, Executive Director, UNICEF



Development Communication Report

Development Communication Report, published quarterly by the Clearinghouse on Development Communication, has a circulation of over 7,000. The newsletter is available free of charge to readers in the developing world and at a charge of \$10.00 per year to readers in industrialized countries.

A center for materials and information on important applications of communication technology to development problems, the Clearinghouse is operated by the Institute for International Research, in association with Creative Associates International and supported by the U.S. Agency for International Development, Bureau for Science and Technology, Office of Education, as part of its program in educational technology and development communication.

The views expressed in *Development Communication Report* are those of the authors and not necessarily of its sponsors. Original material in the Report may be reproduced without prior permission provided that full credit is given and that two copies of the reprint are sent to the Editor.

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In this issue . . .

Educational Technology: Can It Improve Educational Quality?.....	2
New Partnerships in Basic Education.....	4
Getting Girls Into the Classroom: Four Strategies Using Technology.....	5
Social Marketing and Basic Education.....	6
"Sesame Street": Early Childhood Edutainment.....	8
Resources on Basic Education.....	12
What's New, What's Coming.....	14
What Way Home from Jomtien?.....	16

Educational Technology: Can It Improve Educational Quality?

by Clifford Block

The World Conference issued a clarion call for improving the quality of the educational experience. As Barber Conable of the World Bank proclaimed, "The quality of education must be enhanced. School attendance without learning makes no sense."

As many nations begin to seek ways to turn around a steady decline in student achievement, educational communication has a historic opportunity to make a difference. Traditional methods of educational reform too often founder, in the end leaving the classroom teacher to cope alone, with little support in the day-to-day work of motivating and teaching students. Too often, that classroom teacher is under-trained, under-educated, and under-supported, and the results show it. Comparative testing shows primary schoolers at the end of the primary cycle in many developing nations to be performing at less than two-thirds the level of content mastery of their counterparts in industrialized countries. Since those completing the primary cycle are a relative elite, the actual quality of academic mastery is even lower for the average school-age child, and becomes a profound impediment to both individual and national development.

The Evidence Is In

Can the use of educational media help achieve a turn-around in the quality of learning that goes on in primary schools throughout the world? The answer is an emphatic "yes! - But only *if*..." The evidence shows that the introduction of the media can produce major improvements in student learning *if* the media carry a significant part of the instructional load (many educational uses of media are so ancillary as to be trivial), *if* serious instructional design underlies the media lessons, and *if* creativity makes instruction interesting to small children. For instructional communication to meet those standards, educational planners must make a serious commitment to use of the media for quality improvement, and for that they need convincing evidence.

Fortunately, more data exists for the use of the media than for any other intervention introduced to improve quality, and

that data is in many cases now extremely convincing. The broadest set of achievement data surrounds the use of the "interactive radio" approach to teaching basic math, science, English as a second language, and Spanish. Data from six diverse countries where it has been tested shows consistently large gains in student achievement from daily radio lessons. The "effect size," a measure of achievement gains, averages over .5 annually, roughly equivalent to improving the performance level of students from the 50th to the 70th percentile. This gain is larger than any other intervention yet evaluated in the developing world. As a major World Bank study on the improvement of primary education recently noted,

Field tests have demonstrated that in the formal school environment, interactive radio students outscore traditionally schooled children on achievement tests. In non-formal environments, interactive radio students can keep up with their counterparts in conventional classrooms.

As a means to improve the effectiveness of teaching time, interactive radio instruction (IRI) has proved to be most successful. Unlike the instructional design of traditional educational radio, which encourage passivity, . . . IRI lessons are . . . systematically designed to actively engage the learner."

Interactive radio is also one of the most cost-effective educational interventions. Once radio lessons have been developed, the cost per student per year is very low because the same lessons can be transmitted to thousand of new students at minimal cost.

The case for radio, with first-class instructional design and integration, has thus been well made. By putting enough effort and investment into the initial crafting of radio instruction, effective programs can be delivered widely at very low cost. For development aid agencies, assistance with front-end investments that generate operational costs low enough for developing countries themselves to carry can be an attractive form of investment.

Earlier efforts to improve learning outcomes through classroom media use concentrated on national reforms based on television, as in El Salvador and Ivory Coast. Even with a 1970-vintage understanding of how to use the media, El Sal-

vador showed a significant across-the-board increase in tested student aptitudes; in junior secondary subject matter tests, math was consistently improved, with the results mixed in other subjects. Ivory Coast results showed gains in spoken French, while other comparative results are unclear. Some use of TV continues; the Brazilian state of Maranhao continues to base its secondary schools on televised instruction, with good learning results, and Mexico continues its secondary school use of television.

The technology is less important than the instructional quality of the programs it transmits.

Could instructional TV be made more effective? No doubt about it – applying to television the now-accepted instructional design principles of active student involvement, frequent review, feedback, and revision based on learning measures, instructional television could be made into a much more powerful tool for improving basic education. However, costs are typically ten times that of radio, revisions to improve instructional effectiveness are difficult and expensive, and TV is far more intrusive in the classroom.

Computers Make a Difference

As we move into the 1990s, computers will drop in cost so radically that for some countries they may begin to play a significant role in improving educational quality. A single classroom computer can be used by groups or by teachers; however, students need enough computer time to make a difference in learning.

Among the few systematic attempts to use computers to improve achievement in the developing world has been a recent effort by Grenada, which has shown that a half-hour each day of computer-based instruction can improve student performance by an average effect size of .4 for reading, and .8 for mathematics.

For primary schools, one of the most interesting technologies may be hand-held electronic teaching aids – essentially specialized, battery-operated computers which provide voice feedback and cost about \$40. USAID trials of "Speak and Read" and "Speak and Math" just concluded in Belize, following successful pilot tests in Lesotho, are showing achievement gains when

groups of four students use the devices a few minutes a day. If the results hold up over a longer period, these devices may be a practical way to introduce the power of computers into the primary school.

Another strategy is to use computers intensively, for a limited period, to upgrade specific skills. Computer use in South Africa raised the school-leaving pass rate of black high school students from 45 percent to 68 percent in a few weeks. In Jamaica, basic literacy training of young adults by computer was far more effective than traditional means. IBM's "Writing to Read" system has given children a head start in the solid skills of reading and writing with a year of instruction. A related system for adult literacy training, PALS, shows promise. In the US, computers are being used for "compensatory education," bringing students having difficulties up to standard; the Korean Educational Development Institute is using a similar strategy to achieve its "mastery learning" objectives.

What this brief overview shows is that a variety of technologies have demonstrated strong, documented evidence that they can improve student achievement. Sometimes a specific technology has an obvious advantage: radio or TV can improve the learning of second language, because they provide good daily models of such language use. Computers can diagnose student errors and point the learner to remedial practice. On the whole, however, the technology is less important than the instructional quality of the programs it transmits. If so, considerations of practicality, costs, and acceptance should lead decisions.

One thing is clear: students enjoy well-crafted instructional media programs, programs designed to elicit their responses and to promote the excitement inherent in learning. I've walked into computer-using classes in Africa, interactive radio classes around the world, and TV classes in some countries and everywhere have found students alive and active. The contrast with traditional classes in this respect is often stark. With costs for daily national broadcasts of interactive radio instruction, for example, estimated to be as low as \$.50 a pupil per year, it is hard to believe that other types of intervention to improve quality will be more cost-effective.

Clearly, the best approach is to combine media use with in-service teacher retraining, introduction of good textbooks available to every student, and other innovations such as peer-tutoring and better curricula. The Republic of Korea in the

Training Teachers to Assess Student Progress

The North West Regional Educational Laboratory has developed a training package designed to help teachers become better assessors. The package contains "all the materials needed to conduct four three-hour workshops on classroom assessment." The four workshops are:

- 1) understanding the meaning and importance of quality classroom assessment;
- 2) measuring thinking skills in the classroom;
- 3) classroom assessment based on observation and professional judgment;
- and 4) developing sound grading practices.

Each workshop contains a one-hour training video, a trainer's guide, a teacher's handbook, camera-ready handouts, and paper copy for transparencies. Also included are background materials on assessment research, a set of guidelines for establishing teacher training programs in assessment, and a seven-minute introductory video. The cost is \$125. Contact: NWREL, 101 S.W. Main Street, Suite 500, Portland, Oregon 97204, USA. Telephone: (503) 275-9559.

1970s embarked on such a comprehensive reform with startlingly powerful results – student performance increased by 19 percent and in a recent cross-national study of mathematics exceeded that of the United States. A combination of new texts and interactive radio in Honduras raised the share of first-graders that passed the math examination from 38 to 76 percent. Such comprehensive reforms in teaching are affordable for most countries, provided the resulting boosts in student achievement reduce repetition and dropout; if so, better use of facilities and teachers can pay for quality-based reforms.

What is needed is that educators perceive technology as a central tool, not simply as an adjunct, but as a full partner to the teacher and the textbook. As such, it can become a fundamental element of the strategies for reform that will make real the great objectives of Quality Education for All by the Year 2000.

As Senior Scientist for Education at USAID's Bureau for Science and Technology, Clifford Block leads AID's work in educational communications. He was active in many activities of the Education for All conference, including organization of a roundtable on distance teaching.

Building New Partnerships in Basic Education

One of the five major cornerstones of the new vision of education for all is broadening delivery of basic education through both new educational technologies and new organizational partnerships. Clifford Block discussed the former (p. 3). Below, Nat Colletta discusses new educational partnerships that, in many instances, will be responsible for implementing the changes in the delivery of education for all.

by Nat J. Colletta

While the school is considered the primary institution for providing basic education, it is widely recognized that the 100 million plus out-of-school youth and over 800 million illiterate adults will have to be reached by alternative means. Restructuring the partnership between government, nongovernment organizations (NGOs), and people's organizations will be critical to providing basic education for all, particularly among the poorest and most difficult to reach populations.

The World Conference on Education for All gave rise to two major breakthroughs in thinking about basic education: (1) the need to get governments out of the business of direct provision of basic knowledge and skills to out-of-school populations, and into the role of providing technical and financial services through a diverse set of private, non-profit and public institutions which are working more directly with the poor; and (2) that nongovernmental agencies in particular, working with peoples organizations, can forge important new partnerships with government service agencies to achieve education for all.

How will this new thinking on basic education become reality? We look at one case in point: the government of the Philippines is designing a new national approach to nonformal education. Participating in the planning were a cross-sectoral group of officials of government agencies ranging from the National Planning Authority and the Department of Education to the Departments of Health, Social Welfare and Agrarian Reform, together with a broad range of NGO representatives.

Poor Performance, Low Credibility

Uneven quality, low relevance, duplication and inefficiency, underfinancing, poor management and supervision, and a glaring absence of any measurable performance

outcomes were the agreed shortcomings of the national nonformal education system. In short, the performance and credibility of nonformal education was in question.

There were clear differences between government programs and those of NGOs. The government programs tended to be:

- supply driven;
- mono-sectoral;
- institution-based and didactic in pedagogical approach;
- thinly spread; and
- lacking in resources.

On the other hand, the NGO programs, while operating on a smaller scale, tended to be:

- more demand driven, that is, based on learners' needs;
- multi-sectoral;
- better targeted; and
- more flexible in approach.

However, like the government programs, NGO efforts also suffered from poor management, under-financing, and an absence of a monitoring and evaluation of actual outcomes, particularly in terms of

(continued on p. 13)

Educational Technology Plans for the Nineties

At the recent World Conference on Education for All, representatives from many nations expressed the desire to take advantage of modern communications to help deliver educational programming. To see how these intentions are reflected in official national educational plans, we selected five developing countries at random and examined their project plans for the 1990s. The five nations are Thailand, the Philippines, Qatar, Sri Lanka and the Gambia.

Thailand, the host country for the conference, has a long tradition of educational broadcasting. School radio broadcasts have been used on a widespread basis and there are plans to further expand the broadcast system to promote adult basic education, particularly adult literacy. Likewise, the mass media will be used to deliver special training programs in health care, nutrition, and agriculture.

The Philippines will also use technology to deliver education programs that address adult basic learning needs and provide training for specific groups. In addition, the radio-based "School on the Air" will continue to provide instructional programs for schools throughout the islands, providing educational services in areas that remain inaccessible and underdeveloped.

Qatar plans to use the mass media as a key element of its effort to "enlighten the public of the illiteracy problem and opportunities available for educating them." The literacy campaigns are targeted especially

at women. The mass media are seen as a means of reaching large numbers who otherwise might not consider furthering their education.

Sri Lanka's long-range educational plan proposes to expand and upgrade its currently underutilized distance learning system. It also notes that if the country is "to be an active participant in the computer age," it must develop computer education. One specific objective elaborated in the plan is to equip each school district with a computer lab and the capability to provide computer instruction.

The Gambia plans to use media in conjunction with a nationwide program to establish learning centers for women. These centers would attempt to raise women's levels of literacy, which have traditionally been low. Job-related training in a variety of occupations will also be provided, relying on a variety of media.

Across the five countries, educational plans most often referred to distance education methods for use in delivering nonformal education, with mass literacy the program area most consistently cited. Overall, it appears that this small sample of nations sees technology primarily as a means of providing basic education on a widespread basis, rather than as a vehicle for training specialists – a strategy that reflects the spirit of the "education for all" vision.

– Drew Tiene

Drew Tiene teaches educational technology at Kent State University in Ohio.



The Gender Gap in Basic Education

Boys enroll in primary schools at higher rates than girls in nearly all developing countries, even though both girls' and boys' rates of enrollment are steadily rising, according to a new study by World Bank economist Elizabeth King. The gap is widest for the lowest income countries, where girls' enrollment in school lags behind boys by an average of 20 percent – 62 percent for girls, compared with 82 percent for boys. But in many poor countries, for example, Afghanistan, Mali, Somalia and Nepal, less than 20 percent of girls are enrolled in primary school.

What do these trends mean for development? As the study notes, "Failure to raise women's education to a par with men's exacts a high development cost – in lost opportunities to raise productivity in income, and improve the quality of life." An earlier World Bank analysis of 200 Third World countries had demonstrated a close link between primary education for girls and economic and social progress. Countries that had invested in female primary education benefit from greater economic productivity, longer life expectancy for both men and women, lower infant mortality, and lower fertility. At the family level, this means that a mother with a basic education raises a healthier family, has fewer and better educated children, and is more productive at home and in the work place.

Yet in order to fully achieve these social and economic benefits, King suggests, it is not enough simply to raise overall education levels for both girls and boys. Unless the *gap* between education for girls and boys is closed, it will continue to act as a drag on a country's development. For instance, between two countries of comparable population and capital stock, the one with the larger gender gap in primary education will have lower economic production. Similarly, between two countries at a similar level economic level, the one with the larger gender gap will experience lower life expectancy, higher fertility, and higher infant mortality.

With this deeper understanding of the problem, what is needed now, the study concludes, are strategies to eliminate barriers to girls' access to basic education.

Getting Girls into the Classroom: Four Strategies Using Technology

A central topic of discussion at the Education for All conference was the need to increase girls' access to basic education. Concern has grown as a result of new evidence indicating a sizeable gap between girls' and boys' enrollment in primary schools, a gap that can have adverse consequences for economic and social development (see box, left). Mubina Kirmani looks at how educational technology can help close the gender gap.

by Mubina Hassanali Kirmani

Strategy 1

Educating parents on the value of female schooling

Some societies fear that an educated woman will not be a good wife and mother. In others, early marriage takes girls out of school. To influence these sociocultural attitudes and practices, mass education campaigns can be used to make parents more aware of the benefit of educating their daughters. For example, after Kenya achieved independence in 1963, government-supported rallies emphasizing the importance of education for both girls and boys were aired over national radio. Media played a significant role in mobilizing communities in "Harambee" (self-help) efforts. Now, media campaigns to focus attention on women's schooling are being considered in Morocco and Mali. The central message in these campaigns is that literacy and numeracy are essential to finding employment and improving the quality of life.

Strategy 2

Increasing the supply of female teachers

When daughters reach puberty, parents in many countries prefer them to attend single-sex schools and to be taught by female teachers. In fact, a number of studies find a positive correlation between the presence of female teachers in schools and the attendance of girls. But the shortage of trained female teachers, especially in rural areas, is an urgent and massive problem in most Third World countries. National institutions on the whole have failed to keep pace with the demand.



Palestinian school girl. Source: H. Olson, UNDP

Some solutions have depended upon the use of media. As many as 50 Third World countries, including China, Costa Rica, Pakistan, Thailand, Venezuela, Colombia, and Kenya, are involved in some form of distance teacher training in order to reach large numbers of teachers in rural areas, at lower cost than campus-based instruction. These programs can be especially beneficial to women since it gives them an opportunity to receive training, and often teaching certification, without interrupting their family responsibilities or demanding long absences from home. China universalized nine years of basic education in 1985 and is trying to increase female participation in lower secondary in-service teacher training from an average of 27 percent of total enrollment in 1986 to about 40 percent in 1993. The government is encouraging "multiple media for in-service teacher training," including educational television programs, correspondence and short-term residential courses. To attract more female participants, some outreach stations where teachers view TV programs provide childcare services.

(continued on p. 10)

Social Marketing and Basic Education

by Gary Theisen

In the afterglow of the Education for All (EFA) conference in Jomtien, planners and senior education officials are faced with at least three challenges:

- how to mobilize sufficient resources to offer basic education services to all who want them;
- how to ensure that the services provided are both efficient and effective;
- how to generate enthusiasm and support for basic education among its principle clients – the parents of children who will partake of primary education services.



The first two challenges fall into the traditional province of ministry of education policy makers and program implementers. The third, persuading parents and community leaders to support educational programs has long been recognized as central to the success of government education initiatives. However, few governments have employed "marketing" techniques to underscore and strengthen parental support for education. In part this is due to the assumption that education is perceived by most consumers to be a "universal good" – something that one can never get enough of; an inherently attractive investment. Evidence of this is the large amount of money that parents are willing to invest in both public and private education around the world.

The vast majority of parents, however, view education principally as a vehicle to employment security and a stable income. Few are "informed consumers" who realize

the full range of benefits that accrue to basic education. Even fewer are cognizant that it is the process of education that produces benefits to consumers; school-leaving certificates are themselves only proxies for the skills gained via the socialization and cognitive experiences generated by schooling. Maximizing the impact of schooling depends upon efficient use of instructional time by students, maximum performance by teachers and administrators, and access by learners to necessary and sufficient learning resources. But, student success also depends upon proper support and encouragement at home. Parents, for example, need to understand the impact that good nutrition and active involvement in their child's studies has on a student's performance.

The Role of Social Marketing

Appropriately designed social marketing campaigns aimed at parents of school-age children can have a marked effect on student enrollment and performance. Six examples of topics that could be the focus of a national campaign to improve participa-



tion in and the quality of basic education follow.

1. *Nutrition.* Research exists in abundance demonstrating that exceeding a minimum daily caloric intake is highly correlated with student performance in school. Eating a balanced meal before going to school in the morning boosts a child's ability to concentrate and retain information. Parents need to be advised of the importance of nutrition and how it enhances the investment of time and effort

being made by children in school. National campaigns that stressed recommended dietary combinations for students could have a dramatic effect on student learning, especially in the poorest of countries.

2. *Absenteeism.* Children in the poorest countries are frequently requested by parents to perform routine tasks such as tending younger children, fetching water, and selling products. Because parents do not understand that sound instructional practice depends upon continuity of exposure to lesson material and that knowledge acquisition is cumulative, absenteeism is not perceived to be especially detrimental to a child's progress. Of course, high rates of absence among teachers do little to persuade parents that daily attendance in school is important. Thus, a mass campaign designed to encourage regular school attendance should stress the importance of consistency of participation by both the givers and receivers of instruction. Lowering absentee rates would increase both the efficiency and effectiveness of school systems.

3. *Homework.* A prevailing assumption among less educated parents is that the full extent of a child's education is obtained on-site in the school. Evidence from around the world shows however, that student achievement is significantly bolstered by practice and reinforcement of lessons at home. Even though parents may not be able to help their children with substantive aspects of homework, they can encourage youngsters to read, complete assignments, and to prepare for examinations. The tools of social marketing can be employed to provide guidance and materials to parents



Doug Bremner for the WCEFA Inter-Agency Commission

on how they can facilitate these activities and to persuade adults of the importance of encouraging students to develop skills in school as well as out of school.

4. *Parent participation.* There is a growing body of evidence that indicates parental involvement in school activities is linked to higher levels of achievement by their offspring. Participation in parent-teacher groups, school rehabilitation efforts, and athletic activities, for example, boosts parents' understanding of what transpires in school and of what the physical environment limitations and cognitive needs of teachers and students are. Campaigns to increase parental involvement may result in stronger support for teachers and students and may develop a better understanding in parents of the emotional and intellectual climate and purpose of schools.

Social marketing strategies can be employed to inform parents about the performance responsibilities of teachers and school administrators.

5. *Accountability.* Few ministries have sufficient resources to monitor effectively the operation of individual school programs. Properly informed parent groups and community leaders can take more active roles in ensuring that educational expenditures, especially salaries, are being properly used. Social marketing strategies can be employed to inform parents about the performance responsibilities of teachers and school administrators. Parents may not be in a position to judge performance on a technical basis, but they can do much to reinforce to educators that they are expected to be on the job and performing according to at least minimal norms established by the ministry – one of the surest ways to improve the efficiency of educational systems and to increase student performance.

6. *Resource contribution.* Government resources for education in industrialized as well as industrializing countries are rarely sufficient to meet educational needs. Parents make sizeable contributions in the form of direct cash outlays for tuition, often disguised as "fees," books, and other materials. Individual families often make ad-

(continued on p. 10)

A Primer on Social Marketing

Social marketing is the use of marketing principles and techniques to "sell" concepts or products for the purpose of social change. In the case of education, selling the concept of parental involvement in education is based on the assumption that the involvement will contribute to the public good. Some social marketing schemes create products, such as math work books for parents to use at home with their children or radio programs focussed on school issues. Typically, these products are subsidized to ensure that the cost to the consumer is low enough so as not to inhibit their use. However, social marketers believe that the actual sale, rather than the free distribution of the product is important, because it helps to ensure consumer motivation by forcing people to pay for the product and thereby contributes to long-term self-sufficiency of the education project.

There are four elements to a social marketing approach which are considered essential, whether the goal be the promotion of a "product" or "idea":

1. *Product:* As already mentioned, the product can be a concept or a physical object. Of utmost importance is that it must take into account consumer preferences and behavior. If, for example, increased involvement in children's education is being promoted to parents who are employed full-time, the concept of during-school hours involvement will be less acceptable than schemes encouraging after-school activities.

2. *Price:* Calculating the cost of the product or idea to the consumer is complicated. The price of performing a behavior or buying a product transcends actual cost outlay. Cost includes the time it takes to perform the behavior, the perceived benefits of performing the behavior, and other associated costs such as travel time and the substitution of preferred activities for the new one (giving up socializing time, for example, so that the parent can work with the child on his or her homework instead) in addition to the actual cost of the products. Social marketers must take into account the "price" consumers are willing and able to pay.

3. *Place:* This refers to where the product is available, or where the behavior must be performed. Can the new activity take place in the home, or must the parents go to the school in order to

get involved? When actual products such as supplemental books are involved, an effective supply and distribution system is essential to ensure that the product is easily accessible to the consumer. This may mean creating new distribution systems.

4. *Promotion:* Consumers need to be alerted to campaigns or products, the need identified, the benefits demonstrated, how and where activities will take place, and other incentives identified that will motivate the consumer to utilize the product or participate in the program. Techniques for fostering participation include a wide array of communication channels (mass media, point-of-purchase displays, posters, meetings, etc.) and persuasive message placement (songs, theater, soap operas, comic books) which can assist in the promotion of a new concept – such as parental involvement in education.

Essential to a social marketing program is the need to understand the consumer or target audience. All four elements, product, price, place and promotion, assume that the social marketer has taken the time to understand the needs of the target audience and what might motivate them to subscribe to a concept or product. Marketing places emphasis on the consumer's need, attitudes, constraints and opportunities.

Research methods which provide insight into the target audiences are often qualitative in nature. They include focus groups, in-depth interviews, and observation; they use methodologies such as psychographic and Likert scales to develop portraits of potential consumers and their underlying motivations. Larger scale quantitative methods such as Knowledge, Attitudes, and Practices surveys and intercept interview studies allow marketers to test hypotheses about consumer preferences on numerous groups of people. The continued use of these methods enable marketers to develop consumer profiles which will help to tailor products and concepts to the needs of the consumers, and to develop price, access and promotional techniques which will help to ensure that the concepts or products are discovered and utilized.

–Deborah Helitzer-Allen

Deborah Helitzer-Allen is a Senior Program Officer at the Academy for Educational Development.

"Sesame Street": Early Childhood Edutainment

by William G. Darnell

Twenty-five years ago in the United States an early childhood development program was created, aptly named Head Start. It augments the formal educational system by providing locally directed learning experiences for pre-school children who would be economically or otherwise deprived of developmental opportunities. At the same time, educators began to question whether television, which often serves as a "child minder" in American families, also be used to provide children with a stimulus for learning in their own natural environment. The Children's Television Workshop (CTW) piloted a program called "Sesame Street" with the goal of delivering a program to stimulate learning and provide another form of headstart for very young children.

"Sesame Street" is now in its twenty-second season in the United States and there are fifteen successful international co-productions airing in approximately 85 countries. Its characters, Kermit the Frog, Big Bird, Bert and Ernie, and their counterparts overseas, seem real and are loved by millions of youngsters. It is an experiment that has turned into an institution.

Head Start and "Sesame Street" each have their own special strengths. Head Start is directed more toward personal, social and in-depth cognitive learning that is related to school readiness. "Sesame Street" serves a wider audience and creates awareness through broad exposure to learning experiences, in an environment usually not resembling a school. The combined offering of a broadcast such as "Sesame Street" and an organized, nonformal support setting such as Head Start can create an especially effective learning environment. The rationale for using television to deliver early childhood education is well recognized: its appeal and popularity among young children; its wide accessibility, even in urban environments of poor countries; its capacity to offer visual or picture memory stimulation as well as sound; and its ability to provide regular, high standard instruction and appropriate cultural values. In many countries, these reasons are reinforced by the recognition that pre-schools are limited in quantity and quality in many

countries. Family economic and social constraints also limit access to more formal pre-school learning environments. Indeed, there are more children watching television regularly than going to any sort of school in many major cities. Where schools and teachers are unavailable, the broadcast media may be the only means of getting the educational message to young children and stimulating their awareness.

"Sesame Street" was popular and effective with the audience for whom it was originally designed: the multi-ethnic audiences of the United States. In the context of actions to follow the Education For All Conference, an important question is: does "Sesame Street," its adaptations, or simply the model of early childhood education by television offer a good option for expanding the quality and delivery of education to the pre-school audience?

Not a Clone, But an Adaptation

Escalating production costs and shrinking budgets throughout most of the world increases the need for cross-cultural exchanges of programs and production experience. Since 1973, "Sesame Street" has been adapted in Germany, Brazil, Mexico and seventeen collaborating Latin American countries, Holland and Belgium, France, Spain, Kuwait and collaborating Arabic-speaking countries, Sweden, Israel and the Philippines. It has demonstrated the cross-cultural impact of television as a tool of early child development through its successful broadcasts, distributed worldwide to both industrialized and developing countries. One well-learned lesson is that children are receptive to, and stimulated by, very similar things regardless of their cultural differences. Another lesson was that parents in all countries tended to be very accepting of the series and were not threatened. In fact there are reports of significant video taping and adult viewing, with and without the children.

However, not all adaptations had the same goals nor did they follow the same procedures. "Iftah Ya Simsim," the Arabic version, worked with 147 very detailed goals and behavioral objectives. The German "Sesamstrasse" interpreted the goal



Puppets No'man, Melsoon, and Abba with the cast of "Iftah ya Simsim"

statement as an open curriculum, opting out of a detailed formulation of goals. In Germany and the Netherlands, the preparation of children for school was not considered important because all children in the Netherlands, for example, go to school when they are four years old. There was a consequent shift towards emotional and social development. In Canada, a bilingual country, there was a strong emphasis to bilingual education in English and French. The appreciation of differences among cultural groups is given high priority also. "Rechov Sumsum" in Israel makes a point of introducing Arab characters and emphasizing cultural diversity. "Barrio Sesamo" in Spain attempted to break the sex stereotypes and the extremely limited freedom accorded to children.

Despite these differences in emphasis, the CTW production model follows conventional design procedures.

1. *Curriculum development.* Curriculum planning includes definition of educational goals in social, moral and affective development; language, reading and numerical skills; reasoning and problem solving; and perception.

2. *Statement of behavioral objectives.* Teaching aims are expressed in behavioral



titude measures. Evaluation findings and content analyses are fed forward to the next season's programs.

All co-productions of "Sesame Street" emphasized formative research and high production values. "Every co-production," says Peter Levelt, "seeks to involve only the best authors, writers, producers, and directors in its project."

"Ifah ya Simsim": The Arabic "Sesame Street"

In the Arabic co-production, "Ifah ya Simsim" is an imaginary cul-de-sac in a pleasant neighborhood that could be located in any medium-sized town in the Middle East or North Africa. Narrow alleys join it at irregular angles, ornate grills decorate the older houses and a colonnaded sidewalk runs along one side. After school, the neighborhood children stop at Mahmoud's Refreshments for a glass of cold juice or maybe just to chat.

A potential audience of 26 million schoolchildren in 14 countries is lured by the three lively puppets who live at Ifah ya Simsim. Melsoon, a fluorescent green parrot with a bright yellow beak, is a quick-witted chatterbox. A great furry orange camel-like creature called No'man is very demonstrative, eager to please, and sensitive—like a four-year-old child. Abla, a pretty lavender cat-like puppet who is very feminine in her mannerisms, also appears occasionally on "Ifah ya Simsim."

Six Arabian Gulf area countries created the Arabian Gulf States Joint Program Production Institution to work with Children's Television Workshop in producing the series. The intention was not just to create a pre-school educational series of high quality but also to develop an organization capable of producing quality educational and social programming. The series demonstrated that the educational concepts and entertainment themes underlying Sesame Street are culture-free and can be transferred to many new settings, provided that each new co-production is based on extensive research to ensure its educational and cultural appropriateness. The development process of "Ifah ya Simsim," for example, began with a team of educators, researchers, writers and producers developing a set of program goals and a curriculum based on carefully articulated learning objectives. Peculiar to the content of "Ifah ya Simsim" were messages such as the value of manual work, the use and purpose of money, the concept of diversity and interdependence

among nations, and loving God through loving others. It is this critical step of collaboration that makes the adapted series a true co-production, not an import.

The intention was . . . also to develop an Arab organization capable of producing quality educational and social TV programming.

A key issue for producers was language. Modern Standard Arabic (MSA), though rarely heard among the many regional varieties of Arabic spoken in homes, is the language used throughout the Arab world in textbooks and newspapers. Many argued that MSA would not work for "Ifah ya Simsim" since children speak a dialect at home and MSA would be too formal and stilted to be entertaining. They argued that the series should be produced in each of the four major dialects spoken in the children's homes. But Abdelkader Ezzaki, a researcher who examined the impact of "Ifah ya Simsim" on Moroccan children, emphasizes that the acquisition of language children will use in school is very important. "There is a wide gap between the language of home socialization and the language of school, and . . . according to our respondents, this [program] contributes significantly to the bridging of that gap."

The successful use of MSA for the series was a breakthrough. Today, almost all television programming for Arabic-speaking children, including cartoon programs, is currently in MSA. Therefore, even entertainment programs for children provide language enrichment before they actually enter the formal educational system.

Arab educators report research results almost identical with those in the United States and elsewhere. Anecdotal and other research findings corroborate the impact that "Ifah ya Simsim" has had in Arabic speaking countries. A more aware, stimulated group of children enter the more formal educational system. They too have a head start that might not otherwise have been available to them.

William Darnell worked with CTW on "Ifah ya Simsim" and is currently in Pakistan working with a project of the Academy for Educational Development.

or performance terms to allow later testing of outcomes, but also to facilitate the task of writers.

3. *Measurement of existing competence in the target audience.*

4. *Measurement of appeal and educational strategies of existing material.* CTW is conscious of its need to appeal to an audience, and much of its research is directed towards evaluating the appeal of puppets, real people, animation, nature films, male voices versus female voices and so on in different cultures. For example, puppet segments were not so appealing in Jamaica as elsewhere. However, Peter Levelt, director of research for the Dutch version of "Sesame Street," says, "We should not feel compelled to include only the segments of highest appeal; sometimes our educational priorities are more important."

5. *Development of a writer's notebook,* which translates the curriculum goals into practical language, expands on their definition, and suggests teaching strategies.

6. *Experimental production* so that segments and entire programs can be tested.

7. *Formative research on appeal and educational effect.*

8. *Broadcast.*

9. *Summative evaluation,* including audience response, achievement and at-

Computerized Learning Technologies Digest

Under the USAID Learning Technologies Project, the Institute for International Research has produced a Learning Technologies Computerized Information Digest.

The digest is a summary of relevant information on the use of various applications of educational technology for general education in developing countries. It includes information under the following headings: textbooks, interactive radio, other radio instruction, instructional television, programmed teaching/learning, distance education, computers, videodiscs, electronic learning aids, and games and simulations.

The digest summarizes information pertaining to research findings (summary and abstracts of individual studies), technology characteristics, implementation issues, projects, and a bibliography. It was written in a manner designed to encourage browsing and to permit users to proceed to levels of specificity consistent with their particular interests.

The digest runs on IBM-compatible microcomputers. It requires 256K of memory and a hard disk (about 1 MB of space). The program was written using a simple hypertext program and a series of text files. It requires a minimum of proficiency with using microcomputers.

The digest is available for \$25. Orders should specify either 5 1/4 or 3 1/2 inch diskettes. Residents of Virginia should include 4.5 percent sales tax. Orders should be sent to: Institute for International Research, 1815 North Fort Myer Drive, Suite 600, Arlington, VA 222909, USA. Telephone: (703) 527-5546. Fax: (703) 527-4661.

DCR Available in French

You can now read recent editions of the *Development Communication Report* in French! French editions are available on the following themes: distance education, community radio, environmental communication and health communication.

Each edition is available for US \$2.50 (free for readers in developing countries) by contacting the Clearinghouse at the address or numbers listed on p. 2.

(KIRMANI, from p. 5)

Strategy 3

Bringing education closer to home

The distance from home to school is a serious barrier to girls' school attendance, especially in societies where women's mobility outside the home is limited. A study in Egypt showed that when a school was located more than one kilometer away, enrollment for girls fell off more rapidly than for boys. Another study in Nepal found that for every kilometer a child had to walk to school the possibility of that child attending school dropped 2.5 percent. In practice, schools simply become unavailable. In the isolated and mountainous southwest region of the Dominican Republic, for example, one-fifth of the children of primary school age are deprived by poverty and distance of the education their parents want for them. But broadcasts through the Radio-Assisted Community Basic Education project have provided access to literacy, numeracy, social studies, natural science, music and games. Here the radio shelters (Enmarada) are built as inexpensively as possible from materials at hand. Children, mostly girls, arrive late in the afternoon after working on coffee and cane fields. Each day, one hour of radio broadcasts provide the core cur-

(THEISEN, from p. 7)

ditional contributions to support education in the form of in-kind contributions: donated time to clean and repair buildings, assist with class and playground supervision, etc. In many communities, however, these contributions are less than they could be. In the poorest of countries, especially, where over 90 percent of annual budgets are used for recurrent expenditures, there is no residual for capital development and qualitative improvement. Marketing campaigns that might result in the extraction of even 5 to 10 percent more in local resources could be used for qualitative improvements in schools and learning materials. Campaigns promoting community incentive programs tied to meeting certain educational performance standards may be one way of encouraging qualitative improvements as well as of realizing quantitative growth of educational systems.

Social Marketing and EFA

Reaching universal primary school enrollment is a formidable task. Achieving it

riculum of the Dominican Republic, and RADECO pupils are learning as much as their counterparts in traditional schools, who spend all day in their classrooms. In Saudi Arabia, where the practice of purdah restricts women's mobility, attempts are currently being made to relay educational programs to groups of women within the vicinity of their homes.

Strategy 4

Introducing flexible school schedules

El Salvador and Colombia offer their primary school curricula in small units so that students can learn at their convenience, spending time on chores at home or in the fields without missing school work. In the Pune district of Maharashtra in India, early morning literacy classes between 7:00 and 9:00 a.m. were popular among girls. However, flexible scheduling puts extra stress on traditional school systems where teachers are often overloaded. The quality of instruction may suffer as a consequence. In such instances, technology may support teachers by providing them with high quality instructional tools, allowing learners to work at their own pace and convenience.

Mubina Kirmani is a World Bank consultant who researched the use of computers in Kenya schools, and has specialized in gender-related issues in education.

without the support and involvement of parents is impossible. Ministries must draw upon the research and marketing skills and experiences available to them in developing campaigns to improve the performance of school systems as well as in increasing access to them. Parents who are persuaded that time is effectively used in schools, that teachers and administrators are doing their best to inculcate skills into children, and parents who are also actively involved in promoting the financial well-being of the school and in the moral and cognitive development of their children, are an essential keys to the realization of Education for All. It is the responsibility of educators and marketers to join forces to empower parents with the motivation and opportunities to make All for Education a reality.

Gary Theisen is Director of International Research and Planning at the Academy for Educational Development

Resources on Basic Education

In moving from the consensus reached at the EFA conference to the practical task of making education for all a reality, educators and planners can draw upon a variety of resources. Below, we have briefly summarized key resources in two areas – journals and projects – that can provide valuable information on basic education policies, research, experiences and the application of technology.

Journals

Journals often report the most current thinking and practice in education. Of the many journals produced, we have selected those of international scope or likely to appeal to DCR readers.

◆ *Adult Education and Development* covers adult education in Africa, Asia, and Latin America. It serves as an exchange forum for adult educators and authors in developing countries and concentrates on practice rather than theory of adult education. Also available in French and Spanish. Contact: Deutscher Volkshochschul-Verband, Fachstelle Fur Internationale Zusammenarbeit, Rheinallee 1, D-5300 Bonn 2, Federal Republic of Germany.

◆ The *Bulletin of the International Bureau of Education* is devoted to comparative, international studies in education. Each issue covers a special theme (e.g., distance education, secondary education, the foreign student etc.) and includes an annotated bibliography. Contact: International Bureau of Education, PO Box 199, 1211 Geneva 20, Switzerland.

◆ *Convergence/Convergencia* addresses issues, practices, and developments in the field of adult and nonformal education. It includes articles discussing case studies from both developed and developing countries. Articles are abstracted in French and Spanish. Cost: \$30. Contact: International Council for Adult Education 720 Bathurst Street, Suite 500, Toronto, Ontario, M5S 2R4, Canada.

◆ *Educational Innovation and Information* details "news from the field" from a variety of international programs and countries as well as a project index. As a forum for regional and international news, this journal concentrates less on scholarly articles but includes "ways and means" to acquire necessary materials for projects

from literature to tools. Available in French and Spanish. Cost: free. Contact: International Bureau of Education, PO Box 199, CH-1211 Geneva, 20, Switzerland.

◆ *Educational Technology Abstracts* is an international abstracting service for those in the field of educational and training technology. Categories for abstracts are: design and planning, teaching methods, instructional media, instructional resources, learning, and assessment and evaluation. Major journals and books are covered, including detailed bibliographic citations. Contact: 36 Lakeside Drive, Cardiff CF2 6DF, Wales, UK.

◆ *ICAE News* describes various conferences and activities worldwide relating to adult education, as well as recent events in the UN, etc. It does not include theoretical articles, but is more of a calendar/newsletter. Cost: free. Contact: International Council for Adult Education, 720 Bathurst Street, Suite 500, Toronto, Ontario, M5S 2R4 Canada.

◆ *International Journal of Educational Development* concentrates on educational case studies from developing countries with minor attention given to theoretical aspects. It also includes book reviews. Cost: DM 315.00. Contact: Pergamon Press Inc., Maxwell House, Fairview Park, Elmsford, NY 10523, USA.

◆ *International Review of Education* covers issues in comparative international

education. Cost: free. Contact: Unesco, Martinus Nijhoff, Box 566, 2501 C.N., The Hague, The Netherlands.

◆ Although articles in the *Journal of World Education* are not restricted to the topic of education, the journal includes book reviews and schedules for education-related conferences and events. Cost: libraries, \$12, individuals, \$24. Contact: Association for World Education, Nordenfjord World University, Skyum Bjerger, 7752 Snedsted, Denmark.

◆ *Prospects: Quarterly Review of Education* covers international education issues from distance education to informatics, concentrating on education at the secondary level and above. In addition to book reviews, each issue contains two case studies. Cost: 100 francs. Contact: Unesco, 7, Place de Fontenay, 75700 Paris, France.

Projects

The Bureau for Science and Technology's Office of Education (S&T/Ed) at the US Agency for International Development has initiated five contracts that have provided education research, design and development services in developing countries. Some are new, but many have been operating for five years or more and have made significant contributions to our knowledge of educational issues and how to approach them more effectively.

Database Program for Development Documents

Despite the proliferation of international databases, appropriate computer technology for libraries and documentation centers in developing countries has not been readily available until recently. CDS/ISIS is a simple database package designed for development documents. Its users include Unesco's International Bureau of Education (IBE), USAID, the International Development Research Center (in Canada), a club of Senegalese users in Dakar, and our own Clearinghouse on Development Communication. It can be used as a stand-alone database or it can be connected interactively to other databases through modems and telephone lines.

It will run on IBM or Wang personal computers, on DEC's VAX series of mini-computers and on IBM mainframes. The Clearinghouse runs its library database on the microcomputer version (MicroDIS) on an IBM PC clone (at 12 mhz with a 286 chip and 40 megabyte hard disc) and

finds it swift and trouble-free. Data entry and searches are easy to operate for non-expert users.

CDS/ISIS is available *free of charge* from Unesco. The microcomputer version is distributed by the IBE, which also offers training courses for users. Regional training seminars are held every year under the auspices of the International Network for Educational Information.

Our own experience with the software leads us to recommend CDS/ISIS for the following reasons: several key agencies are now using it so that a variety of information is now available; it does not require sophisticated computer technology to run it; the operator's manual is easy to follow; and inexpert users can find their way around the program using the prompts on the screen. For more information on another user's experience, write to Adana Daff, B.P. 2352, Dakar, Senegal. Otherwise, contact: IBE, PO Box 199, 1211 Geneva 20, Switzerland.

The five projects described below are listed in alphabetical order. Publications listed are illustrative only. A complete list of publications is available from the address given at the end of each project description.

◆ **Project ABEL (Advancing Basic Education and Literacy)** is committed to improving equity, efficiency, and quality in basic education. Increased participation and retention of girls is a fundamental goal. The four main components of the project are dissemination of proven educational tools, methods, and research findings, operational and managerial support for USAID Missions initiating basic education projects, design and implementation of pilot projects and research studies, and provision of short-term training to build capacity within ministries of education and local schools. Project ABEL has been in existence for six months and has been active in Egypt, Jordan, Malawi, Mali, Ghana, and Uganda. Available publications include:

- *The Establishment of a National Center for Educational Evaluation and Examinations: Report of a Feasibility Study* by Peter C.P. Kimber and Protase E. Woodford.
- *Uganda Education Sector Review: Issues and Options for USAID* by Suzanne Grant Lewis, V. Byabamazime, et al.

To order these publications, or for more information, contact: Project ABEL, Academy for Educational Development, 1255 Twenty-Third Street, NW, Washington, DC 20037, USA. Telephone: (202) 862-1900. Fax: (202) 862-1947.

◆ **BRIDGES (Basic Research and Implementation in Developing Education Systems)** focuses upon improving opportunity and quality in Third World schools through the design of strategies that will increase children's access to schooling, increase retention, decrease repetition, optimize the use of fiscal and educational resources, improve the amount and quality of what is learned in school, and improve the accuracy of educational statistics and projections. BRIDGES conducts research reviews to identify and synthesize available research, and empirical research to provide country-specific data and to answer questions arising from research reviews.

BRIDGES is currently developing a set of integrated software packages which will assist education officials to accurately assess existing educational conditions, anticipated needs, and the cost-benefit of alternative policies.

Available publications include the following:

- *Policy Initiatives to Improve Primary School Quality: An essay on implementation, constraints and opportunities for educational improvement* by Chris Wheeler, Steve Raudenbush, and Aida Pasigna. Cost: \$5
- *Using Instructional Hardware for Primary Education in Developing Countries: A Review of the Literature* by Stephen Anzalone. Paper #2, March 1988. Cost: \$4
- *The Consequences of Schooling: A Review of Research on the Outcomes of Primary Schooling in Developing Countries* by Thomas O. Eiseimon. Paper #3, September 1988. Cost: \$4

For a complete list of BRIDGES documents, or more information contact the project at the address listed below. To order, send a check or money order in US currency, payable to Harvard University. In the US please add \$2.50 for the first document, and \$.50 for each additional document to cover shipping and handling costs. In Canada and Mexico, add \$3 for the first document and \$.50 for each additional document. In Europe, South & Central America, Africa, Asia, and Australia, add \$6 for the first document, \$1 for each additional document. BRIDGES Publications, Harvard Institute for International Development, 1 Eliot St., Cambridge, MA 02138, USA. Telephone: (617) 495-9720. Fax: (617) 495-0527.

◆ The principal goals of **IEES (Improving the Efficiency of Educational Systems)** are to aid developing countries improve the performance of their educational systems and strengthen their capacity for educational planning, management, and research. IEES sector assessments provide the baseline information necessary to derive country-specific strategies to enhance educational efficiency. IEES efforts are concentrated on strengthening the analytic skills of education planners by stressing the importance of methodical consideration of alternative policy options, improving educational management by facilitating the communication flow between central, regional, and school level management, as well as general knowledge development, information dissemination, and networking.

Available publications include:

- *Indicators of Educational Effectiveness & Efficiency* by D. Windham, January 1988. Cost: \$6

- *Introduction to Computer Application in Educational Data Processing* June 1989. Cost: \$5.30.
- *A Guide to Educational Training Materials* June 1989. Cost: \$2.40.

For a complete catalog of IEES documents, or more information on the project, contact the address listed below. To order, send check in US dollars, issued by an American Banking institution, payable to Florida State University, Learning Systems Institute. International money orders are also accepted. Contact: IEES, Educational Efficiency Clearinghouse, Learning Systems Institute, 204 Dodd Hall, The Florida State University, Tallahassee, Florida 32306, USA. Telephone: (904) 644-5442. Fax: (904) 644-3783.

◆ The purpose of the **Learning Technologies Project** is to aid developing countries in obtaining the greatest possible benefit from their investments in classroom uses of computers and other newer learning technologies. The project has developed a computerized information digest on the use of educational technologies in developing countries, and has produced a cost analysis for the use of computers in the Third World. An evaluation of computer assisted instruction on student achievement was conducted in Grenada, a cost-analysis on the classroom use of computers was formulated in Belize, and technical assistance was provided to the Belize Ministry of Education for the development of a computerized management information system. The Learning Technologies Project has also initiated pilot studies on the use of electronic learning aids to improve math skills in developing countries.

For further information, contact: Stephen Anzalone, Institute for International Research, 1815 N. Fort Myer Drive, Arlington, VA 22209, USA. Telephone: (703) 527-5546. Fax: (703) 527-4661.

◆ The **Radio Learning Project** utilizes interactive radio instruction to facilitate learning of basic primary school skills. The strength of this program lies in its use of radio, a low-cost means of instruction, its interactive style, which engages students, and its effective curriculum design. Approximately 600,000 children throughout the developing world are currently benefiting from interactive radio lessons in subjects such as mathematics, English as a second language, reading and writing in Spanish, health and science.

(continued on p. 13)

(COLLETTA, from p. 4)

behavioral change of the clientele. Both groups recognized that they shared similar problems and each had certain advantages that could complement one another.

In addition to NGOs, many private and community or people's organizations such as cooperatives, women and youth associations have emerged as an outgrowth of the Philippines' "people power revolution." However, they often lack knowledge, skills, resources and confidence to convert their aspirations and needs to effective demand and use of government services. It was time to bring together a new partnership of government organizations, NGOs, and people's organizations.

Planning Principles

The multi-sectoral planning group decided that there were five strategic principles which had to drive the new approach to nonformal education if it were to alleviate poverty and address inequality.

(RESOURCES, from p. 12)

The **Radio Science Project** is currently developing a radio-based curriculum for children in grades 4-6 in Papua New Guinea. Realizing that science is a subject which many teachers find difficult to teach, this project also includes a teacher training program to strengthen teachers' confidence and competence. The project also attempts to address constraints such as inadequate materials and equipment by utilizing commonplace objects for experiments. Adaptation of the interactive radio methodology to fit the needs of a more inquiry-oriented, materials-based subject such as science has proved challenging, but promising.

Available publications include:

- *Interactive Radio Instruction: Confronting Crisis in Basic Education* (AID Science and Technology in Development Series), 1990.
- *English in Action* (videocassette of an interactive radio instruction pilot project in Swaziland), 1990.
- *Science on Air* (videocassette of an interactive radio pilot project in Papua New Guinea), 1990.

For order information, project information, or a complete list of available publications, contact: Radio Learning Project, Education Development Center, 55 Chapel Street, Newton, MA 02160, USA. Telephone: (617) 969-7100. Fax: (617) 332-6405.

First, the learners' needs and programs had to take precedence over the agendas of institutions providing education services. That is, the system had to be "demand driven" and not supply driven. The model should not repeat past patterns of building physical facilities and searching for learners. The needs and characteristics of the learners had to shape the programmatic and institutional arrangements, not vice versa.

Second, the programs should be targeted to the most needy, and not dissipated by trying to do too much for too many.

Third, the programs should be multi-sectoral and integrated, addressing the question of learner motivation head-on. For example, literacy could not motivate learners who were hungry or desired buying power first.

Fourth, the programs should be outreach-oriented, adapting delivery and curriculum rather than relying on fixed facilities and content.

Finally, the efforts should possess a certain degree of built-in financial sustainability through client contributions or revenue earning.

With these assumptions in mind, the recommendation was made to convert the semi-dormant University of Life into a nonformal education service center. This center will provide technical and financial services to a range of regional and provincial intermediaries, government and nongovernment. These intermediaries will provide direct assistance to people's and community organizations involved in the delivery of basic education services, integrated within broader cross-sectoral development programs. Regional intermediaries will be selected on the basis of their ability to collaborate with people's organizations and their implementation record.

Demand-Centered Education Services

Meeting demand will be the key instrument in linking democratization and people-centered development in the Philippines. Regional intermediaries will be required to conduct a local learning and development needs assessment, which will identify priority target populations (e.g., unemployed out-of-school youth and adults, illiterates, etc.), and their information, knowledge, skills and financial needs. From such a needs assessment, regional and local plans and sub-plans could be constructed, identifying particular technical and financial services that are needed and

could be provided by the national center to the regional intermediaries and from the regional to local groups.

Support for new plans from the center will be based upon actual performance in meeting local learning needs and alleviating poverty. The objective was to establish a competitive system in which reward or program support is based upon actual performance, not simply because an institution exists and is part of an annual budgeting cycle.

Government Services

Government's role in providing nonformal education will be transformed from direct instructor to that of technical and financial service agent. The actual technical services which will be provided to regional intermediaries and grassroots organizations by the national NFE service center are:

- staff development, training and learning materials development;
- organizational development including strengthening of management, supervisory and information systems, as well as planning, programming, monitoring and evaluation activities; and
- the provision of new knowledge and technology.

The financial services provided by the national center and its partner regional intermediary network will take the form of a revolving credit scheme or connections to other sources of local financial credit. The revenue to support this revolving fund will come from the rental of fixed assets of the former University of Life, e.g., dormitories, sports facilities, offices, printing and media communications facilities. Since the national center is oriented toward outreach in the regions, there is little need to use the large complex for direct instruction or training.

By combining all of these elements – a highly targeted, needs-based, demand-driven planning process, a flexible, responsive multi-sectoral network of institutional support, a mechanism for financial self-sustainability, and coordinating links to cross-sectoral policy-advisory bodies – the Philippines is embarking on a path which recognizes that new partnerships between NGOs, government and peoples' organizations will be a necessary condition to achieving education for all.

Nat Colletta served as Deputy Executive Secretary of the Inter-Agency Commission, World Conference on Education for All. He is presently a Senior Education Specialist at the World Bank.

What's New, What's Coming

Conferences

Distance Education

As a follow-up to the Education for All conference, Unesco is sponsoring a seminar on distance education in Africa, to be held September 24-28, 1990, in Arusha, Tanzania. The seminar will bring together specialists and decision-makers to review experience in distance education as a means of providing access to quality education. It is hoped that conclusions reached will guide the design of future projects. Although participation is limited to invitees, proceedings will be made publicly available. For more information: contact Unesco, 7, place de Fontenoy, 75700, Paris, France. Telephone: (331) 45-68-1000. Fax: (331) 40-65-9405.

Literacy

The forty-second session of the International Conference on Education, will be held in Geneva, September 3-8, 1990. The theme will be literacy. For more information, contact: International Bureau of Education, P.O. Box 199, 1211 Geneva 20, Switzerland.

Telecommunication

Africa Telecom 90, the second telecommunication meeting ever to be held in Africa, will take place in Harare, Zimbabwe, on December 4-9, 1990. An exposition of telecommunications technology and services will run concurrently with a session on "Development Strategies for Telecommunication Resources, Management and Technology." Immediately following the gathering, on December 10-14, the African Telecommunications Development Conference will be attended by delegates from African countries and donor agencies. Contact: Africa Telecom 90 Secretariat, ITU, Place des Nations, CH-1211 Geneva 20, Switzerland. Telephone: (41-22) 730-52-44. Fax: (41-22) 733-72-56. Telex: 421-000 UIT CH.

International Communication

The International Institute of Communication will hold its 21st annual conference September 12-14, 1990 in Dublin, Ireland. Participants will address communication ownership and regulation,

trends in communication technology, and access to communication by minority and disadvantaged populations. To register, contact the IIC before August 30 at Tavistock House South, Tavistock Square, London WC1H 9LF, UK. Telephone: 388-0671. Fax: 380-0623. Telex: 24578 IICLDN G.

Resources

Environmental Journalism

"Everyday Dose of Radiation," "In Search of Clean Water," and "Himalayan Dams on Shaky Ground" are a few of the headlines of feature stories distributed through a new India-based news service. Twice a month, the Energy and Environment Group in New Delhi, India, issues English-language stories covering topics related to environment,

energy, health, and sustainable development in South Asia. Annual subscription rates are US \$200 for overseas organizations and 800 to 3,000 rupees for Indian-based organizations. For more information, contact: Energy and Environment Group, Post Bag no. 4, New Delhi, India 110066. Telephone: 608-515. Telex 31-66145 OMIN.

A continent away, reporters concerned about the environment have formed the Nigerian Forum of Environmental Journalists. The group is currently seeking support from international agencies and eventually hopes to expand its activities to cover the entire African continent. For more information, contact: Bode Oyewole, Federal Radio Corporation of Nigeria, Box 9535, University of Ibadan Post Office, Ibadan, Nigeria.

New Books

■ **Third World Television Access to U.S. Media by Claus Mueller.** New York: Friedrich Naumann Foundation, 1989. Available free of charge from Friedrich Naumann Foundation, 823 United Nations Plaza, Suite 717, New York, NY 10017, USA.

From Mueller's introduction we learn that the television traffic between the United States and the Third World travels on a virtual one-way street. As a result, the average US television viewer rarely gets to see how the countries of South see themselves, as reflected in their own films and TV programs. Not to be totally discouraged by this fact, however, Mueller focuses on providing information that will help correct the imbalance. Third World TV producers and distributors will find the book a useful guide to media markets in the United States, the programming policies of public broadcasting and cable networks, and potential channels for breaking into the US market. The author also presents the results of a survey assessing audience preferences and response to Third World TV programs. Finally, a series of 11 appendices present lists of contact addresses and phone numbers for organizations mentioned throughout the text.

— Amanda Dory

■ **Training Manual on Farm Broadcasting, Farm Broadcasting: A Trainer's Handbook, and Farm Broad-**

casting in the Asian and Pacific Region. United Nations Economic and Social Commission for Asia and the Pacific. New York: United Nations, 1989. Free of charge to readers in developing countries.

Each volume in this three-volume set is directed at individuals working at a different level of the agricultural extension process. The training manual is designed to build radio production skills among agricultural extension workers. Sprinkled with colorful illustrations that are vaguely suggestive of Asia — but generic enough to be used in other regions — this volume introduces the reader in plain English to radio equipment and techniques of interviewing, script writing, oral presentation, and tape editing.

The trainer's handbook, designed for those who plan and implement extension programs, explores basic concepts of communication for development and the role of radio in the overall effort to reach rural villagers with information. It provides guidance in the types of training farm broadcasters require. The final publication presents case studies of state-of-the-art farm broadcasting practice in 18 countries in the Asia-Pacific region. Researchers as well as policymakers should find it useful. Taken together, the three volumes complement one another well.

— Karen Richardson

Amanda Dory and Karen Richardson are Research Assistants for the Clearinghouse on Development Communication.

ERIC: A US Resource for Education for All

by Barbara Minor

There are 16 clearinghouses affiliated with the Educational Resources Information Center (ERIC) of the US Department of Education. Their purpose is to collect and process printed materials on education that are not available commercially: conference papers and proceedings, literature and state-of-the-art reviews, curriculum and instructional materials, congressional hearings, and research reports.

Each ERIC clearinghouse specializes in one of the following educational areas: Adult, Career, and Vocational Education; Counseling and Personnel Services; Educational Management; Elementary and Early Childhood Education; Handicapped and Gifted Children; Higher Education; Information Resources; Junior Colleges; Languages and Linguistics; Reading and Communication Skills; Rural Education and Small Schools; Science, Mathematics and Environmental Education; Social Studies/Social Science Education; Teacher Education; Tests, Measurement and Evaluation; and Urban Education.

All clearinghouses actively solicit materials within their subject area. The materials received are reviewed by subject experts, and abstracts are written subject index terms assigned for inclusion in an on-line data base. The abstracts and indexing terms from all of the clearinghouses appear in a monthly index, *Resources in Education* (RIE). Clearinghouses also monitor professional journals in their area of interest and provide annotations and descriptors for selected articles, which appear in *Current Index to Journals in Education* (CJIE).

The full text of most documents announced in RIE (except journal articles) are then included in the ERIC Microfiche Collection, available in more than 700 libraries or information centers around the world. Microfiche and paper copies of all documents can be ordered from the ERIC Document Reproduction Service, 3900 Wheeler Avenue, Alexandria, Virginia, USA. Orders can be submitted via telephone, (703) 823-0500, or in the US (1-800) 227-3742; or via fax, (703) 823-0505.

The ERIC Clearinghouse on Information Resources may be of most interest to DGR readers. It focuses on educational technology and library and information science at all levels. Areas of interest include the media of educational communication, telecom-

(METHOD, from p. 16)

some facets of the EFA agenda and the language of the education managers, researchers and analysts may continue to be of focus, choices, targets, comparisons and contrasts, looking for the points of leverage, advantage and tradeoff.

This, in my view, is the greatest risk to the EFA consensus and the ability to work jointly on EFA. We need somehow to pursue the many points of analysis, advocacy and incremental improvement while validating the education for all agenda and vision as a whole and supporting the many complementary roles.

Fifth, under any of the above scenarios, it is likely that before very long educators, education observers and others will return to focusing more on the problems than on the solutions. The magic of what happened at Jomtien is that there was a collective choice to focus on what could be done and to accept the responsibility that whatever will be done to provide education for all over the next decade will be a result, in large part, of what vision people choose to accept. The participants chose to act as though education for all is within reach. Technology exists. Resources exist. Understanding of the problems exists. The scale of the problem is manageable in most countries, if the policies are right and resources are managed efficiently. The main missing piece is the will to act. This overly simplified set of assertions is one of the forces which caused people to come to

the table. The moral imperative to attempt education for all exists in part because it is perceived to be doable, achievable. The willingness of so many senior people from around the world to join in the ERA reflected their assessment that at least there was a chance of making real progress. That is powerful stuff, but it also reflects a number of deliberate simplifications.

It would be easy, today, to think of reasons why little will be accomplished. It will remain true in the year 2000 that there is too much poverty in the world, that demographic trends are frightening; that many governments are weak, irresponsible or repressive, and that too many children remain inadequately educated, too many adults have too little access to information and too few people care. However, it is also true now that the children who will be 14 years old and approaching adulthood in the year 2000 are 4 today. If their early childhood development is not being attended to today, it never will be. If steps are not taken within the next two or three years to ensure that all these children have access to schooling of acceptable quality, most of those left out never will have any formal education. If these children reach 14 without the basic skills needed to reach their potential, most of them will not and we will all be diminished by that fact.

Frank Method is a Senior Policy Advisor at USAID. He served on the steering committee for the EFA conference and assisted in drafting the conference declaration and framework for action.

munications (cable, broadcast, and satellite), audio and video recordings, film and other audiovisual materials. In addition to processing materials for RIE and CJIE, ERIC/IR publishes two-page digests on topics of current interest; mini-bibliographies providing annotated citations to items in the ERIC database about popular topics; a monograph series featuring trends and issues analyses, synthesis papers, and annotated bibliographies; and a semi-annual newsletter. These materials are available directly from the clearinghouse.

General information about the ERIC clearinghouses is available from ACCESS ERIC, 1600 Research Boulevard, Rockville, Maryland, 20850, USA. Telephone: 1-800-USE-ERIC.

Barbara B. Minor is Publications Coordinator for the ERIC Clearinghouse on Information Resources.

Share Your Videos on Basic Education

Unesco is seeking contributions to a new collection of videos documenting innovative approaches to basic education in developing countries. Of special interest are videos demonstrating ways primary schools have successfully addressed common problems – for example, high drop-out rates, limited access by disadvantaged groups, lack of educational materials, and irrelevant content of materials. Project coordinators also request help in identifying innovative projects that have not yet been videotaped. Contact: Ulrika Peppler, Unesco, 7, place de Fontenoy, 75700 Paris, France. Telephone: (331) 45-68-1000. Fax: (331) 40-65-9405.

What Way Home from Jomtien?

by Frank Method

At the end of the EFA, when most participants had left, the exhibits were being dismantled and the hall readied for another conference, the remaining steering group members and sponsors met to talk about what had happened. There was a strange mix of exhaustion, exhilaration and apprehension. The conference had exceeded most expectations, but the "so what?" and "what next?" questions remained. Was there really a new vision, a true consensus, a genuine willingness to collaborate within a new framework? Or was this only a stimulating meeting among well-intended people who shared an interest in common problems? Would the broad perspective survive once delegates returned to their specific organizations and interests?

So far, it appears that the EFA has in fact been a catalyst for new initiatives and new plans of action. There are already very promising signs that the international funding will be available, that more organizations and partnerships (including private sector and mass media partners) are becoming involved, and that many, perhaps most, countries will make greatly increased efforts to achieve education for all over the next decade. It is particularly encouraging that international collaboration is increasing in key areas for new initiatives such as early childhood development, the education of girls and women, comparative assessments, joint research and the exchange of education data.

However, there are several scenarios which could undercut the new initiatives and pull the consensus apart.

First, the international community may not be able to deliver new resources, either because funding scenarios are overly optimistic or because the leadership among the major assistance agencies (e.g., the four agencies which sponsored the EFA or the other donors working through the International Working Group on Education) proves unable to work collaboratively. For a number of reasons, I think this scenario is the least likely.

Second, and more likely, the international community may put too much emphasis on international funding, coordination and monitoring mechanisms, getting ahead of national capacities to assess, plan and im-

plement. The emphasis must be on developing national plans of action and on the capacities of countries themselves. Countries need to set their own priorities, to mobilize and allocate resources within their own budgets and management systems and to establish the analytic and assessment capacities to be able to judge whether national needs and priorities are being met. An essential part of such capacities is the participation of communities, the private sector and nongovernmental entities both in providing education and in articulating the social demand for education.

Educators themselves may pull apart the consensus for a broad approach, . . . returning to narrower advocacies.

If international agencies are too concerned about moving large resources quickly against pre-agreed targets, the education systems which result are likely to be centrally controlled, narrowly focused with standardized approaches and rigid administrative guidelines, and with few meaningful roles for the participation of communities, parents and individual learners in shaping their education.

Third, the commitment to cooperation, joint partnerships and new approaches may become quite strained once we begin to talk about major initiatives with new finance. Donors must find ways to work more collaboratively, with new partners, providing assistance as part of larger packages involving multiple sources of funding and assistance, and expending resources with less external oversight and direct management. There is more awareness of

the need to assist and encourage non-governmental approaches and local participation in the management of education than there is understanding of how to do it. Further, we may be quite naive about the willingness of communities and private organizations to take a larger and more direct role in the provision of basic education services. Each organization needs to account for its own resources, most organizations have specific program mandates and not all PVOs and NGOs want to manage larger education sector programs, however defined.

Fourth, educators themselves may pull apart the technical consensus for a broad approach using diverse technologies and delivery systems to meet a number of complementary education needs, for all learners, returning to narrower advocacies for particular technologies or approaches. Or, they may set priorities and targets and focus more on areas for experimentation rather than the broad scope for mobilization and new partnerships.

The EFA consensus has been built by expanding perceptions of basic education needs to include literacy as well as schooling; quality, achievement and relevance as well as quantitative access and literacy nosecounts; early childhood development as well as lifelong learning. The agreement has been on broad objectives, not on means, approaches, choices of technology or measurement instruments. The language has been of broad frameworks; comprehensive approaches; integration, balance and complementarity; and of partnership and common purposes. By contrast, most educators and educational organizations are involved only with

(continued on p. 15)



Source: Nony Marcello for the WCPEA Inter-Agency Commission

84



Communicating with Women

by Mallica Vajrathon

Why do development communicators and educators need to think about women?

The moral, human rights reasons are well known and need no elaboration. The practical development reasons why communicators and educators can make a difference through communicating with women and empowering them with information and skills are outlined below:

◆ Women are *economic agents*, although they are usually not perceived to be. Their work is not accounted for, and so their further development potential is grossly neglected.

◆ Women are *farmers*. In Africa, they produce some 80 percent of food, and they can produce more if other workload is reduced and if they receive training and technical information.

◆ Women are *key agents of environmental protection*. In rural areas, they live and work closer to the eco-system; they can understand its limitations and can safeguard its future by practicing sustainable agriculture and forestry. Therefore, they need support, technical conservation information, and sharing of their experience through communication.

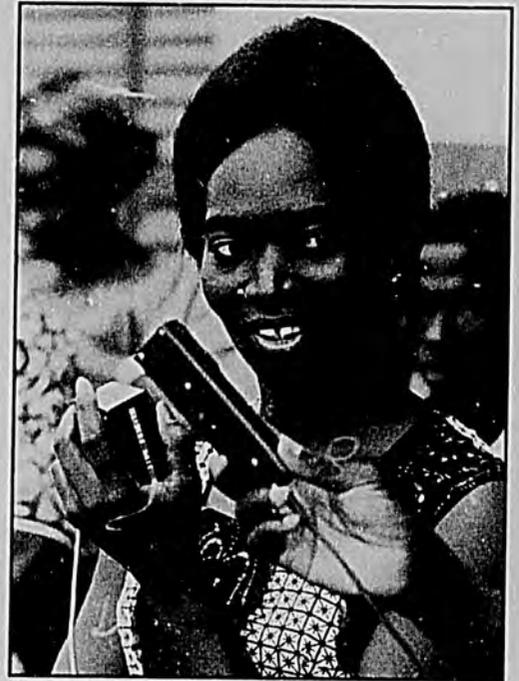
◆ Women are the *key agents of human development*. They can improve the quality of life and optimize human responses in communities through reducing maternal and child mortality, reducing fertility, improving family nutrition, and managing safe drinking water and sanitation. They also teach their children (especially daughters) good health practices and other skills at home, thus supporting formal education systems.

When development communicators ignore women, they consciously or unconsciously slow down the pace of development and perpetuate the vicious cycles of poverty, illiteracy, starvation, and human suffering.

Women and Development Support Communication

Over recent decades, there has been growing recognition that communication based on people's background, culture and basic knowledge is a critical component of any development project, and that it must be systematically planned, budgeted for and evaluated. But, as with development planning in general, there is still a tendency to assume that development communication and information directed at a general audience will equally reach women.

In fact, women often do not have equal access to information, due to such factors as restricted mobility outside the home, lower educational levels, and sometimes men's control over information or media technology. Development communicators



Village woman in Togo speaks into tape recorder.

may need to "repackage" information in a form that is comprehensible to poor, illiterate women and to select those communication channels most appropriate for women. Furthermore, women will have different information needs and ways of treating knowledge. For example, women must be informed about life options in relation to marriage, safe contraception, and breastfeeding, in order to make choices in their own interest. Even then, development communicators need to ensure that they bring women information *as women* and not simply as intermediaries for children and families. For instance, a breastfeeding promotion campaign that focuses too much on child health goals might miss the fact that six half-hour feedings per day would seriously burden already over-

(continued on p. 2)

In this issue . . .

Communicating with Women	1
Agricultural Extension and African Women.....	4
Women and Water: The Bucket Stops Here	6
Increase Mothers' Self-Confidence	7
Social Marketing: More Marketing than Social?	8
Making Training Effective and Empowering for Women	9
Women's Training Needs: Notes from a Trip to Africa	11
Community Publishing as a Strategy for Women's Development.....	12
Funding Communication for Women in Development.....	14
What's New, What's Coming.....	18
Resources	19
Have Women Missed the Boat on Communication Technology?	20

70



Development Communication Report

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(VAJRATHON, *from p. 1*)

worked and time-constrained mothers. Thus development communicators must become much more sensitive to women's problems and listen to their own ideas of how to solve them.

It is also essential that more women be given an opportunity to be trained in skills that will enable them to become development communicators themselves. Such skills range from interpersonal communication techniques, to production skills in folk media, small controlled media and mass media, as well as use of new high-tech information technologies as communication tools for development.

Women and the Media

During the 1970s and 1980s, especially during the United Nations Decade of Women (1976-1985), the international women's movement made media producers, communication planners, and others aware of the need to think about women and the media in the context of development. Many national and several international meetings were organized on the subject of "Women and the Media," raising such questions as how the mass media treats issues of concern to women, and women's participation in various capacities in the production of mainstream media.

Social analysts and critics have pointed out that mass media – newspapers, television and radio – are used by those who have access to them. Until now, men in all cultures have had both access to and control of the printing press, broadcast technology, computer-based technologies and production resources that determine the design and content of programs. Traditionally, men have communicated through the media on behalf of all humankind, influencing public opinion, and bringing about political, economic and social change from their point of view. But because parents bring up girls differently than boys in most cultures, women experience life quite differently and so bring a uniquely female perspective to many issues of local as well as global importance. In recognition of this gap, there has been a significant entrance of women into mainstream media – much more in Western than Third World countries, but to a noticeable extent in the latter as well.

At the same time, those attentive to issues of national and international development raised the question of whether the strategy for participation of women in the

media should concentrate on getting women into mainstream media or creating "alternative" media institutions to serve the interests of women and meet the communication needs unserved by male-controlled media. Women's own media also allow an opportunity for open dialogue without domination by men. Psychologists have observed that in a group composed of men and women, the men usually set the agenda, choose topics for discussion, and tend to answer most of the questions posed during the group discussions.

The present challenge is how to counter the negative reactions when "women's issues" are brought up at national or international development discussions.

While the debate has continued, women have felt compelled to work on *both* strategies, depending on their local situations and, of course, their own vocational preferences. The last ten years have seen an enormous expansion of women's own media: international networks of women's development information, development manuals for women, films and videos by and about women.

However, it can be argued that neither strategy has succeeded in making a significant enough difference in Third World women's access to information and skills relevant to them and useful for contributing to development in their communities. Despite larger numbers of women professionals employed in mainstream print and broadcast media in developing countries, they still tend to be concentrated in sex-stereotyped posts such as announcing or children's programming, and are largely absent from management and decision-making positions. Several recent studies show that factors push women who work in media to become "one of the boys" in order to achieve recognition and status within the profession, neglecting women's interests in the process. Mass media treatment of women's issues, while broader than before, is too often confined to a "women's page" or program rather than integrated into broader content, and many stereotypes and negative images of women prevail in media content as well as advertising. The use of alternative media, when sus-

Convincing USAID Staff

The new GENESYS Project of the Office of Women in Development, US Agency for International Development, is designing a multi-media communication strategy to get policy makers, planners and technical staff throughout the agency to "buy into" the notion of integrating gender considerations into every aspect of their work.

The campaign's central message is that women are active contributors to economic development and, conversely, development that ignores women is wasteful and more likely to fail. Agency bureaucrats and field staff are the primary target audience, but the project also intends to direct messages at the US Congress, NGOs, women's organizations and leaders in developing countries. A specially tailored message and strategy will be developed for each audience.

The multimedia approach is one element of a broader effort to stimulate ac-

tion on gender issues. Research, training, and technical assistance are all coordinated with communication.

The project is now completing a limited survey of USAID policy and technical staff on their attitudes, knowledge and practices related to women in development. The first issue of a newsletter is just off the press, success stories are being packaged for dissemination through a mixture of media, and computerized economic models and videos are in the works.

"The message is simple, but powerful: women are more than half the world's population and A.I.D. cannot afford to define them as a special interest," declares Chloe O'Gara, Deputy Director of USAID's Office of Women in Development. "Women in development concepts must become an integral element of all development assistance. Communication can play a critical role in this process."

tained, has indeed had an impact on women's knowledge and skills and is capable of reaching significant numbers of local women. But these have been relatively rare phenomena, with small, alternative media constantly struggling to survive and dependent on financial support from donor agencies due to women's inability to pay for such information flows.

Communicating with Policy Makers

Currently, there is an enormous need to use communication to heighten male leadership's understanding of the importance of accepting women on an equal basis in development. Development communicators, men as well as women, need to use their skills to reach policy makers and opinion leaders to make the case that women are agents of development, that their work has an economic value and that due to their special role as family caretakers and community activists, their needs and potential must be properly taken into account in development strategies and programs.

The present challenge for development communicators is how to counter the negative reactions when "women's issues" are brought up at national or international development discussions. These negative reactions come not only from male decision-makers, but also from female decision-makers. Communication strategies

must be developed to address three stumbling blocks:

- Many development professional and policymakers hold deep-seated beliefs that women are not men's equals, and that economies and societies are correctly organized to reflect this inequality.
- Some believe that it is inappropriate to "export" a cultural ideology of women's advancement from one society to another, especially when the export is from a dominant donor society to a poorer recipient society. Many critics claim that to introduce the gender equality notions of the West into development programming in Africa, Asia and Latin America is a form of cultural neocolonialism.
- Many development professionals resist raising women's concerns in development discussions as a separate issue to be analyzed and assigned programs. They cannot see how they could begin to generalize about approaches to women in development that could be useful since women are represented in rich and poor, rural and urban, educated and uneducated, all ethnic, religious, cultural, tribal and other groupings.

Breaking Barriers

Presenting women's viewpoint in development through interpersonal and mass media will explode several myths of

patriarchal society, especially those assuming that "male-defined reality" is the only reality, that political and economic systems created by men are superior and that women must merely be integrated into these systems. Likewise, men should be brought into "female-defined reality," that is, the reality of child rearing and education of the new generation. Men have the advantage of better nutrition and education, and one question development communicators might pose is whether society ought to give greater responsibility for caring and educating children to the best qualified among us – the men.

A more gender-balanced communication requires that there be a process of redefinition and change in all areas of human activity. It's a tall order, and a challenge to development communication professionals in the coming decade.

Mallica Vajrabon, from Thailand, is a Senior Technical Officer in the Education, Communication and Youth Branch of the United Nations Population Fund in New York. She has written widely on women's education and communication, and has produced films and other audio-visual materials in support of development efforts.

Talking It Out, by Radio

Local Zimbabwean women and national development planners are carrying out a weekly dialogue on key development issues – via radio. At the same time, women who cannot afford radios are gaining greater access to national radio programming.

Under the experimental project initiated by the Federation of Africa Media Women, women who form radio listening groups at the local level receive a radio/cassette player. They meet regularly to discuss their own concerns and priorities without interference from outsiders, recording their conversations on audio-cassette tape. The cassettes are passed onto a broadcast program coordinator, who selects passages for presentation to government and non-government development officials. Conversations and responses are woven into a thirty-minute program, which is broadcast every Monday at 2:00 p.m. on Radio Four, Zimbabwe's educational channel. Since the project's initiation in 1988, three listening groups contribute regularly to the program.

Based on a report in INSTRAW News 12.

Agricultural Extension and African Women

by H. Leslie Steeves

For more than a decade, development scholars and practitioners have known that women grow 80 percent of food in Sub-Saharan Africa. However, a review of studies and project documentation for the region indicates that the primary channel for transmitting information on agriculture – agriculture extension systems – still largely ignores the needs and situations of African women farmers.

Women Overlooked

Extension programs are typically operated by a Ministry of Agriculture. Furthermore, most extension programs are based on Everett Rogers' diffusion model, which assumes that a combination of mass and interpersonal communication can move individuals from awareness (usually of a new technology) through interest, evaluation, trial and finally adoption. The diffusion model has been criticized for its "top-down" nature, that is, its underemphasis on the participation of recipients – particularly the poor – into development decisions and processes. Another criticism has been its relative neglect of communication strategies beyond interpersonal and group communication.

Although the application of the diffusion model has changed over time in efforts to reach more poor rural people, research shows that women are neglected. While much has been written about the "training and visit" (T&V) system (one adaptation of the diffusion approach that relies on "contact farmers") the literature contains little reference to women. Little reference to women usually means that women are not included. In a 1985 study, Jean Due and her colleagues found that extension agents in northeastern Tanzania visited significantly fewer female farmers than contact farmers (all male) or non-contact male farmers. Also, the T&V focus on specialized training for agricultural agents (usually male) will most likely be to the detriment of any agricultural training for home economics agents (often female), who may be best able to reach women farmers.

In Africa, as elsewhere, most change agents are men (about 95 percent, according to the Food and Agriculture Organization), and the few studies that have been reported indicate that these men are not

reaching poor women farmers. In a mid-1980s study of a project in the northwest province of Cameroon, Adam Surla Koons found that male extension workers paid far fewer unsolicited visits to women than to men. These male agents held such strong stereotypes about women's supposed lack of interest and inability to learn technical information that they could not be easily swayed by contradictory evidence. Women likewise believed that the extension workers only served men and they seldom requested visits. Similar findings have been reported elsewhere, including in a five-country study (Kenya, Malawi, Sierra Leone, Zambia and Zimbabwe) conducted by the FAO.

Kathleen Staudt studied a sample of female-managed and jointly-managed farms in Western Kenya in the mid-1970s. She found that "female-managed farms always received fewer services than jointly managed farms, and gaps increased as the services became more valuable." Such services included home visits by extension workers, group demonstrations, short courses, disseminating loan information and access to the services of cooperatives. Inequities resulted in a decline in female managers' relative yields and other performance indicators. Staudt's recommendations for extension systems included:

- recruiting more female agricultural extension agents, and/or provide agricultural training to home economics extension workers;
- placing more emphasis on group extension; and
- making greater use of women's groups and networks.

These recommendations constitute three themes recurring in the recent literature on women and agricultural communication.

More Female Extension Agents

The desirability of hiring female extension workers seems obvious in African and other societies with sharply divided gender roles. Put simply, women are likely to communicate well with other women. In some instances, husbands' jealousies of their wives' interactions with male extension agents, or other taboos against women's interaction with non-family males or against women's interaction with males on certain

topics (e.g., family planning) makes the need for female extension agents even more apparent.

However, there has been little research to find out what kinds of barriers women extension agents face or through what types of training male agents might be able to reach women. Certainly this research must examine the macro-level of decision-making where women are seldom present. But research is also needed to examine more localized constraints. For example, a recent CARE and Peace Corps project to locate and train female extension workers in northern Cameroon sought women aged 20-35 (to assure credibility in working with village women), unmarried and divorced women (to avoid conflicting family responsibilities), a junior high school education level, and fluency in French as well as in at least two other local languages. It was felt that these criteria were essential, but it was almost impossible to locate qualified and available women. In Malawi, where it is similarly difficult to find many female extension workers, Anita Springs and others found that male agents could be trained to reach women more effectively. At the same time, female home economics agents were given agricultural training to enable them to supplement other extension efforts and to better meet their clients' needs.

Recent studies indicate that female agents are more effective in some respects than male agents. The FAO five-country study provides some evidence that women farmers prefer women agents. Koons found that men in northwest Cameroon claimed the responsibility for passing information to their wives, but in fact it was seldom done. Even when information was relayed, reasons for new practices were seldom given, reducing women's motivation to change. Koons also found that women agents from the same local area as their clients paid more unsolicited visits to women farmers and that their participatory style in meetings was more effective in eliciting questions and facilitating learning. However, women farmers did not request any more visits from female than from male agents. Also the female agents were somewhat handicapped by their unwillingness to ride motorcycles, as well as by a perception of their lower status by both client farmers and other agents.

Using Group Extension Approaches

Another issue is the need to use group techniques to reach more people. Staudt found that an emphasis on individual visits tended to overlook most poor farmers, including most women. Yet there is also evidence in Africa that men dominate in mixed-gender extension workshops, and women are silent.

For example, Louise Fortmann and Dianne Rocheleau found that while Kenyan women are the primary users of agroforestry products (for fuelwood, fodder and fiber), in mixed-group extension meetings only men spoke up. However, in the women-only meeting, women not only exchanged information freely, but they also named many useful shrubs and species unfamiliar to forestry and agricultural agents. Furthermore, Koons found that female extension agents in northwest Cameroon did a better job of engaging women in groups than male agents. However, the female agents' responsibilities to male as well as female farmers reduced their available time to meet with groups of women.

In sum, there is evidence that group extension may be more effective with gender-segregated sessions, particularly when women agents lead the sessions, and also that women have important agricultural knowledge to share that should be gathered and incorporated into extension research, planning and outreach.

Working Through Women's Groups

Numerous scholars and practitioners have noted the value of using women's groups in development projects, and the strategy has received a great deal of attention in recent writings. The strategy is important because it moves beyond the more traditional extension practices of interpersonal and group communication.

In Africa, women's groups form initially for many reasons (related, for example, to religion or economic need). During the 1975-85 International Women's Decade, national women's groups and affiliated local groups were greatly strengthened and they now constitute a significant political force. They are also important facilitators of "women's projects" in development, including extension programs for women.

However, many observers caution that often only the wealthier and better-educated women have the time to participate in organizations and it is these women who are likely to assume leadership roles. Maria Nzomo of the University of Nairobi recently observed that despite the high growth rate

of women's groups in the 1970s and 1980s, more than 90 percent of the women in Kenya – primarily the very poor – do not belong to organizations. So while it is important to draw on the help of women's groups, care must be taken not to exclude those who are most vulnerable and least apt to be represented by these organizations.

Planning Communication Strategies

There is no question that the above three strategies will greatly increase the sensitivity of agricultural extension to women in Africa. But there are many more strategies that extension could draw upon.

In general, just as most development communication theory and practice has not considered women, most approaches to women and extension in Africa have not drawn on a broad range of communication theory and strategy. These studies seldom cite development communication theory beyond diffusion or suggest strategies beyond interpersonal and group communication – despite the fact that some studies comprehensively assess women's agricultural practices and their roles in the farm-home system, hence, their information needs.

The determination of communication strategies requires the same careful attention as the determination of proper technologies and messages for women and for men. The diffusion model alone is an inadequate guide for researching and planning extension communication. The substantial recent work on the meaning of "feedback" in development communication can provide guidance. Further, there is much empirical research and anecdotal evidence (some reported in *DCR*) that mass media, small controlled media, and indigenous forms of media can often be effective in development and may be worthwhile to consider along with the more usual practices. Finally, the failure of most development communication projects in Africa to consider women and of gender-sensitive extension projects to examine a variety of communication possibilities indicates a need for critical analyses of all development communication programs.

Leslie Steeves is Associate Professor of Journalism at the University of Oregon. This article is adapted from her paper, "Women, Rural Information Delivery, and Development in Sub-Saharan Africa," a forthcoming publication of the Working Papers on Women in International Development, Michigan State University.

Women Farmers Listen

In the bush-savanna area of Cote d'Ivoire, women subsistence farmers gather in the evenings several times a month to learn about farming methods and animal-raising. Their extension agent: audiocassettes speaking in their local Baoule language.

The project is one NGO's way of tackling the problem – if at a small scale – that most agricultural education in the country is directed at men literate in French, even though it is mainly illiterate women who raise food crops. In 1987, the Institute des Affaires Culturelles took the agricultural course normally presented in French-language booklets, translated it into Baoule dialect, and transferred it onto audiocassettes. Lessons covered choosing and preparing land, crop cultivation, preventing soil erosion, and even animal-raising, an activity usually under men's control.

Listening groups of women were formed in seven villages, with each group receiving a cassette player and tapes. None of the participants had any schooling and most eke out a living raising cassava and vegetables on two hectares of land, selling the surplus in the market.

So far, approximately 130 women have joined. "Local women were pleased to have any attention at all paid to their educational needs," notes project director Kenneth Gilbert. In several cases, the course has strengthened local women's groups and encouraged the formation of farming cooperatives. Still, the field coordinator remarked that the project required "a lot of patience." Sessions were often postponed due to women's heavy workload, and the adult women did not learn as quickly as literate youth and men.

An evaluation conducted last year revealed that not only did women score well on oral exams – and they enjoyed getting high marks – but they applied much of their new knowledge in the field. However, results suggested that they might have benefited from direct demonstration or visual materials to understand difficult concepts (e.g., composting). Women also expressed interest in information not covered, such as marketing their produce, and obtaining agricultural credit.

Based on correspondence and evaluation report from Kenneth Gilbert, Institute des Affaires Culturelles, 01BP 3970, Abidjan 01, Cote d'Ivoire.

Women and Water: The Bucket Stops Here

by May Yacoub

Consider for a moment how, on coming home, the average resident of the United States turns on a tap and easily obtains his or her daily requirements for bathing, cooking and cleaning. On the other hand, consider the two billion people in developing nations who, because of severely limited water supplies, must decide which use should be given priority on any particular day. The average woman in a developing country survives on less than ten liters of water a day – less than what we use each time we flush a toilet. Plus, where there is no running water, drinking water or toilets, women spend many hours hauling water and caring for family members with waterborne diseases.

Educating Women Is the Key

Early in the International Drinking Water Supply and Sanitation Decade, which began in 1980 and ends this year, the sponsoring development agencies agreed that the role of women in water supply and sanitation involves more than equitable treatment or women's rights. Their role in managing water was recognized as a key determinant of their families' health and well-being. But early research on reduction of diarrheal diseases showed that the installation of water systems *alone* had no meaningful impact on health. Instead, the greatest benefits resulted when water and sanitation systems and hygiene education were an integral package. It became clear that decisions about how much water to use and for what purpose were critical in controlling almost 80 percent of the diseases commonly causing mortality and morbidity among infants, and that these decisions could be influenced by learned behavior. These decisions largely fall to women because of their responsibilities for household management and child care.

It also became clear that water and sanitation systems bring direct benefits for women. Time saved by no longer having to haul water and care for chronically ill family members translate immediately to additional time to rest, cook, care for children and, perhaps, engage in income-generating activities. If young women do not have to

spend hours hauling water, parents are more likely to allow their daughters to attend school. Women recognize these important benefits and, for that reason, they are willing to invest the time required to make water and sanitation projects sustainable. As one village woman in Togo remarked during an evaluation of water projects funded by the US Agency for International Development, "Now that I don't have to carry water three times a day, I have time to work with other women in improving the lives of our children."

As a result of their involvement in community water and sanitation projects, women are also more likely to participate in other development efforts. For example, the Aga Khan Foundation found that in its community health projects in Pakistan, women tended to come to clinics for mother and child health services and family planning once improved sanitation practices had been adopted. And a study conducted in Togo and Indonesia by the Water and Sanitation for Health project (WASH) found that the children of women who had been involved in participatory water projects tended to have a higher rate of completed immunization series and that the women themselves had greater knowledge of oral rehydration therapy.

Ensuring Sustainability

At one time, the prevailing wisdom in the water supply and sanitation development community was that once improved technology was supplied, people would realize the importance of such innovations and use them. However, it quickly became apparent that the benefits of improved facilities did not occur automatically. Project experience clearly indicates that health benefits will not result unless sustainability is ensured. Sustainability refers to the long-term ability of communities to use



A woman in Togo enjoys better health and more time with a water system (inset), but most African women haul water miles each day.



Hygiene education must have its roots in existing community ideology, values, religion and myth.

and manage their facilities. Success, therefore, must be measured not in terms of how many wells are constructed or latrines built, but in terms of whether the necessary community institutions are developed and how well community members are trained to take responsibility for and manage improved systems.

Water supply improvement typically involves a relationship with communities that can last from one to five years, depending on the system being constructed. During this process, community members, guided by extension agents, learn and apply skills related to problem-solving, planning and evaluation. Seeking

(continued on p. 17)

75

How to Improve Child Well-Being? First, Increase Mothers' Self-confidence

by Marcia Griffiths

For years, research has been done with women in an attempt to bring their perspective to the design of child survival and nutrition programs. We have documented their child-rearing practices, and brought to light some of the constraints they face. Such factors as time, formal education, position in the household, community and society, control over family resources, and health status have been used to explain mothers' behavior.

However, there is still a gap in our understanding because we do not know the context in which mothers operate and make decisions. By this, I refer to what a woman wants from life, her aspirations for herself and her children, what her dreams and fears are, what makes her feel inadequate or happy, how much she feels she is in control or can influence things.

Probing Mothers' Feelings

Recently, the importance of female self-confidence has emerged as a critical issue for sustaining the health promotion behaviors advocated in many women's health and child survival programs. Several investigations clearly illustrate its importance in decision-making related to child feeding. For example, through research in the Gujarat and Maharashtra districts of India, we found that mothers shared the following attitudes and perceptions:

- They believed that their role is to serve their husbands, mothers-in-law and children. They made no decisions since their mothers-in-law are powerful and their husbands control all the money.
- They believed that they are not worthy of going outside the home for any activity except agricultural labor.
- They said that they will do what they can for their children, but universally they felt helpless to ensure good care in the presence of constraints such as lack of money, lack of facilities and circumstances dictated by God.
- They believed that they cannot give food until the child asks for it, and only when he/she asks for it, and that they must stop giving foods when the child rejects them.

- They feared that doing something new or different will cause problems. Therefore, they wouldn't try.
- They refused to do anything special for themselves for fear of calling attention to themselves, and they seldom thought it was important to do anything special for their children, at least for the girls.

We concluded that no matter how well we created our messages about health and nutrition, we would achieve little unless the education improved mothers' sense of self-confidence in their ability to care for their children and helped them see that small decisions and actions they take on a daily basis could improve their lives and those of their children.

Since this initial research, we have looked at the issue of self-confidence in Indonesia, Cameroon and Swaziland, where we worked with colleagues to improve infant feeding practices under the USAID-assisted Weaning Project. We found that maternal self-confidence and self-concept can differ markedly among cultures. In Swaziland mothers mostly seemed confident in their abilities and were willing to try new approaches, as long as they were affordable. Specifically,

- Mothers felt relatively confident about their ability to raise healthy children.

They said a good mother is one who is clever, who knows what her child needs, and who tries to satisfy those needs.

- While they believed that their role is to serve their family, they strived for economic independence and usually believed that it could be achieved.
- They had difficulty coping in their daily lives, but they saw the future as holding better opportunities for their children. They saw themselves as different from their mothers. Their desire for information was high.
- They appeared to be in control of child feeding, persisting more with their children and, on occasion, practicing force feeding when the child refused to take food.

But in Indonesia and Cameroon, a lack of confidence was apparent again. In both these countries, the research had a new approach: focus group discussions were held with mothers with well-nourished children and mothers with undernourished children, allowing the perceptions of each group to be compared. Mothers selected for the two groups were from roughly the same communities, the same economic background, and the same literacy level. What distinguished them initially was the nutritional status of their children.

In Cameroon, mothers in general seemed to lack confidence, could not articulate much about the future, and seemed concerned with daily problems and chores. But all of these tendencies were more pronounced among mothers of undernourished children, as were the following tendencies:

Bringing Women Together

L. Gunanadbi, a health educator with the Rural Leprosy Trust in Orissa, India, wrote the DCR with some ideas about women's participation in health education programs. We share them with you here.

How many health educators will acknowledge that it is hard to get a group of women together for classes? It is alien to the illiterate to sit and learn.

If we surveyed the actual people who come to health education classes in the day or even in the evening, would we find the women... who one might say "need the education most," i.e., do we find the mother who has had five children but lost three all under the age of two years? ... [Or] is it the women who brings her children to an immunization program that

attends such classes? In our experience, it is often the woman who does not bring her children to immunization that also doesn't come to health education discussions.

Now take a video player to the same village, regularly every two weeks or once a month, and see who comes... If video is adopted, then the films shown need not be just "health education." They can be shown with commercial films too. Those mothers and children who come to see the educational film pay no fee, those that only come for the commercial film pay... We should be starting to realize that video is the most easily understood health education medium [for use] in the poor areas where there is electricity.

- They were more likely to decide to begin giving food to their children when the child asks for it, or when he/she is ready to accept it.
- They were more likely to classify food by what their child likes, rather than by other criteria.
- They often believed that illness is prevented only by God and that they have no capability to "cure" their children's illness.

In Indonesia, mothers generally saw their role as one of obedience. They felt they must be happy with what they have. But the following differences between the two groups of mothers were apparent:

- Mothers with well-nourished children seemed more confident, articulate, and future-oriented than mothers with undernourished children.
- Although all mothers viewed children as their own persons, able to convey what they want, mothers of undernourished children seem more influenced by this perception. They were more likely to stop breastfeeding when the child is still young, attributing it to the child's lack of interest. They were also more fearful of the negative consequences of trying something new or insisting on giving the child food.

While there are many explanations for women's feelings, it seems clear that the more confident mothers feel in their abilities and themselves, the more likely it is that their children will be better nourished. Maternal confidence seems to influence such practices as the initiation and duration of breastfeeding; the timing of the introduction of foods; the willingness to try new foods or practices; the quickness with which the mother will take action when there is a problem; and the willingness to persist in feeding when the child doesn't want to eat.

Next Steps

The research challenge is to develop techniques that allow us to explore these issues, which are often difficult to elicit, even in the United States. The techniques must be ones that minimize researcher-determined responses. They must allow women who have never articulated or possibly even thought about these issues in the abstract to say what they feel or think. Currently, we are using a variety of techniques to explore these topics in both focus group discussions and in-depth interviews. For ex-

(continued on p. 18)

Social Marketing: More Marketing than Social?

Social marketing – a strategy that applies techniques of commercial marketing for social goals – has been celebrated as being responsive to the desires and needs of people. The strategy is gaining wide popularity among development communication specialists, especially for health and child survival promotion. But the experience of the Family Planning Social Marketing Project in Bangladesh raises questions about how responsive the methods are to those who fall largely outside the reach of market mechanisms – in this case, poor rural women.

The project, which began in 1973 and is still ongoing, aimed to massively increase the use of contraceptives in Bangladesh, especially among low-income families in rural areas. Currently, the project sells approximately 115 million condoms, 6 million oral contraceptive cycles, and 3 million foaming tablets each year at below-market prices through mass retail outlets. To promote sales of the product, Bangladeshi market research firms and advertising agencies were hired.

Through market surveys, researchers concluded that Bangladeshi men do the shopping and are the major decision-makers on family planning, and therefore they should be the primary target audience for promotional messages. The project gave major emphasis to the formal mass media – television, radio, and the press – because they were considered most cost-efficient and because advertising firms' expertise lay in mass media. Yet in Bangladesh, these channels are primarily accessible to men, especially urban men, and least accessible to rural women. Initially, the project made only minimal use of informal media and interpersonal communication, which had proven more effective in reaching women.

As a result, information on who should use the contraceptives, how they should be used, and potential side-effects was not adequately available to the end users of the pills and foaming tablets – the women. This became a problem when pill-users began to suffer unpleasant side-effects. The only information about side-effects was included in printed package inserts (even though most rural women were illiterate) and, in fact, the printed inserts played down side-effects by reassuring women that they would disappear after a few monthly cycles. As early as 1977,

project staff became aware that women were complaining of side-effects from the pills. But it was not until sales began to fall off in 1979 that they took women's concerns seriously enough to redirect the marketing strategy.

Subsequently, a household distribution scheme was adopted in which saleswomen made one-time visits to women in their homes. Although they were effective in boosting sales to rural women, this approach was quite costly and therefore was discontinued. Yet from this scheme, and a similar effort in 1987, it became apparent that repeat visits with women were required to address their concerns about side-effects. But project staff felt that intensive repeat direct communication "wasn't compatible" with the mass marketing strategy.

Also in response to the problem of side-effects, project planners also decided to introduce a new low-estrogen pill. Following standard marketing convention, project planners decided to "differentiate" the new pill by making it more expensive and marketing it to an urban, literate audience. It was felt that more educated women would better understand the explanations of possible breakthrough bleeding with use of the low-dose pill. Yet since there was evidence suggesting that the side-effects from the high-dose pill were most severe in malnourished women, this strategy deprived precisely those women who needed the low-dose pill most.

In sum, nearly every decision made during the project – the reliance on market research and advertising agencies, the use of mass media, distribution through mass retail outlets, the two-tiered product differentiation and even the manner of direct communication with women – was driven mainly by marketing and sales signals as defined by Western commercial marketing practice, rather than by users' health needs and concerns. On the whole, these decisions privileged men and disadvantaged women, especially poor rural women. This experience illustrates some problems that can occur as a result of the tensions between the "marketing" and the "social" dimensions of a social marketing campaign.

– *Rasbmi Lutbra*

Rasbmi Lutbra, from India, is a research fellow at the University of Wisconsin. This article is based on her doctoral dissertation research.

Making Training Effective and Empowering for Women

by Suzanne Kindervatter

Four years ago, Antonia Ayala made a profit of about \$2.50 a day raising chickens and pigs and selling snack foods in a northern Honduran village. Today, she earns \$20 a day – eight times her original earnings – making and selling cheese and butter. With her increased income, she paid off what she owed on her house, bought a motorcycle to increase her delivery to the surrounding community and was better able to meet her four children's daily needs. When asked what made the difference in her life, Antonia and over 500 sister grassroots entrepreneurs credited a program which provided them with business training, loans and access to new technologies.

The women naturally valued the loans and new technologies, but also stressed how vital the training was to their improved standard of living. As one woman said, "Before the training, I did a lot of work and I had nothing to show for it. Now, for the same amount of work, I make much more." The training enabled these Honduran women to assess their markets better, to determine how to make their products more attractive than a competitor's, to track business costs and income better and to develop creative marketing strategies. It enabled them to maximize the potential of the new sources of capital and technologies available to them – and to turn a higher profit.

Women and Training Needs

The importance of training to women in Honduras, as well as in other Third World countries, should not be surprising in light of women's low educational status and high rates of illiteracy. Yet, women's responsibilities for family and community welfare are expanding, as female-headed households continue to increase and women's vital roles in development – from providing basic health care to preserving the environment – are better understood.

Women, who have been denied schooling, cannot expand their roles without access to new knowledge and skills. But what training strategies work? What factors enable training to make a significant and positive difference in women's lives?

This article addresses these questions, drawing lessons from programs which have involved thousands of women in Asia, Africa and Latin America over the past fifteen years. The programs were sponsored by Overseas Education Fund (OEF) International, a Washington, DC-based non-governmental organization, and indigenous partner organizations throughout the Third World. When the grassroots training efforts began, relatively little was known about how to design and implement successful training programs involving women; the succeeding years have been a true exercise in "learning by doing." The programs encompassed various sectors – from health, to community development and organization, to agroforestry, to income generation – but the insights into effective training have been markedly constant across sectors.

Outlined below are five keys for creating training programs that motivate women to attend and result in concrete changes in their standards of living and status.

1 Training must be appropriate in content and to the context of women's lives.

Most basic to effective training is the relevance of the subject matter to the trainees. Programs need to develop out of a thorough understanding of women's needs and problems and of their views about them. What women need to learn should be defined by them, from their own perspective, rather than by technical experts. Taking income generation programs as an example, village-level women and program planners generally agree that the choice of which economic activity to pursue greatly influences prospects for profitability. However, their view of the factors involved in selecting a business idea can be dramatically different. Some economists tend to see the challenge in terms of rigorous market analysis, assuming that if needed products and services are identified, women will participate in technical training programs to learn requisite skills. From the women's viewpoint, however, there are other variables besides marketability which affect their motivation, such as: how the economic activity fits with roles and responsibilities in the home;

whether the activity is culturally acceptable; how much time will be needed to learn the new skills; and how much economic risk is involved.

In order to take all these factors into account, OEF International evolved a woman-centered approach to training for starting or reviewing an economic activity. In the training, women conduct their own feasibility studies on a business idea by following a series of steps that include finding out if people will buy the product or service, determining how the business will operate, and calculating projected business expenses, income and profitability, as well as possible social costs and gains. The input of technical specialists is factored into the process, but the women themselves – rather than experts – are the decision-makers on what economic activity to do and how to do it. Using this approach, women feel an ownership of the business ideas and are usually highly motivated to succeed. Also, women learn essential entrepreneurial skills by actually carrying out their own business analysis.

Understanding women's points of view can be accomplished by providing women with the opportunity to discuss their situations and by attentive listening. In OEF's experience, informal group discussions or even half-day workshops have proven particularly fruitful for gaining insights into women's perspectives. Training sessions can then be designed to present a priority list of issues to the women based on their discussion, involve them in analysis, awaken in them a need to know new information or develop new skills, and provide them with opportunities to do so.

Even the best developed content, however, is affected by a range of contextual considerations. For example, time and location for training activities are particular concerns. Women's time use, both over the course of an average day and over the course of a year, must be taken into account so that women are able to attend a program and apply new knowledge or skills after the program. Likewise, training should be conducted in a convenient and friendly environment, where women feel comfortable expressing their ideas.

Another critical factor is women's interface with men in the program, a factor which varies greatly depending on culture. The support of husbands and community leaders may be needed for women to even participate in a training program, as in Morocco where women needed written permission from their husbands or in

Thailand where village headmen had to approve activities. For some, this may seem antithetical to programs which aim to enhance women's status, but efforts to change status must start with women's present realities. The issue of mixed or women-only training groups is also important to consider in cultures where mixed groups are possible. Generally, the issue to address is "when," rather than "either/or." In situations where women are comfortable discussing their ideas with men, mixed groups can be a means to involve women in mainstream development activities; where this is not the case, or where women want to meet to develop solidarity, then women-only groups are appropriate or may precede a mixed group.

2 Development of materials should be rooted in the field.

One of the materials OEF developed for enabling women to expand marketing strategies for their products or services is a board game. As players move around the board, they answer simple and true-to-life "true or false" questions about the four facets of marketing: the product, distribution, pricing and promotion. Each of these four facets is represented by a symbol. When the game was originally conceived in Central America, "promotion" was depicted as a chicken with a fancy hat. But, when the game was used in Senegal and Somalia, the fashionable chicken made no sense to village women and had to be replaced with more concrete representations of "promotion," such as signs or handbills.

A materials development process that is firmly rooted in the field is a means to ensure that symbols, such as those in the marketing game, and other learning aids and methods are suitable and understandable for a particular group of women.



In addition, field-rooted materials development increases the likelihood that materials will be easily usable by trainers and further reinforces content appropriateness.

In OEF's experience, however, field-rooted materials development means more than just field testing a particular learning game, poster, story, or photograph. Effective materials development involves four stages. First, a variety of training activities should be tried, in informal meetings or half-day workshops. Since most women at the village level are not literate, this "trial and error" stage is a means to identify how to promote learning with little or no written word. When planning these short-term, rather than on-going activities, it is critical to bear in mind women's severe time constraints and to structure the activities so that women benefit from them.

The second phase of materials development involves creating a training curriculum and compiling a guide that can be used by a trainer. Third, trainers need to actually use the materials as a package, to determine if instructions to trainers are clear and adequate and if the activities are organized in a way that makes sense.

Fourth, the training package needs to be revised based on the experience of the field applications.

When this process was used in a program of the Women's Bureau in Sri Lanka, trainers – many of whom were men and had not worked with village women before – readily used the materials, and women were highly motivated to attend the training sessions. Thus, "from the field to the field" materials development also serves to expand the cadre of trainers willing and able to work with grassroots women.



3 Participatory methods are most effective.

Program planners sometimes underestimate or ignore the value women place on *bon* learning takes place.

In an isolated land settlement in rural Thailand, OEF International worked with staff of a local training center to create a pilot community development/income generation program for village women and to train women leaders as trainers. The center cook, who was a village woman herself, told staff what she had heard from women in the program: "You know what these women are talking about? This is the first time people are listening to and respecting their ideas. That's very special to them."

In many cultures, traditional roles and responsibilities isolate women, giving them an inaccurately limited view of their potential and self-worth. Participatory methods, which catalyze dialogue within groups of women and involve them in "learning by doing," provide a means for women to gain a different perspective of themselves, their relationships with one another, and their options for taking action to improve their circumstances. In OEF's experience, this sense of personal efficacy and group support is the foundation on which new knowledge and skills can be built. When women are provided the opportunity to appreciate their strengths and to realize they share common problems with other women, they are more likely to participate in development activities.

4 Select trainers for their sensitivity to women's needs and train them on the job.

Do trainers need to be women for programs to be effective? Generally, yes, due to cultural norms in many countries and the need participants feel for examining their situation from a gender perspective. However, whether the trainer is a man

or woman, the ultimate selection criteria should be an individual's respect for women's potential and recognition of the structural constraints they face in their societies. In some cases, male trainers can be advantageous, since they can become advocates for women's participation and open doors to mainstream development programs. In West Africa and Sri Lanka, men have proven to be effective trainers

with grassroots women after conscious preparation for their new roles. Specifically, the male trainers spent time with village women, with the expressed purpose of gaining an understanding of their realities and perspective, and also had structured discussions with female colleagues about women's roles and obstacles to participation in development.

(continued on p. 18)

Women's Training Needs: Notes from a Trip to Africa

In June of this year, I traveled to Senegal, Zimbabwe, Kenya, Tanzania and Egypt and interviewed more than 60 staff members of African, European, and US NGOs, the Peace Corps, and UN agencies. Most of them were engaged in supporting women's economic activities, particularly poor women in rural areas who have little or no formal education. The main purpose of my trip was to assess their needs for training materials and to identify problems in getting access to and using existing training materials. While some needs and problems were specific to individual groups, many were common to all groups. Below is a brief summary of my findings and recommendations that grew out of the dialogues.

First, a general observation is in order. In all countries I visited, information, like other valuable resources, is usually accessible to the person with the most authority and control (almost invariably a man), and that person often uses it to bolster his own political and social status at home, at work or in a community. Adding to the problem is women's own lack of awareness about information or their lack of confidence in seeking it out, particularly when it means approaching someone from outside their own village. Thus the delivery of training and information *directly* to rural women is a function that needs more technical, material, and financial support.

I found a series of further obstacles:

- ◆ Problems in the delivery of training arose from trainers' lack of experience in using participatory, nonformal education methods, which have proven most effective with women. Throughout Africa, the legacy of a colonial education system that sets up a strict hierarchy between teachers and students poses an enormous obstacle to adopting learner-centered approaches. The transition requires trainers' empathy with the learner, time, commitment to the process from all project staff and funders,

and appropriate incentives for evaluation of qualitative and quantitative results.

- ◆ Trainers' lack of familiarity with core training materials or how to adapt them to the local context suggested the need for practice workshops. When workshops are not feasible, companion facilitators' guides and videotape cassettes (when resources permit) could demonstrate a book's purpose, content, and possible application.

- ◆ When training is conducted in urban capitals away from project sites, it is less likely to benefit rural women. One group discovered in evaluating their training workshop that those who attended often were not field staff but heads of organizations. In many cases, village women are unlikely to leave their village because of custom or lack of an identity card. Moving training programs to rural sites where new skills can be directly practiced would enhance the delivery of programs to women.

- ◆ The effectiveness of government extension workers in reaching women is hampered by politics and traditional attitudes, as well as lack of resources. An extension worker may be responsible for liaison with hundreds of women, cover every aspect of community development from health to business, and have irregular access to a vehicle. Women's dependence on them for information and assistance could be lessened through "barefoot" extension schemes or peer training by village members.

- ◆ Too often, field workers with technical knowledge are not prepared to convey what they know and the skills they have in ways that are relevant and applicable to users. What's more, many technical concepts and jargon do not translate easily into local languages. In reality, *everyone* on a development project is a communicator. Training in communication skills and participatory methods should be provided to all extension agents and technical experts.

- ◆ A related problem is the lack of materials that "scale down" technical information in a form and level appropriate to women at the grassroots, particularly information relevant to their roles as income-earners and food producers. Furthermore, little printed material exists in local languages, a particular problem for low-literate women since literacy training is usually provided in local languages. However, a handful of groups are successfully using desk-top publishing to reproduce and adapt literacy and post-literacy materials in different language versions with locally specific drawings. The best results occur when editors and artists accompany trainers to develop and test materials based on real-life experiences, local history and custom.

- ◆ Dissemination of training and educational materials is a serious problem. I found few resource centers for women, or other centers where development practitioners could go to obtain books, posters, games, slides, audio and video cassettes, computer programs, periodicals and other materials. Furthermore, training resources from abroad usually require spending scarce foreign currency. In commercial bookstores, exchange rates and taxes make the prices of imported books quite high. Libraries are resource poor and usually serve academia and a literate general public. These problems pointed to the need for greater support for local distribution networks: rural library branches that would serve adult education needs, subsidies to broaden NGO access to material from abroad and the promotion of exchange forums among local and regional development associations and NGOs. As one field worker said, "In Africa, there's a hunger for public education material. Anything relevant gets eaten up."

—Nena Terrell

Nena Terrell is Publications Manager for OEF International, in Washington, DC.



Community Publishing as a Strategy for Women's Development: A Zimbabwean Experience

Traditional communication methods meet high-tech communication: this article on grassroots publishing was handwritten by the author (and decorated with the illustration above) but arrived to the DCR from Harare via facsimile transmission.

by Kathy Bond Stewart

The Community Publishing Program was established five years ago by the Zimbabwe Ministry of Community and Cooperative Development. The program aims to promote development through books, other media and workshops, which build up the practical and analytical skills, confidence and creativity of village leaders and development workers nationwide.

Women are playing a leading role in the program at all levels. The ministry is led by two women, four of the five members of the National Book Team that coordinate the program are women, and 95 percent of the 6,000 village community workers who introduce the books throughout rural Zimbabwe are women.

A Grassroots Process

The books are produced collectively and democratically using the following process. The book team travels around Zimbabwe, *listening* to what local people want in a book. They meet a wide variety of people and get ideas and information from them on the book's themes. The visits are followed up through correspondence. The

book team then puts together a first draft, based on the research trips and supporting documentation. The draft is widely tested, and workshops are held to reach a national consensus on the final form of the book. Finally, the books are printed, translated into all five Zimbabwean languages, and distributed. Through follow-up workshops, participants learn how to use the books effectively and create their own media on local themes not covered in the books.

Guiding Principles

Several principles guide the community publishing program:

Process. The process is as important as the product. We do not begin with a pre-established curriculum and text books. Rather, we regard the involvement of participants in the design of their own curriculum and training materials as one of the most important aspects of their training. Method should reinforce content. We not only write about creative democratic ways of organizing development, but practice these in the way in which the books are produced.

Accessibility. By basing the program on the village community workers, we ensure that the books will be available in every village. The books are also accessible in terms of language level, and available in all the national languages, as mentioned above.

Decentralization and coordination. At the national level, books are produced on

national themes, with contributions from all Zimbabwe's 55 districts. At the local level, the production of local media is encouraged.

The End Products

So far we have produced two books: *Let's Build Zimbabwe Together: A Community Development Manual*, and *Building Wealth in Our Villages: An Introduction to Rural Enterprises*.

We are currently compiling a book on women in development (the title is still to be chosen), which has generated two local books. The women's book is being produced democratically by well over 1,000 participants, from all Zimbabwe's districts and the agencies, governmental and nongovernmental, that relate to women. Village women have contributed many stories, poems, drawings and research, as well as participated in the planning and testing of the book. The book is structured in a way that is both problem-posing and confidence building.

The book is composed of six volumes, between 80 and 120 pages per volume. It covers an overview of women in development; women in history; women's economic, social and cultural, legal and political situation; areas of special concern (elderly women, disabled women, young women and prostitution); organizing for the future; and a directory of contributors. It will be accompanied by posters and

songs and, in 1992, will be launched through 1,500 nationwide workshops and is expected to generate the widest discussion of women's issues ever to take place in Zimbabwe.

Local Initiatives

Village-based participants sent us so much material for the women's book that it was clear in some areas that they were ready to start producing a book of their own. In June of this year, participants in the province of Mashanaland Central and the remote mountainous district of Chipinge began working on their own local books. They have elected their local book teams and the national book team will guide them through all stages of book production in a series of five workshops over two years.

The experience will be written up in another book on "How to Produce a Local Book," to encourage the publication of more local books throughout Zimbabwe. The first two local book teams are mobilizing participants very effectively. For example, in Chipinge, participants from all 180 villages will contribute to the book, ranging from village women and youth to extension workers, chiefs, traditional leaders and district councillors.

Future Plans

We are planning to produce five more national books, on topics ranging from children and youth in development to health, population, and civics. We have surveyed district reading needs as a first step in beginning to plan rural libraries. Beginning later this year, we will sell a share of our books commercially, to ensure that the program will be financially viable in the long-term. Eventually, we hope to encourage the formation of a local book team

New Clearinghouse Resources

The following resources are now available from the Clearinghouse on Development Communication: a bibliography on distance education (cost: \$5, free to readers in developing countries); and French and Spanish translations of *Development Communication Report* editions on distance education, community radio, environmental communication and health communication (cost: \$2.50 each, free to readers in developing countries). Contact the Clearinghouse through the address or phone listed on p. 2.

in each district, with a wide range of media, adult education and development skills.

What Have We Learned?

We can draw a number of lessons from our first five years.

First, our program has generated tremendous response because we chose the right starting point and participatory methods. We based the program on 6,000 newly elected village development communities and the community workers who serve them. We realized that all development begins with people's intellectual development. In the early years, we concentrated all our energies and limited resources on building a nationwide network of talented and committed people, although we had no office and no equipment. In other words, it is important to begin with people, rather than with offices and things.

Second, our work is based on consultation and the giving and receiving of criticism. This has promoted the quality and popularity of the books.

Third, we teach participants to deal with conflicts and opposition constructively. By recognizing the humanity in our opponents, we have converted many of them into supporters. Unity can be built by developing a common vision and shared values, by accepting diversity as stimulating and by developing individual talents within a collective framework.

Finally, in order to change women's situation, it is very important to work with communities and all agencies that relate to women, rather than with women alone and to work on as large a scale as possible. In other words, women's concerns should be brought into the center of all national development, rather than marginalized. Whatever women's problem is being dealt with, it is essential for people to link economic, social, cultural, legal, and political strategies. In the women's book we provide a framework for doing this. Also, we mobilized hundreds of men to work on the women's book and this is promoting a widespread male interest in the book. Our

The Response from Participants

Last year, we invited 100 village-based participants to review the Community Publishing Program and the results were very encouraging. Following are some of their comments:

- ❖ "We are very proud of our books. They have given us courage and built unity."
- ❖ "We see the whole nation contributing to the program. The books belong to the whole people."
- ❖ "We have never read anything with such depth and truth."
- ❖ "The way these books have helped us as communities is very important. They have changed our attitudes and our working style. They were an eye-opener to community leaders and to us as development workers."
- ❖ "The Community Publishing Program will become the fastest and most effective way of spreading ideas and messages nationally!"
- ❖ "In this program, we practice democracy at its maximum. Our involvement makes us feel happy, stimulated, honored and fulfilled."

On the women in development book,

- ❖ "Tradition did not permit women to show their intellectual strength. I'm overjoyed to be given this opportunity of expressing our views as women in Zimbabwe. We feel very much honored by the notion. I believe this book will liberate many women in our country."

—K.B.S.

male participants are very useful for changing the attitudes of more chauvinistic men.

The only problem we have encountered so far is that our collective, democratic methods are very labor-intensive. We are trying to address this by training participants in coordination skills, and by handing over responsibilities to participants as soon as they are ready to cope with them.

We are operating within an unusually long-term time frame. While we have been encouraged by the positive response to our program so far, we feel that we have hardly even started. In fact, we have planned in detail activities up to the turn of the century, and we are thinking in outline about the following two decades. We feel a long-term perspective is necessary in order to accomplish deep and widespread social transformation.

Kathy Bond Stewart coordinates the Community Publishing Program of the Zimbabwe Ministry of Community and Cooperative Development.

Funding Communication for Women in Development

I. What Women Want

by Anne Firth Murray and Gretchen Sutphen

The Global Fund for Women, a grantmaking agency that provides funds to initiate, strengthen, and link organizations promoting women's interests, has chosen to emphasize communication as a program area. Since its founding three years ago, we have awarded 115 grants ranging from \$500 to \$10,000 to grassroots non-governmental organizations mostly in developing countries; approximately 30 percent are in the area of communication.

The emphasis on communication evolved because women's organizations worldwide have made it clear that communication is vital to women's empowerment. Women want to communicate – locally, regionally, globally. They want to share their experiences, learn from one another, and devise collaborative strategies to deal with the difficult issues they face. Moreover, women's organizations are at a critical stage of transition. Having articulated specific needs, principles, and goals in their own organizations, women are now ready to make an impact on the larger society. They see communication as critical to that objective.

The Global Fund maintains a data base of some 800 funding requests that it has received from women's organizations throughout the world. We have examined that data base to suggest some generalizations about what kinds of communication support women are asking for. The following is a summary of our results.

Groups writing to The Global Fund stress not only the *importance* of communication but the *variety of needs* in the area of communication. Proposals include requests for general support for women's media organizations, sponsorship for attendance at communication-related conferences, seed grants to establish information centers, donations to purchase communication equipment and technology (especially computer equipment and fax machines) and support toward publishing and film ventures. We have found that these requests can be grouped in three categories:

- efforts to use communication media;
- efforts to obtain communication technology; and
- efforts to increase the emerging power of an organization through the creation or expansion of networks, coalitions, associations, and conferences on local, national, and international levels.

Although no one project or style characterizes a given nation or continent, we have found some region-specific patterns in the kinds of needs expressed by women's groups.

Africa: Documentation Centers

Women in Africa express a need to come together to exchange equipment, skills, knowledge and experience necessary to the development of effective programs. The majority of requests are to create or improve women's research and documentation centers. A typical example is the Women's Research and Documentation Project of Dar es Salaam, Tanzania. The project, which promotes the study and documentation of women's issues, submitted two requests to attend international conferences for training in using computers for on-line networks, establishing data bases and general administration, and strengthening information exchange with local and international organizations. By these means, the groups sought to be able to collect, organize and disseminate practical resources to grassroots organizations in order to be a more effective source of consciousness-raising and skills training for local women. Similar requests for documentation/research projects come to us from women's organizations throughout Africa.

In all, we have received some 20 requests for communication support from groups in Benin, Burkina Faso, Nigeria, Senegal, South Africa, Sudan, Tunisia, Uganda, Zambia and Zimbabwe. Each articulates the need for support of women's self-empowerment through communication. SPEAK, a South African group addressing women's issues through the publication of materials, noted: "There was no organization or group that was produc-

ing media around women's issues, and we felt that it was important. . . ."

Latin America: Policy Changes

In Latin America, we also see women coming together to affect policies about women in relation to legal or other female human rights issues (e.g., domestic violence). Often, these groups request support for radio programs, printed publications and, in one case, a traveling theater troupe. For example, Coletivo de Mulheres Negras da Baixada Santista of Santos, Brazil, uses the media to "increase . . . the role of black women in their community as agents of change." Another grantee states: "We want to reinforce the necessity of a space on the radio where the women's movement can communicate . . . ideas and denounce abuses. . . . [We] need to have our voices listened [to] and ourselves respected." These feelings are echoed in most of the 27 communication proposals we have received from the region.

Asia: Women and Mass Media

Many groups in Asia writing to The Global Fund also emphasize the need for non-sexist mass media. The National Council of Women of Thailand and the Center for Instructional Technology in India, for example, requested support toward workshops to generate critical awareness about the destructive images of women in Asian mass media.

Other women's organizations in Asia battle to eradicate sexism in the mass media by promoting women's participation in the field as writers, broadcasters, producers, etc. Depthnews Women's Service in Manila, Philippines, for example, which promotes non-sexist news stories by and about women in Asia, requested support for linking with grassroots groups to obtain a diversity of women's experience and linkages for broader dissemination of their news stories. They stressed the importance of women reporting on issues so that the media are sensitive to women's concerns and explore them with "greater accuracy and fairness."

Other Regions

The importance of communication to women's empowerment appears in different forms in other regions of the world as well. Women want to increase their participation in media, and international networks are central to their efforts. The Women's News Service of the World Press Center in England and the Women's Inter-

national News Gathering Service in the United States are examples of groups that want contact with overseas media women. So too does the International Women's Media Foundation in Washington, DC, which plans an international conference on women and the media in the 1990s.

To generalize about women's needs in one region or another risks distracting us from what women's struggles have in common, regardless of locale. Each request we receive expresses a need for change. In every region there is a lack of funds for women's efforts in communication. And across all regions, we are seeing a rising interest in the application of computers, faxes, video and other new information technologies for women's education and organizing efforts.

Moreover, generalizing by region discounts the diversity of women's experiences within that region. Given this diversity, The Global Fund tries to be flexible and respectful in responding to each group's specific needs.

Women's groups are growing in number and developing in effectiveness. Our three years of experience have made one thing clear: women want to communicate, to teach, to learn, to be empowered – for their own sake and for the sake of humanity.

Anne Firth Murray is President and Gretchen Stupben is Grants Officer of The Global Fund for Women.

II. What Donors Support

"What kind of communication activities for women do you support?" The *Development Communication Report* put this question to officials from a small sample of donor agencies, both private and governmental, with grants ranging from several thousand to millions of dollars. Although all respondents provided descriptive accounts, most were unable to provide dollar figures, since women's components were frequently integrated into larger communication programs. A summary of their responses follows.

For years, women in their roles as mothers and family caretakers have been the primary target of the US **Agency for International Development** (USAID) health and nutrition communication programs. Communication to promote breastfeeding, oral rehydration therapy and child survival practices has been almost exclusively focused on women. Women prostitutes and pregnant women are a primary target

audience for safe-sex messages of the agency's AIDS communication programs in Latin America and Asia and new projects are underway to target a more general female audience for AIDS prevention messages. In other cases, such as in Lesotho, women have been the prime beneficiaries of projects integrating basic education into microenterprise training activities. Currently, a major USAID agriculture communication project is being redirected toward women farmers.

Similarly, the **Canadian International Development Agency** (CIDA) has long made women a primary target group for its communication components within health, agriculture, microenterprise, basic education and community development projects. For example, the communication component of an immunization program in Pakistan trains traditional female birth attendants in motivational skills for raising villagers' awareness about child immunization. In addition, CIDA finances media and communication activities by international NGOs such as Worldview International, which trains women development officers and rural women in the use of video for documentation, consciousness-raising and "videoleters" to government officials, and Fempress, a project that promotes women's alternative media throughout Latin America. CIDA also supports the News Concern International Foundation's programs, which train men and women reporters from the Third World to cover rural dwellers' concerns.

Many of the multilateral agencies of the United Nations have made major commitments to communication for women in development. The extensive communication programs of the **United Nations Fund for Population Activities** (UNFPA) focus mainly on population and sex education and are targeted at girls and young women. The agency has also supported research on sexual and reproductive attitudes and behavior among adolescents. Increasingly, however, the agency's communication campaigns promote male responsibility for sexual behavior as well as equal treatment of boys and girls within families and communities. An interesting new initiative trains census-takers in India and Nepal to collect data on women's paid and unpaid work while also using mass media to raise women's awareness about correctly reporting their economic activities. Finally, women must make up at least half of the trainees in UNFPA's training programs in interpersonal and mass media skills.

Recognizing that women grow the lion's share of the world's food, the **Food and Agricultural Organization** (FAO) attempts to make all of its development support communication programs responsive to women's needs. FAO places strong emphasis on training women as communication planners, researchers, and media producers. Since child-care and home responsibilities often prevent women from attending agricultural training sessions far from home, FAO has developed special audiovisual packages to bring training directly to village women. It also supports the use of video and other audiovisual tools for consciousness-raising and confidence-building among illiterate rural women.

The **United Nations Children's Fund** (Unicef) supports national and regional initiatives, such as an NGO's publication on women and communication and a program to train women daycare providers to communicate child health information about to mothers. In the wake of the Education for All conference earlier this year, Unicef is gearing up for massive mobilization campaigns using communication to promote girls' enrollment in primary schools. Women must comprise at least a third of Unicef's communication officers as well as trainees in communication skills workshops.

UNESCO has focused on improving women's participation in the mass media, providing major support for the Women's Feature Services, which were established a decade ago as a means of increasing mass media coverage by and about Third World women. The substantial research on women's employment in the mass media as well as the media's portrayal of women across various countries has been largely funded by Unesco. A recent three-year program trained women journalists in French-speaking and English-speaking Africa in television and radio production, photojournalism, and media management skills. Courses in development communication techniques were also provided to women trainers.

The **United Nations Development Fund for Women** (Unifem) occasionally supports communication projects at the local and regional level, such as the founding meeting of the African Women and Development Communication Network, and the subsequent publication of the network's magazine. Two recent Unifem-supported efforts stress marketing approaches: assistance to the Women's

Feature Services in their effort to develop financial self-sufficiency through better marketing of their news reports; and assistance to appropriate technology groups in developing communication strategies for marketing and disseminating food processing technologies to rural women.

Among private donor agencies, the Chicago-based **MacArthur Foundation** supports a sizeable communication program in four target countries – Mexico, Brazil, India and Nigeria – focused on family planning and women's reproductive health. A major objective is to develop culturally appropriate, indigenous media for reaching women bypassed by the mass communication approaches often used in population campaigns. The foundation is also financing the establishment of an African organization that will conduct media training for groups throughout the continent, including women's organizations. Because the foundation's grants are awarded on the scale of hundreds of thousands of dollars, it farms out funds to other groups such as the **Global Fund for Women** to award small grants to grassroots women's organizations (see p. 14).

Since 1986, the London-based **World Association for Christian Communication** (WACC) has held a series of regional and national workshops on women and communication in Africa, Asia, and Latin America, one giving rise to the "Women in Communication – Asia Network" in September 1989. The regional network launched a newsletter and is currently setting up a data bank and resource center addressing women's communication activities. WACC also offers training in media skills for women. The organization supports only activities based in Christian faith.

Intermedia Associates, affiliated with the US National Council of Churches, directs about a third of its funds in small grants (average US \$5,000) to women's media projects in developing countries. Projects have emphasized women's alternative media, communication skills training, networking and information exchange, and use of media for consciousness-raising about women's issues. Health education is reportedly the most common concern expressed in proposals from women's groups.

Clearly, approaches and scale of programs vary widely among donor agencies. But with few exceptions, officials surveyed agreed that communication with and for women – in all its various forms – would be a high priority in years to come.

New Books

Communications at the Crossroads: The Gender Gap Connection edited by Ramona R. Rush and Donna Allen. Norwood, New Jersey: Ablex Publishing Corporation, 1989. 316 pp. \$17.50

"This book . . . is about the silence of women. . . . If all women could communicate, including being published, we would not have any book to write."

So declare the editors in the preface to this collection of articles that examine the relationship between women and communication. The breadth of perspectives on the question is impressive – spanning women's employment in the media field, the images of women in mainstream media, mass media coverage of women's issues, women's alternative media, the development of a thesaurus for on-line databases on women and much more.

In all, 24 women from the US, Europe and Latin America contributed to this volume. At least 10 of the book's 23 chapters are concerned with development issues. Two contributions stand out: an overview tracing the rise of the women's alternative media in Latin America by Adriana Santa Cruz, founder of *Fempres*; and an essay by the late Martha Stuart, exploring her concept of "equitable development communication" and her experience with using video to put these ideas into practice through a family planning project in Indonesia.

Women and Media Decision-Making: The Invisible Barriers. Paris: Unesco, 1987. 121 pp. US \$9.00

If you are looking for women in the broadcasting field, don't look in the technical or senior management posts, because you probably won't find them there. You might find women in presentation and announcing, but if you search in the creative areas, you're more likely to discover them in children's and educational programming than in news and current affairs.

That is the recurrent message in the five country case studies presented in this book, each focusing on women's representation in decision-making positions in broadcasting. The consistency is more remarkable considering that the countries studied – Ecuador, Egypt, India, Nigeria and Canada – have widely diverse cultural traditions and are at different levels of economic development. All studies present original statistical data. Several go behind the statistics to explore attitudes, beliefs

and organizational procedures which continue to discriminate against women, despite legal protection.

Down with Stereotypes! Eliminating Sexism from Children's Literature and School Textbooks by Andree Michel. Paris: Unesco, 1986. 105 pp. US \$9.50

This book is at once a research review and a practical aid for the teacher, textbook writer or illustrator who wants to overcome prejudice against women and girls. Divided into two sections, the first section broadly discusses the extent of sexism in textbooks and children's literature across countries, summarizing research from China, Peru, Zambia, France, Norway, the Ukraine and seven Arab nations. The second section focuses on eliminating sexism, providing guidelines for recognizing sexist bias in educational materials, and how to produce non-sexist text and visual materials.

Among the many practical tools included in the book are: a questionnaire titled "Teachers, are you guilty of sexist discrimination in your class?"; a checklist for evaluating whether educational materials perpetuate sex-role stereotyping; and ten pages of textbook and storybook illustrations, counterposing sexist with non-sexist images. A useful educational resource.

"Communications for Women in Development." Papers presented at International Consultative Meeting, October 24-28, 1988. Santo Domingo, Dominican Republic: United Nations International Research and Training Institute for the Advancement of Women (INSTRAW). US \$25.00

This series of 29 papers comprises the proceedings of a conference that, in contrast to so many earlier meetings on "women and the media," focused on the role and potential of communication and communication technology for women in development. The series includes three overview papers examining trends, twelve case studies of communication projects or approaches, and separate reports from ten UN agencies and six international NGOs on their communication activities and experiences. With a few exceptions, the papers are mercifully short, although they vary considerably in quality – and in their willingness to stick to the topic of communication. Several outstanding contributions include the overview by INSTRAW Director Dunja Pastizzi-Ferencic and case studies on the use of radio in Zimbabwe, TV in Nigeria, and TV in China for various objectives related to women's development.

(YACOUB, from p. 6)

to establish viable community committees has meant encouraging women's interest groups. While the process varies from one culture to another, the objective remains the same: reaching women and integrating them into local information dissemination systems and into system management. At the management level, this usually means ensuring that women are well-represented in workshops on water and sanitation held for ministries of health, natural resources, and local government. Women engineers, social scientists, and economists are increasingly sought for both in-country and technical assistance assignments, and efforts to use women extension agents, educators and other professionals to reach village women have become the rule rather than the exception.

Developing Change in Health Behavior

The sustained behavioral change that results in health benefits does not occur by itself. Nor does it result from "targeted messages," disseminated through impersonal mass media channels. A WASH study of the impact of radio messages to women and men in Thailand showed that while such messages were useful for raising general awareness, they did not appear to influence health practices. If hygiene education is to bring about behavioral changes in water use and sanitation practices, it must have its roots in existing community ideology, values, religion and myth. It is also most successful when it involves those in the community who are traditionally responsible for these functions: religious leaders, birth attendants and village elders. Furthermore, it must be developed within a context of training village-level institutions in problem-solving skills. This takes time and resources, and it can only be done using face-to-face interaction.

The focus of learning and training should not be on "missing gaps," where information and education is seen as supplying what communities don't know or don't do. Rather, it should be on belief systems and "ways of doing things" already found in communities. One example of such an approach occurred in Sudan, where sayings on cleanliness from the Koran were used as the basis for a hygiene education component. These sayings were then broken down to behavior activities that the community is obligated to follow in the course of religious practice. When these kinds of approaches are used, the belief that preven-

tion does work provides the basis for change in cultural beliefs and practices.

An Example from Yemen

An experience from the Yemen Arab Republic illustrates how women, even in so-called "traditional" communities, can integrate health education at an early stage of water and sanitation projects. First, it is important to understand women's position in relation to others in that society. Yemeni women are highly valued in their culture. Their future husbands spend their youth as migrants toiling in neighboring countries just to earn the bride's price and women, as spouses, feel honored to be such valued possessions.

In a culture so protective of women, government policy is sensitive to projects that propose to focus on them. Focusing on women, just like focusing on any aspect of someone's possessions, can invite the "evil eye." Thus, in introducing health education to government planning agencies, a concern for the entire community with regard to water and sanitation use was emphasized. The broad scope served to allay the fears usually associated with projects where women are the target group.

To reach women, the project had to meet them in their habitats. Unfortunately, primary health-care workers, government-trained sanitarians and especially engineers putting water systems in place shared a disabling characteristic: they were all men. In identifying the institution best able to reach women, the women's extension service of the Yemeni Ministry of Agriculture was selected.

While it was critical that educators were women, it was a boon that they were also Arab. Such women represented convincing role models for behavior change — role models sufficiently close to home that Yemeni women emulated them. Identifying water and sanitation practices among women took time and patience. Questionnaires did not work. Even sitting in their company, the educators could not turn quickly to talk of sanitation or domestic water use. The trend of conversation progressed from marriage to husbands, to children, to fertility and infertility, to children's disease, and only then to behaviors regarding defecation and excreta disposal.

In some villages, male community leaders wanted to meet a project's intermediaries before permitting access to their women. In such situations, it was worth citing references from the Koran about the

importance of "learning" for improving the general well-being of the community. The respect this implied for Islamic tradition provided a common link, a shared behavioral value to assure them that their women would not be misled into the ways of foreigners.

Lessons Learned

We can draw several important lessons about the role of education and communication in water and sanitation projects from our field experience:

- A successful community water and sanitation effort requires commitment by top officials as well as local leaders to conduct hygiene education as an integral part of water system construction. This may require re-orientation of project staff and relevant government agencies.
- Training of community health workers should include communications and presentation skills as well as substantive technical knowledge about water and hygiene.
- If education is directed at women, it may be necessary to involve men in the community level in planning and sanctioning the education effort.
- In cultures where sex roles are strictly separated, women health educators clearly facilitate the education process with women audiences.
- Health behaviors are developed from "the bottom up." New information to villagers should be presented in terms of what they already know, building upon indigenous models of health beliefs.
- Audiovisual materials should be entertaining as well as informative. Images and speakers should be given locally appropriate names, dress, and use local dialect. If the messages require action by women, the main image or speaker should be a woman. Rather than be the focus of instruction, the materials should serve as reference points for open-ended discussion.
- Small group sessions and individual house-to-house visits are usually more effective than larger sessions. Sessions should be planned around women's daily schedule, and sessions in homes may help establish credibility with entire families.

May Yacoub is a medical anthropologist concerned with social and behavioral sciences. She has been the Associate Director of the WASH project for the past five years.

(KINDERVATTER, from p. 9)

As for training trainers to conduct learning activities with women, guided hands-on experience works best. Rather than discussing participatory training, trainers should be immersed in these processes. Then, following a particular training session, trainers can meet together to analyze what happened and the problems they encountered. This enables trainers to develop the ability to adjust their approaches continually to fit the needs of particular groups of women.

5 Link programs to other resources and services.

Training, particularly for women, does not operate in a vacuum. Many conditions external to the training govern the extent to which new knowledge and skills can actually be applied. For example, in income generation programs, women may learn new technical skills, but then be denied access to needed capital by local banks. Or, women's child care responsibilities may not be fully understood by programmers, so that expectations of the time women have available for activities are unrealistic.

To ensure that training is translated into action, program planners and trainers need to expand their roles to become "brokers

(GRIFFITHS, from p. 8)

ample, we present open-ended stories of daily situations of fictitious women, and ask women to finish the stories. Or we present photographs of different women and ask the viewers to describe the women and identify the ones that are most like herself.

The programmatic challenge is to translate mothers' concerns into advice and activities that will help them. While a good deal of the success depends on the society's willingness to promote women's status, small inroads can be made by women's health and child survival programs. For example, more information should be targeted to fathers and mothers-in-law, relieving the burden of responsibility for children's health always placed on mothers. In addition to addressing specific behaviors, communication could be used to reinforce the idea that women can do more, they do know better than their children, and they do have something to offer.

One beginning has been made in India, where a weekly radio soap opera was

of opportunity" with other service and resource organizations. In designing a program, they need to anticipate which external factors most critically impinge on the women with whom they are working. Then, they need to address these factors either directly in their own program or by linking with other organizations. For instance, in programs with which OEF has worked in Central America and Senegal, planners recognized the need for time-saving technologies and established connections with organizations working in this area. Similarly, finding or organizing child care is typically a high priority need.

By taking these external linkages into account, and keeping the other four keys to effective training discussed above in mind, trainers will enable women to experience the impact as expressed by this participant in Sri Lanka: "The training program did not come like the monsoon, quickly deluging us and as suddenly going away. It was like a gentle rain, steady and penetrating, and we shall never forget what we learned here."

Suzanne Kindervatter, EdD, has lived and worked in 10 countries during her 20 years of experience in training and development. She currently serves as Director of Technical Services with OEF International, where she has been based since 1979.

designed to raise women's self-confidence. The idea is to air it like any radio program so people can listen at home, but women are encouraged to gather at child-care centers, where there is an opportunity for discussion following the show. Mothers and mothers-in-law listen to "The Story of Lakshmi," a woman like them who faces many constraints, but who, under the guidance of a school teacher, has the courage to think through a situation, make small decisions, influence people, and do things every day that she has learned will make a difference in her life and in the lives of her family and friends. Lakshmi's mother-in-law often enters the program and is frequently heard remembering what it was like when she was a daughter-in-law, a memory that seems to elude most mothers-in-law.

The hope is that by addressing women's innermost thoughts and doubts we can open the way to help them really see their role in family health promotion.

As President of the Manoff Group, Inc., Marcia Griffiths applies social science and marketing research techniques in maternal and child nutrition projects.

What's New, What's Coming

Communication Conference

The Stony Point Conference Center, Maryknoll Mission Institute, and Intermedia will jointly host a conference on "Communication and Information: A Basic Human Right," November 15-17, 1990, at the conference center near New York City. Conference themes include information distortion and control; influence of global communication on traditional cultures; communication and development; and the role of churches and community organizations in providing alternative sources of information. Cost for tuition, meals and accommodation is US \$165. Contact: Stony Point Center, Stony Point, NY 10980, USA. Telephone: (914) 786-5674.

Radio for Health Contest

The League of Red Cross and Red Crescent Societies announces the sixth bi-annual radio competition to promote primary health care in Africa. Cash prizes will be awarded to the three best radio programs on primary health care themes. A separate prize will go to the two best programs on AIDS communication. The competition is jointly sponsored by the Union of National Radio and Television Organizations in Africa, the World Health Organization and UNICEF. Those interested should register immediately and submit recordings (15 to 30 minutes long) by November 15, 1990, to the League of Red Cross and Red Crescent Societies, PO Box 372, CH-1211 Geneva 19, Switzerland. Tel.: (41-22) 734-5580.

Employment Opportunity

The Food and Agriculture Organization is seeking a Development Communication Specialist to develop, implement, and evaluate a system of communication among agricultural researchers, extension personnel and farmers. The individual will also train field staff. Field experience in development support, communication and training experience are required. The 18-month assignment will begin in early 1991. For more information, contact: Development Support Communication Branch, FAO, via delle Terme di Caracalla, 00100 Rome, Italy. Telephone: (396) 5797-3251. Fax: (396) 514-7162.

Resources

- ✓ The Clearinghouse on Infant Feeding and Maternal Nutrition manages a collection of 8,500 print materials and 400 audiovisual materials. Education and communication materials for promoting breastfeeding, nutrition, and child survival are a central focus of the collection. Through a computerized database, the clearinghouse's friendly staff provide information support and technical assistance primarily to staff of USAID-funded projects. Its newsletter *Mothers and Children*, published three times a year in English, French and Spanish, reaches 27,000 readers worldwide. Contact: American Public Health Association, International Health Programs, 1015 15th St., NW, Washington, DC 20005. Telephone: (202) 789-5600.
- ✓ The Women's Information Network for Asia and the Pacific (WINAP) was formed under the auspices of the regional UN Economic and Social Commission to promote the exchange of information among women in the region. Last year, WINAP sponsored a two-week workshop on management of women's information centers in the Pacific, covering research and data collection techniques, production and acquisition of low-cost media materials, uses of computers and new information technology, and the experience of a multi-media campaign against domestic violence in Papua New Guinea. The semi-annual *WINAP Newsletter* publishes news and viewpoints on women's initiatives throughout the region. Contact: WINAP, ESCAP Social Development Division, UN Building, Rajadamnern Avenue, Bangkok 10200, Thailand.
- ✓ Our own 50-page "Information Package on Development Communication and Women" presents selected articles on the topic, profiles of communication projects designed to benefit women, and an extensive list of resources organizations and materials. Available for \$5 by contacting us at the address and telephone listed on p. 2.
- ✓ For 15 years, the International Women's Tribune Center has been assisting grassroots women's organizations in Third World countries through information exchange, training activities and production of print and audiovisual resources. For example, the Tribune Center offers training workshops in desk-top publishing to local women's groups. Among dozens of publications, a March 1989 newsletter "Women

Using Media to Effect Change" offers how-to strategies for using the mainstream media to women's advantage, plus a thorough listing of Third World women's media groups and their activities. The newsletter succeeds an earlier collection, "Women Using Media for Social Change," which presents the experiences of women creating "alternative" media. The Tribune Center also distributes three books of clip-art featuring black-and-white drawings of "women in action" and simple text that is easily understood by low-literate women. Materials are available in both English and Spanish and are free to readers in developing countries. Others should write the Tribune Center for a resource and price list at 777 United Nations Plaza, New York, NY 10017, USA. Telephone: (212) 687-8633.

- ✓ Isis International Women's Communication and Information Service, with offices in Santiago, Chile, and Manila, Philippines, is also engaged in networking, information exchange and training for Third World women's groups. One major activity is the coordination of the Latin American and Caribbean Women's Health Information Network through regional events and a bimonthly newsletter. Each edition of the Isis quarterly journal is written, edited, and produced by a regional women's organization in the Third World. *Women's Data Base*, published twice a year, reprints bibliographical listings and abstracts from the Isis computer data base and is accompanied by a thesaurus of terms, useful for organizing information about women. Annual cost: US \$30 per year. Available from Isis International, Casilla 2067, Correo Central, Santiago, Chile.

- ✓ Also from Isis, *Powerful Images* is a valuable resource guide for women who are discovering that audiovisuals can be an important tool for training, documentation, and consciousness-raising. This well-illustrated book presents first-hand experiences by Third World women's groups in making and using slideshows, films, and videos and practical instructions for using audiovisual equipment. The book's centerpiece is an annotated catalog of more than 600 audiovisuals produced by and about women, including addresses for producers and distributors. Available for US \$19 (individuals) or \$27 (institutions) from Isis International at the address listed above.

- ✓ "Into Focus: Changing Media Images of Women" is a new multi-media resource kit designed to help media professionals and action groups analyze how the Asian mass media portray women and to

demonstrate how media can be positively used in women's interest. The kit's five modules make use of illustrated text, videocassettes, booklets and slides to address topic of major concern to Asian women: family, health, violence, work and the media itself. The Asia-Pacific Institute for Broadcast Development developed the kit, drawing on material from 11 Asian countries. Available for \$50, plus postage (US \$24 for South and East Asia, \$50 for Europe, US, and Africa) by writing the Institute at PO Box 1137, Pantai Post Office, 59700 Kuala Lumpur, Malaysia.

- ✓ The annual *Directory of Women's Media* provides complete contact addresses and telephone, cost information, and brief descriptions for more than 1,000 groups and 500 individuals concerned with women's media. Categories include: periodicals, presses and publishers, news services, radio and TV programs, speakers' bureaus, bookstores, library collections, and production groups for women's radio, television, video, cable, film, music, theater, art and graphics, and multimedia. At least a third of the listings are for groups based in the Third World. After 15 years of publishing the directory, the Women's Institute for Freedom of the Press has just passed the baton to the US National Council for Research on Women, which will publish the next edition in 1991. The 1989 edition is available for US \$25. Contact the council at the Sara Delano Roosevelt Memorial House, 47-49 East 65th St., New York, NY 10021, USA. Telephone: (212) 570-5001.

- ✓ Well-designed popular education and training materials are a hallmark of the Overseas Education Fund's programs to strengthen women's economic status (see p. 9). OEF's handbook *Women Working Together for Personal, Economic, and Community Development*, based on community-level training experiences in Central America and Thailand, consists of more than 40 participatory learning activities. One module presents instructions for a skit on "women's work," complete with cut-out models for puppets, another focuses on how to communicate with authority figures. Available in English for \$11, Spanish and French for \$13. "Video Technology Applications for Development Projects Designed to Benefit Women" presents six brief case histories demonstrating the use of video for training, community mobilization, evaluation and other purposes. Cost: \$5. Contact: OEF, 1815 H Street, NW, 11th floor, Washington, DC 20006, USA. Telephone: (202) 466-3430.

Have Women Missed the Boat on Communication Technology?

by Heather Royes

Good news, good news! After 20 years of raising concerns about the media's treatment of women, women have fought and won several major battles. The most important are struggles related to promotion of women media professionals to higher levels of decision-making and improvement of the images of women in media content and commercial advertising.

Who remembers the First World Conference of Women Journalists in Mexico City in 1969, organized by the Women's Federation of Mexican Journalists? It was inspiring listening to testimonials and "witnessing" the plight of women journalists. The most heart-rending cases came from developing countries, where rigid cultural and social barriers blocked improvements. Case studies and country reports by women media workers from these countries reflected hardcore stereotypical representations of women in news, analysis and visual images, as well as a professional arena that was essentially "a man's world."

Then came a number of United Nations conferences on women and the media during the Decade of Women (1975-1985), as well as women's gatherings at regional communication conferences. They provided a forum for women who had been isolated from positions of power and seniority in production and management of broadcasting, newspaper, publishing, film, etc. At the same time, many women began to argue that, rather than rely on the mass media to raise women's awareness and bring them relevant information, particularly poor women in developing countries, women should develop their own media. A consensus emerged that small "lightweight" media – e.g., simple print media, slideshows, video, audiocassettes, posters, etc. – as well as traditional folk media and interpersonal communication were most appropriate for reaching the masses of women in developing countries. By the end of the Decade, much had been done to address these concerns through training programs and communication projects and to increase the visibility of women's issues in mass and alternative media.

But while women were concentrating on these issues, they were neglecting larger



Those formulating major national and international media policies are all men from the circles of science, technology, broadcasting, telephony and telegraphy.

changes in the communication and media field. Communication is not the same as it was 20 years ago. With the widespread adoption of satellite and computer-based information systems during the 1980s, communication has become increasingly sophisticated and expensive. The shift toward high technology has polarized the field, so that differences in technical resources, skills and capabilities among countries are vast. By its very nature, communication now comes almost totally under the control of industrialized countries. Access to state-of-the-art equipment, and opportunities provided by satellite linkages, telecommunication, and information technology fall primarily to the economically and politically powerful nations of the North.

Not only has high-technology communication become the province of the wealthier countries, but it has fallen almost totally under the control of men. Those formulating the major national and international media policies are all men from the circles of science, technology, broadcasting, telephony and telegraphy. As a result, the regional and international organizations that now control the "global village" have

few women in senior positions. Those women that occupy such positions are usually administrators or political appointees, not technical experts – much less advocates for women's interests.

For example, the glamorous First World Electronic Media Symposium and Exhibition held in Palexpo, Geneva, in 1989 was a sumptuous affair. Sponsored by the International Telecommunications Union (one of the wealthiest and most powerful UN agencies), it offered numerous presentations, mainly on technical topics such as satellite systems, allocation of broadcast frequencies, selection of equipment and systems and international technical standards. Of the total 173 presenters and panel members, an estimated 5 percent were women. And most of them played minor roles – except for a presenter from Canada and another from the People's Republic of China, both of whom are frequently paraded as the token women in the international communication arena. A string of earlier international gatherings by such agencies as INTELSAT, INTERSPUTNIK, and regional Third World satellite associations were similarly devoid of women.

Perhaps these institutions had good cause to exclude women. Women had not prepared themselves for these fields and showed little interest in such apparently uncreative topics. They had allowed their agenda to be interpreted as "lightweight" media (as though they could not manage more complex, "heavyweight" issues), with minimal target audiences, and they had chosen to work in isolation from national and global trends. True, limited opportunities for scientific and technical education had left women unprepared. Yet even when educational opportunities are available, women have not entered these fields in large numbers, especially in developing countries. So women have excluded themselves and have been excluded from the "hard" technoscientific arena of communication systems and policies.

The field of international communication is changing. The developing countries must catch up with the rest of the world. And women in both developed and developing countries must move on to catch up with the rest of the field.

Heather Royes is a private media consultant in Kingston, Jamaica. She formerly served as Director of Information for Jamaica, and has represented her government at international conferences on communication and telecommunication.

CDC INFORMATION REQUESTS LOG

Fourth Semester

From March 1,1990 to August 31, 1990

<u>LOG DATE #</u>	<u>NAME & ADDRESS</u>	<u>ORGANIZATION</u>	<u>SERVICE RENDERED</u>
030290-01	Larry Hilliard 2700 Feather Run Trail Apt. K16, West Columbia, SC 29169		Bib. references on satellite technology
030290-02	Bill Mackie Austin, TX	Univ. of Texas, Austin	Bib. references on broadcasting in Belize
030690-03	Andrew Paris, 72/2 Blanche Street, Sliema, Malta	Univ. of Malta	Bib. references on visual communication; DCR back issues
030690-04	Daniel Morduch Tel Aviv, Israel	Tel Aviv University Faculty of Humanities School of Education	Bib. references on m i c r o c o m p u t e r applications in LDCs
030990-05	Jeannie Stefanek, Calle Pio Valdivieso Quito, Ecuador		CDC publications: PP, DCR 63, Bulletin #4: "Radio's Role in Development"; reprints on radio in Ecuador
031590-06	Barbara McCann, 197 James Street Ottawa K1R 5M6 Canada		Bib. references on distance education course development & contents
031690-07	Mah Bi Guessan, 09 BP 815 Abidjan, Côte d'Ivoire	ASAPSU	Referral to video production training institutions
031990-08	Karen Epps, Rockville, MD	University Research Co.	Bib. references in French on FP and demography; French edition of DCR on Health
032090-09	Shahid Akhtar, Associate Director Canada	IDRC, Information Sciences	Additional copies of DCR 67 "Information Technologies"
032390-10	Joan Chamberlin, 1929 Hickory Hill Lane, Silverspring, MD 20906		DCR back issues; referrals to int'l agencies supporting Dev.Com. & Telecoms in LDCs
032790-11	Johnne Duernstel, 5585 Monkland, Ste 130 Montréal, Canada, H4A 1E1	Info JED inc.	DCR 63 "Distance Education"

032190-12	Ali Al-Garni, 2249 College Avenue #3 Stevens Point, WI 54481		Reproductions of doc. about radio for education in rural areas
033090-13	Paul Gwin, 804 W 6th Street Junction City, KS 66441		DCR back issues
033090-14	Kay Holland 206/789-8330 P.O.B. 30945, Seattle, WA 98103	INTERDEV	Referral to Master's Programs in Dev.com.
040390-15	Khairul Bashar, Executive Director Kuala Lumpur, Malaysia	Asian Institute for Development Communication (AIDCOM)	Bib. references on Dev.Com.
040590-16	L.Breiner, Chief Ottawa, Canada	C I D A , Telecommunications Section	Information on CDC
040590-17	Arthur Charloff, 261 Sea Breeze, Jupiter FL 33477		Bib. references on immigration impact on the economy
040990-18	Pierre Laval, P.O.Box 50518, Nairobi Kenya	URTNA	Referral to Distance Education Institutions
041090-19	Debra Allred, Pasadena, CA 91104	William Carey International University	Referral to organizations working with street children
041090-20	Dr. Lakshman Velupillai Baton Rouge, LA 70803	Louisiana State University, International Programs	PP
041190-21	Rev. Balaam Ekimwere, CEO Kampala, Uganda	Centre for Africa Compassion	CDC publications
041390-22	Rotacio Gravoso, College Laguna Philippines	UPLB	Bib. references on Environmental Education
041690-23	Jennifer George, 2 Methuen Street, Apt. 1-1 Woodbrook, Port of Spain Trinidad & Tobago		Referrals to Library training institutions in the US and abroad
042390-24	Carolyn Bargman, P.O.B. 174 Riverdale MD 20738		LRCN Info. Pack.
042390-25	Tom Eisenbeiser 241-3700 Washington, DC		Reproduction of doc. on Development Education

042390-26	Diane J. Clark, P.O.Box 40596 Casuarina, NT 0811 Australia	Department of Health & Community Services	CDC Catalog
042690-27	Ms. Fuma Ba, B.P. 3311, Dakar Sénégal	UNESCO (BREDA)	"BRIDGES" Reports
042690-28	Grace Belcher, Washington, DC 20036 653-8209	Institute for Energy & Environmental Analysis	Information on CDC, DCR
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050890-31	Dr. Javier Martinez Salaberria Quito, Ecuador	Fundacion Interayuda	Bib. references and referrals on Water & Sanitation AT
050890-32	Juan Pravda, Washington DC Rm. I-4013	World Bank, Tech. Dept. LA/T/HR	Book on Interactive Radio
051190-33	Phyllis Stiles, Cullowehee, NC 28723	Center for PVO- University Collaboration	Reproduction of "Book Network"
051190-34	Mark Sametz, 125 W. Green St. Ithaca NY 14850		Information on CDC
051590-35	Dr. Timothy J. Johnson, Executive Director Oakville, Ont. Canada L6J 3N5	Institute for the Study and Application of Integrated Development (ISAID)	Information on CDC
051690-36	J.H. Hardgrove, 612/861-4768 Minneapolis, MN 55419	Compatible Technology, Inc.	Information on RADECO
051790-37	Pr. V. Basnayake, Colombo Sri Lanka	Natural Resources, Energy & Science Authority	DCR #65 on the Environment
051790-38	Anne Devine, Program Manager Port Vila, Vanuatu	The Foundation for the Peoples of South Pacific	References on computer software for Health Information/Education
052190-39	Ikeh Stephen, Mbaitoli, Nigeria	Community Secondary School Isakala	References & doc. on agricultural extension
052290-40	Dona Pascale, Newton, MA	EDC	50 RADECO Books
052490-41	Peter Spain, Washington DC	AED/ PRITECH	References & doc. on Health Education through School

052490-42	Sushil K. Regmi, P.O.Box 4 Birgang, Nepal	National Rice Improvement Program	PP on agriculture
053090-43	David Kahler	World Education	20 DCR 68 on Literacy
053090-44	Willy a. Karamoy, Director Jakarta, Indonesia	Department of Information, Foreign Information Services	Referrals to institutions granting fellowships for training in communication
053090-45	Luis Salazar Ochoa, Project Advisor Lima, Peru	Save the Children	PP in Spanish
053090-46	Kathleen Tucker, 885-6304		References on Birth Control Marketing in Bangladesh
060490-47	Dr. Seydou Pathé Barry B.P. 585, Conakry, Guinée	Ministère de la Santé Division de la Promotion de la Santé	DCR French Editions
060490-48	M.Mamadou Aliou Sow, B.P. 823 Conakry, Guinée	Ministère de l'Education, IPN	DCR French Editions
060490-49	Indu Sinha, Program Coordinator, Materials & Media, Patna, India	DEEPAYATAN, Centre for Adult Education	PP
060490-50	C.P. Jayalakshmi, Director New Delhi, India	Energy Environment Group	PP
060490-51	Michael Bamfo-Tahor, Accra Ghana	Department of Community Development	PP
060490-52	Morgan I. Salomon, Manager, Staff training Center, Kaduna, Nigeria	Nigerian Agricultural and Cooperative Bank	CDC Catalog
060490-53	Anita Ademoye, Training Coordinator Africa Centre, 38 King street London WC2E 8JT, England	Bureau for Overseas Medical Service	DCR Sub. ; CDC Catalog
060490-54	Michael Connet, Manager, Distance Learning Greenville, SC 29606-5616	Greenville Technical College	CDC Catalog
060490-55	Judy Tucker, Librarian Albion, NY 14411	Albion High School	CDC Catalog

060490-56	Daniel Larocque, Toronto, Canada		CDC information, DCR French editions
060690-57	Cheryl Kasper Atlanta, GA	Georgia Department of Technical and Adult Education, Instructional Technology & Services Center	Bib. references on Educational Technology; CDC information
060690-58	Ellen Nayeri Arlington, VA	Vector Biology & Control Project	Bib. references on Community Health Training
060690-59	Katherine Wedgwood Guildford, Surrey, England	Robens Institute	Bulletin #9 "Mtu ni Afya"; DCR 41; bib. references on Water & Sanitation
060790-60	Alvaro Caballero, Director, Center for Development, Asuncion, Paraguay	Companeros de las Americas, Comite Paraguay-Kansas	Referrals to manufacturers of telecom & broadcasting equipment, and solar powered TV
060790-61	Gertrudes V. Bartulaba, Santos City, Philippines		DCR 64 "Local Radio"
060790-62	Chan Ho Choi, Seoul, Korea	National Agricultural Cooperative Federation	DCR back issues
060790-63	Daniel Kay Adeyemo, Ejigbo, Nigeria	Comprehensive Health Centre	CDC publications: bulletin #9: "Mtu ni Afya"; bulletin #7. "Source Boo": on Radio"
060790-64	Patricia Hinds, Woodbrook Trinidad & Tobago		Bib. references on Social Marketing; referral to SOMARC; DCR #47, 59
061390-65	Enma F. Ruiz, Executive Officer Apartado 72, Chimbote, Peru	Radio Onda Nueva	CDC, DCR information
061590-66	Brigitte Brun, Paris, France	GRET	DCR French Editions
061590-67	J. Lederman, Bruxelles, Belgium	COTA	DCR French Editions
061590-68	Martin Long, London, England	AHRTAG	Bib. references & doc. on the use of Video in Development

061890-69	Lori Stobbe, Lake Worth, FL 33466	South America Mission, Inc.	Referral to Mazingira Institute; doc. on comic magazines for Environmental Education
061890-70	Marzella Wuestefeld, Kawambwa, Zambia	Integrated Rural Nutrition Programme	Bib. references on Health Education; bulletin #9 "Mtu ni Afya"
061990-71	Maigari K. Cletus, Bukuru, Nigeria	Basic Health Center	DCR back issues
061990-72	Dr. Amelia M. Dozzi, Lawrenceville NJ 08648		Referral to the Northwest Regionl Education Laboratory about Distance Education for Substance Abuse
062690-73	Haydar Badawi, Athens, OH 45701		CDC publications: "Cover to Cover"; DCR back issues
062690-74	Jeannette Diallo, Bamako, Mali		DCR French Edition
062990-75	Dr. E.M. Teri, Entebbe, Uganda	Ministry of Health, Health Education Division	DCR Back Issues; information package on environmental education
062990-76	Jane Turner, Librarian	Ohio University Library	DCR #23, 24
070390-77	Dr. Louise Bourgault	Northern Michigan University	Videos: IRI, "Global Solution" in French
071190-78	Ulrika Pepler, Paris, France	Unesco, Unit for Cooperation with Unicef	Videos: IRI, "Distance Education", referral to Third World Television Exchange", IDRC
071790-79	Kris Nicholson, New Orleans, LA 70112	Tulane University, ICEC	Reproduction & bib. references on Health Education & Communication
071890-80	Selena Evans, Toronto, Canada	Developing Countries Farm Radio Network	PP
080990-81	Juanita P. Montalvo, Ottawa, Canada	IDRC, Social Sciences Division	References on the use of Video in Participatory Communication

080990-82	Catherine Joseph, Librarian Madras, India	Bay of Bengal Programme	Bib. references on Development Communication
081090-83	Ing. José Pacheco Alcocer, La Paz, Bolivia	Centro Nacional de Computacion	References on "Speak & Math", DCR 68
081090-84	Anne-Marie Holenstein, Zürich, Switzerland	Radio DRS	DCR Back Issues
081390-85	Joseph Sukwianomb, Kingdom of Tonga	South Pacific Alliance for Family Health	Bib. references, & referrals on Radio for Family Planning
081390-86	Mrs. Sumon K. Tuladhar, North Amherst, MA 01059	University of Massachusetts, School of Education	Bib. references on Educational Media, & Video in education

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for the period of March 1, 1990
to August 31, 1990

Date 08/17/1990

Page 1

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Total for page - 19

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94

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Total for page - 30

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100

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10/

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VANI, JANICE	3711070	04/90	MINISTRY OF EDUCATION	LIBERIA	FREE
PERFECTO, CHRISTINA	3711064	04/90		PHILIPPIN	FREE
UKUAECBU, ALFRED	3711065	04/90	UNESCO (BREDA)	SENEGAL	FREE
MOEGIADI,	3711066	04/90	MINISTRY OF EDUCATION & CULTUR	INDONESIA	FREE
INGLES, DAVID	3711075	04/90	ASIAN NGO COALITION (ANGOC)	PHILIPPIN	FREE
SOLON, FLORENTINO	3711068	04/90	NUTRITION CENTER OF PHILIPPINE	PHILIPPIN	FREE
LEESUWAN, DR.CHUKIAT	3711069	04/90	EDUCATION EXTENSION DPT	THAILAND	FREE
YANDJA, YENTCHABRE	3711078	04/90	MINISTERE DU PLAN ET DES MINES	TOGO	FREE
IKETE, EBALE	3711079	04/90	COMITE NTL DE LUTTE CONTRE	ZAIRE	FREE
BEAUTAH, OSCAR	3711080	04/90	A.A.L.A.E.	KENYA	FREE
HABUFITE, PASCAL	3711081	04/90	PRESIDENCE DE LA REPUBLIQUE	RWANDA	FREE
SAVICEVIC, DUSAN	3711082	04/90	FACULTY OF PHILOSOPHY	YUGOSLAVI	FREE
KOMBA, DONATUS	3711067	04/90	EDUCATIONAL RESEARCH NETWORK	TANZANIA	FREE
FAKUNLE, O.A.	3711084	04/90	HEALTH EDUCATION UNIT	NIGERIA	FREE
KNAPPMAN, MICHAEL	3711085	04/90		NICARAGUA	FREE
MORRY, EARL	3711086	04/90	MINISTRY OF EDUCATION	ST.KITTS,	FREE
COLEMAN, ALBERT	3711071	04/90	MINISTRY OF EDUCATION	LIBERIA	FREE
CHAWANI, SAMUEL	3711088	04/90		*MALAWI	FREE
HAQ, AZIZUL	3711089	04/90		BANGLADES	FREE
KESSOPA, OSOT	3711090	04/90	KRUNG THAI BANK	THAILAND	FREE
BA, FUMA	3711091	04/90	UNESCO (BREDA)	SENEGAL	FREE
MABULA KINKELA, NLANDU	3711076	04/90	PROJET EDUCATION A LA VIE	ZAIRE	FREE
MOTSELEBAWE, M.	3711077	04/90	MINISTRY OF EDUCATION	*LESOTHO	FREE

Total for page -

31

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103

SUBSCRIBER'S NAME	IDNUMBER	START DATE	ORGANIZATION	COUNTRY* *U.S. = 0	SUB TYPE
PENDAELI, J.	3711094	04/90	UNIVERSITY OF DAR-ES-SALAAM	TANZANIA	FREE
MULICHAN, KHONGKHAN	3711095	04/90		THAILAND	FREE
CURRIN, CHARLES	3711096	04/90	ASIAN DEVELOPMENT BANK	PHILIPPIN	FREE
NITAYACHART, SUTTHIPON	3711097	04/90	UDOMDARUNEE OIRL SCHOOL	THAILAND	FREE
YOKTHONG, WANIDA	3711098	04/90	WICHENMATU SCHOOL	THAILAND	FREE
NONTHIKORN, JANTHANA	3711099	04/90	DEPT OF EDUCATION SUPERVISORY	THAILAND	FREE
PUM SA ARD, SRISAMORN	3711100	04/90	EDUCATIONAL RESEARCH & PLANNING	THAILAND	FREE
ANANTARUNGSU, NARONG	3711101	04/90	EDUCATION REGION 12	THAILAND	FREE
VIYO, DET	3711102	04/90	NAMPHONG SCHOOL	THAILAND	FREE
BOUROUINA, YAYA	3711087	04/90	CEM MOHAMED TAALLAH	ALGERIA	FREE
MUGEMA, ROMUALD	3711072	04/90	MINISTERE DE L'INTERIEUR	RWANDA	FREE
KELLY, NORMA	3711073	04/90	H.E.A.R.T. TRUST	JAMAICA	FREE
CHACHA OGWE, CHRISTOPH	3711074	04/90	MINISTRY OF EDUCATION	KENYA	FREE
TARA, NAYANA	3711083	04/90	INDIAN INSTITUTE OF MANAGEMENT	INDIA	FREE
FIELAKEPA, T.	3711092	04/90	MINISTRY OF EDUCATION	*TONGA	FREE
DANIELE, DEDE	3711093	04/90	MINISTRY OF PLANNING	CENT AFRI	FREE
KINUNDA, MICHAEL	3711062	04/90	UNESCO	KENYA	FREE
HAMRATANAPORN, SUTHEP	3711063	04/90	NON-FORMAL EDUCATION	THAILAND	FREE
ALT, DAVID	3711353	05/89	USAID/ MANILA		FREE
VILAKATI, ELLIOT	3711113	05/90	THE PUBLIC HEALTH UNIT	*SWAZILAN	FREE
QUEIROLO, CARLA	3711114	05/90	INPPARES	PERU	FREE
KOOMSON, ANTHONY	3711115	05/90	ADVENTIST DEVELOPMENT & RELIEF	GHANA	FREE
BELAYET ALI, DR.KAZI	3711108	05/90	MINISTRY OF HEALTH	IRAN	FREE
KARIA, KAMLESH	3711133	05/90	SKILLSHARE AFRICA	ENGLAND	FREE
	3711118	05/90	USAID/LESOTHO		FREE
	3711119	05/90	REDSO/ESA		FREE
NDENKUYI, JAMES	3711104	05/90	NATIONAL AID'S GROUP	NIGERIA	FREE
ABDULRAHMAN, ABUBAKAR	3711105	05/90		NIGERIA	FREE
BARROILHET, CARIOLA	3711122	05/90	CIDE	CHILE	FREE
PRASAD KHANAL, DR.GOPA	3711123	05/90	KALIGANDAKI HOSPITAL	NEPAL	FREE
MORGAN, DAVID	3711140	05/90	HORIZON BOOKS	KENYA	FREE
Total for page =	31				

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1/10

SUBSCRIBER'S NAME	IDNUMBER	START DATE	ORGANIZATION	COUNTRY* *U.S. - 0	SUB TYPE
ROYCE, DR.HEATHER	3711109	05/90	INTERMEDIA ASSOCIATES	JAMAICA	FREE
LOVERDOS, GEORGE	3711110	05/90	SPECISS COMPUTERS	ZIMBABWE	FREE
ADEKAMMI, AWODIRAN	3711111	05/90	OYO LOCAL GOVERNMENT	NIGERIA	FREE
REQUENA, JORGE	3711112	05/90	CENDOC - CIPCA	PERU	FREE
HADY EL GILANI, DR.ABD	3711129	05/90	FACULTY OF MEDICINE	EGYPT	FREE
FRANCO, ELIANA	3711130	05/90	FODERUMA	ECUADOR	FREE
HINDS, PATRICIA	3711131	05/90	T & T ASSOC OF SOCIAL WORKERS	TRINIDAD	FREE
LAAKSO, ANETTE	3711136	05/90		TANZANIA	FREE
CASTRO, PATRICIA	3711141	05/90	INIAP	ECUADOR	FREE
JAMIL, MOHAMMAD	3711134	05/90		PAKISTAN	FREE
CROCOMBE, MARJORIE	3711135	05/90	THE UNIVERSITY OF AUCKLAND	NEW ZEALAND	FREE
DANMALLAM, BAWA	3711106	05/90		NIGERIA	FREE
KARANI, MARIJANI	3711107	05/90	IGABIRO FARMERS TRAINING CTR	TANZANIA	FREE
JAHANGIR, DR.NURUR	3711142	05/90	BANGLADESH TEA RESEARCH INSTIT	BANGLADES	FREE
GORTON, LYNN	3711144	05/90	USAID/ GUATEMALA		FREE
MATEMU, F.S.	3711152	05/90	POFLEP	TANZANIA	FREE
SONGONY, NANETTE	3711156	05/90	EAST AFRICAN WILDLIFE SOCIETY	KENYA	FREE
RAHMAN, SHAFIQR	3711160	05/90	ASIA	BANGLADES	FREE
RUSHIN BELL, CAROLJO	3711146	05/90	USAID/ ANTANANARIVO		FREE
MOHAN, GEETAN	3711155	05/90	JAGIRATI	INDIA	FREE
MAGIMAY, CANUTE	3711148	05/90	UPLB	PHILIPPIN	FREE
SLEEPER, JONATHAN	3711147	05/90	USAID/ LA FAZ		FREE
SATHYANARAYANA, DR.RAO	3711162	05/90		INDIA	FREE
ORIOLO, OKUNLOLA	3711163	05/90	DEPARTMENT OF GEOGRAPHY	NIGERIA	FREE
MORFAW, MARIA	3711154	05/90		ITALY	FREE
RESSEGUIE, ROBERT	3711145	05/90	USAID/ CAIRO		FREE
BASU, SISIR	3711200	06/90		INDIA	FREE
EMMET, WILLIAM	3711167	06/90	PROJET SANTE FAMILIALE & ADMINISTRATION	NIGER	FREE
ISORENA, SALVADOR	3711172	06/90	INST. OF PUBLIC ADMINISTRATION	PHILIPPIN	FREE
SILO, AMEURFINA	3711169	06/90	MIS-LAND BANK OF PHILIPPINES	PHILIPPIN	FREE
	3711166	06/90	MIN. OF JUSTICE & NAT. SEC.	TRINIDAD	FREE
SETIA, DANDAN	3711207	06/90	MINISTRY OF HEALTH	*BRUNEI	FREE
NDONYA, NELSON	3711176	06/90		NIGERIA	FREE
MAHUTA, IBRAHIM	3711209	06/90	SCHOOL OF SOCIAL & RURAL DEV.	NIGERIA	FREE
BULIVA, NEWTON	3711178	06/90	MIN OF INFORMATION & BROADCAST	KENYA	FREE

Total for page -

35

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SUBSCRIBER'S NAME	IDNUMBER	START DATE	ORGANIZATION	COUNTRY* *U.S. = 0	SUB TYPE
	3711171	06/90	SAVE THE CHILDREN	PERU	FREE
BARTULABA, GERTRUDES	3711196	06/90	DXCP RADIO	PHILIPPIN	FREE
BETIGERI, SHRI	3711173	06/90	D.F.P. GOVT. OF INDIA	INDIA	FREE
TIMOULALI, MOHAMED	3711182	06/90	CENTRE REGIONAL AFRICAIN DES	SENEGAL	FREE
LEE, CHANG SEEK	3711215	06/90		KOREA	FREE
TILDE, MUSA	3711192	06/90		NIGERIA	FREE
NAG, DR.A.K.	3711185	06/90	VIVEKANANDA INTL HEALTH CENTRE	INDIA	FREE
PRAKASH, CEDRIC	3711186	06/90	ST. XAVIER SOCIAL SERVICE STY	INDIA	FREE
DIAZ, MS.ALLISON	3711187	06/90		TRINIDAD	FREE
MABUZA, A.S.	3711204	06/90	TOWN COUNCIL OF MBABANE	SWAZILAND	FREE
MILLER, PAM	3711189	06/90	OHLTAVER & LIST TRUST CO.	SOUTH AFR	FREE
GOZEDE, B.J.	3711206	06/90	CITY OF BLANTYRE	*MALAWI	FREE
CAMINO, ALEJANDRO	3711191	06/90	PERUVIAN FOUNDATION FOR THE	PERU	FREE
	3711208	06/90	COMMUNITY INITIATIVES SUPPORT	KENYA	FREE
RAZZAQUE, DR.A.	3711193	06/90		IRAN	FREE
CASEY, MONS.LUIS	3711194	06/90	RADIO SAN MIGUEL	BOLIVIA	FREE
ODOMEL, PAUL	3711179	06/90	MIN OF ENVIRONMENT PROTECTION	UGANDA	FREE
GIL SIERRA, JUAN	3711212	06/90	COOSEDECO	COLOMBIA	FREE
TEKUR, S.P.	3711197	06/90	COMMUNITY HEALTH CELL	INDIA	FREE
ATANG, CHRISTOPHE	3711198	06/90	PAN AFRICAN INSTITUTE FOR	CAMEROON	FREE
DAVIS, C.T.	3711199	06/90	FAO	KENYA	FREE
ESIEY, NIKE	3711202	06/90	ACTION HEALTH INC.	NIGERIA	FREE
MWASHILINDI, GEOFFREY	3711201	06/90	TP & TC	TANZANIA	FREE
	3711223	06/90	COMMUNICATIONS BUREAU ASSOC.	NIGERIA	FREE
JANJUA, JAVED	3711203	06/90	PAK INTL UNESCO	PAKISTAN	FREE
EMIHIAN, S.A.G.	3711210	06/90	BENDEL BROADCASTING SERVICE	NIGERIA	FREE
SOW, ALIOU	3711205	06/90	INSTITUT DE PEDAGOGIE NATIONAL	*GUINEA	FREE
CHOI, CHAN HO	3711214	06/90	NATIONAL AGRICULTURAL COOP FED	KOREA	FREE
ADEYEMO, DANIEL	3711211	06/90	COMPREHENSIVE HEALTH CENTRE	NIGERIA	FREE
ENCALADA, MARCO	3711218	06/90	FUNDACION NATURA	ECUADOR	FREE
Total for page -	30				

SUBSCRIBER'S NAME	IDNUMBER	START DATE	ORGANIZATION	COUNTRY* *U.S. - 0	SUB TYPE
FARNSWORTH, SUSAN	3711213	06/90	CARE INTERNATIONAL AU NIGER	NIGER	FREE
RUIZ, ENMA	3711219	06/90	NOR PERUANA DE RADIODIFUSION	PERU	FREE
TAIWO, SAHEEB	3711222	06/90		NIGERIA	FREE
KELLY, KEVIN	3711229	06/90	USAID/PANAMA		FREE
COLOP, MOISES	3711224	06/90		GUATEMALA	FREE
IJEZIE, DR.JUSTIN	3711237	06/90		NIGERIA	FREE
SHERPER, KEITH	3711227	06/90	USAID/KAMPALA		FREE
MOGAKA, HULDAH	3711245	06/90	WILDLIFE CLUBS OF KENYA	KENYA	FREE
	3711234	06/90	INTEGRATED RURAL NUTRITION PRG	ZAMBIA	FREE
BOATEMG, ERNEST	3711231	06/90	OFFICE OF GHANAIAN ENTERPRISES	GHANA	FREE
WALTER, CARLE	3711244	06/90	NAT'L DEVELOPMENT FOUNDATION	*ANTIGUA,	FREE
	3711239	06/90	24 HOUR TELEVISION PHILIPPINE	PHILIPPIN	FREE
GOPAL, DR. W.	3711246	06/90		MAURITIUS	FREE
GIRMA, MANYAZEVAL	3711247	06/90	OGADEN AUTONOMOUS REGION	ETHIOPIA	FREE
MARATA, GEORGE	3711232	06/90	RADIO TANZANIA	TANZANIA	FREE
KATUNKU, CLETUS	3711235	06/90	BASIC HEALTH CENTRE	NIGERIA	FREE
PAYTON, WAYNE	3711242	06/90	BELIZE BROADCASTING NETWORK	BELIZE	FREE
	3711240	06/90	SHRAMIK BHARTI	INDIA	FREE
DAS, ACHYUT	3711225	06/90	AGRAGAMEE	INDIA	FREE
TASHI, KARMA	3711257	07/90	RESEARCH AND EXTENSION DIVISIO	*BHUTAN	FREE
GUNASEKERA, G.G.T.D.	3711249	07/90	SIGIRI NIWASA	SRI LANKA	FREE
VERGIS, THOMAS	3711261	07/90	CYRIAC ELIAS VOLUNTARY ASSOC.	INDIA	FREE
CAMBERS, DR.GILLIAN	3711268	07/90	CONSERVATION/FISH ERIES DEPT.	**VIRGIN	FREE
CAESAR, FIDEL	3711265	07/90		*ST VINCE	FREE
ALAM, M.U.	3711270	07/90	CENTRE FOR ADULT & CONTINUING	INDIA	FREE
KANTI RAY, TUSHAR	3711263	07/90	SHRAMIK VIDYAPEETH	INDIA	FREE
COLLENS, STEPHEN	3711248	07/90	ST. MICHAEL'S HOSPITAL, PRAMSO	GHANA	FREE
DAY, MARCUS	3711267	07/90	EDUCATION (VSO) SMALL PROJECTS	*ST. LUC1	FREE
SHARMA, PROF.B.M.	3711262	07/90	ATB UNIVERSITY	NIGERIA	FREE
SOTA GARCIA, ING.JORGE	3711264	07/90	INSTITUTO LATINOAMERICANO DE	MEXICO	FREE

Total for page - 30

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SUBSCRIBER'S NAME	IDNUMBER	START DATE	ORGANIZATION	COUNTRY* *U.S.- 0	SUB TYPE
MESSICK, JAMES	3711250	07/90	USAID/ ISLAMABAD		FREE
HOXENG, JAMES	3711342	08/88	S & T /ED		FREE
BLOCK, DR. CLIFF	3711343	08/88	S & T/ ED		FREE
SAHEED, TAIWO	3711285	08/90	PHARMACY STUDENT ASSOC.	NIGERIA	FREE
KAILI, JAMES	3711273	08/90	CHRIST THE KING COLLEGE	SIERRA LE	FREE
RAFF, DR.CARMEN	3711287	08/90	MANCHESTER UNIVERSITY	ENGLAND	FREE
ATAEI, MOHAMMAD	3711292	08/90		IRAN	FREE
DAVIES, CHARLES	3711301	08/90	F.A.O.	KENYA	FREE
DADZIE, FRANKLIN	3711286	08/90		GHANA	FREE
HOW, AGNES	3711271	08/90	ASIAN & PACIFIC DEVELOPMENT	MALAYSIA	FREE
EL GILANY, ABDEL HADY	3711284	08/90	MANSOURA UNIVERSITY	EGYPT	FREE
ROYES, HEATHER	3711289	08/90	INTERMEDIA ASSOCIATES, LTD	JAMAICA	FREE
	3711298	08/90	ISLAMIC CENTER FOR EDUCATION	LEBANON	FREE
JAWAHAR, DR. A.	3711275	08/90		INDIA	FREE
SHARLAND, DR.ROGER	3711276	08/90	ORGANIZATION OF AFRICAN	KENYA	FREE
WIRJATMAOI, BAMBANG	3711277	08/90	DIVISION OF NUTRITIONAL SC.		FREE
SETIA, DANDAN	3711278	08/90	MINISTRY OF HEALTH	*BRUNEI	FREE
BURGOS, ANNABELLE	3711295	08/90	PHILDHERRA	PHILIPPIN	FREE
KENNEY, ASTA	3711280	08/90	NIGER FAMILY HEALTH DEMOGRAPHY	NIGER	FREE
MONY, M.G.	3711281	08/90	SOCIETY FOR HEALTH EDUCATION	INDIA	FREE
DIMAS, MATHEW	3711282	08/90	NIGERIA SOCIETY OF ENGINEERS	NIGERIA	FREE
DANMALLAM, BAWA	3711283	08/90	MINISTRY OF AGRICULTURE & AGRAGAMEE	NIGERIA	FREE
DAS, VIDHYA	3711300	08/90		INDIA	FREE
ADIELE, BRUNO	3711297	08/90	GENERAL STUDIES DIVISION	NIGERIA	FREE
LEON RIVAS, FAUSTO	3711302	08/90	RADIO "ONDA NUEVA"	PERU	FREE
UKAEGBU, ALFREDO	3711303	08/90	UNESCO - ROSTA	KENYA	FREE
ANENE, SAM	3711288	08/90		NIGERIA	FREE
FIELDS, RACHEL	3711291	08/90	INTER-ACTION ISRAEL	ISRAEL	FREE
ALCOCER, JOSE	3711274	08/90	CENTRO NACIONAL DE COMPUTACION	BOLIVIA	FREE
JOSEPH, CATHERINE	3711272	08/90	BAY OF BENGAL PROGRAMME	INDIA	FREE
PIEDRAHITA, ARTURO	3711294	08/90	UNIVERSIDAD MILITAR NUEVA	COLOMBIA	FREE
ADEKOYA, DR.ADEBOLA	3711308	08/90	COMMUNICATIONS BUREAU ASSOC.	NIGERIA	FREE

Total for page - 32

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SUBSCRIBER'S NAME	IDNUMBER	START DATE	ORGANIZATION	COUNTRY* *U.S.- 0	SUB TYPE
NYENKE, CLEMENT	3711306	08/90		NIGERIA	FREE
FOSTER GROSS, DONALD	3711344	08/90	PFM		FREE
MKAMYIKA, CATHERINE	3711309	08/90	MINISTRY OF HEALTH	KENYA	FREE
GAYOSO, ANTONIO	3711346	08/90	S & T/ HR		FREE
BADAWI, HAYDAR	3711307	08/90	OHIO UNIVERSITY		FREE
AL HASSAN, D.ALYU	3711316	08/90	SCHOOL OF HEALTH TECHNOLOGY	NIGERIA	FREE
CALESTOUS, JUMA	3711317	08/90	AFRICAN CENTER FOR TECHNOLOGY	KENYA	FREE
	3711318	08/90	ISCFO	ST LUCIA,	FREE
	3711319	08/90	GUYANA PUBLIC COMMUNICATIONS	GUYANA	FREE
JANAVARUM, DR.	3711320	08/90	COMMUNICATION DEPARTMENT	INDIA	FREE
	3711313	08/90	ENDA - EDITION	SENEGAL	FREE
	3711322	08/90	PRIMARY HEALTH CARE	NIGERIA	FREE
BAKHDA, SUSHILA	3711323	08/90	NAIROBI ACADEMY SECONDARY SCHL	KENYA	FREE
BISSEL, RICHARD	3711340	08/90	PPC		FREE
YANKAH, KOJO	3711325	08/90	GHANA INSTITUTE OF JOURNALISM	GHANA	FREE
BUSHAN, INDU	3711326	08/90	DIRECTORATE, MEDICAL & HEALTH	INDIA	FREE
MAY, BARATUNDE	3711327	08/90	CORNELL UNIVERSITY		FREE
MARPAUNG, CLOTILDE	3711328	08/90	SUBDIRECTORATE FOOD CONSUMPTIO	INDONESIA	FREE
MAKURIA, RAHEL	3711329	08/90	EDUCATIONAL MEDIA AGENCY	ETHIOPIA	FREE
LUSOWA, DOUGLAS	3711330	08/90	UNICEF/ KAMPALA (UGANDA)		FREE
CHUI, JAMES	3711331	08/90	UNFPA		FREE
CASIMIRO, MA LUZ	3711332	08/90	PUBLIC INFORMATION & HEALTH	PHILIPPIN	FREE
NADJMUDDIN,	3711333	08/90	DITJEN BIMAS ISLAM & UR HAJI	INDONESIA	FREE
SHOLIHIN, ZAINAL	3711334	08/90	DITPENAI, DITJEN BIMAS ISLAM	INDONESIA	FREE
SUMADI, SUPRAPTO	3711335	08/90	BOGOR RESEARCH INSTITUTE FOR	INDONESIA	FREE
	3711336	08/90	CESO	NETHERLAN	FREE
SALAZAR OCHOA, LUIS	3711305	08/90	THE SAVE THE CHILDREN FUND, UK	PERU	FREE
BARNES, VICTOR	3711338	08/90	PPC		FREE
BERGAUST, JEAN	3711339	08/90	S & T/ ED		FREE
MEYER, ANTHONY	3711348	08/90	S & T/ ED		FREE
CUERVO, AMALIA	3711341	08/90	S & T /ED		FREE
NICASTRO, THOMAS	3711350	08/90	ANE		FREE
MANILERD, CHALEO	3711311	08/90	INSTITUTE FOR THE PROMOTION OF	THAILAND	FREE

Total for page - 33

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13

SUBSCRIBER'S NAME	IDNUMBER	START DATE	ORGANIZATION	COUNTRY* *U.S.- 0	SUB TYPE
SAYRE, ELMER	3711360	08/90	SERVUS	PHILIPPIN	FREE
GARZA, LEO	3711345	08/90	LAC		FREE
DE RAMIREZ, LILLIAN	3711362	08/90	CEDCAS	COSTA RIC	FREE
METHOD, FRANK	3711347	08/90	PPC/ PDPR		FREE
RASSEKH, CHAHINE	3711352	08/90	USAID/ BAMAKO		FREE
MORRIS, THOMAS	3711349	08/90	PPC/ PDPR		FREE
	3711354	08/90	FEDERACION APOYO FAMILIAR	ARGENTINA	FREE
PELCZAR, RICHARD	3711351	08/90	USAID/ JAKARTA	INDONESIA	FREE
MENEZES, CASMIR	3711321	08/90	DHARMASTHALA	INDIA	FREE
			RURAL DEV. PROJCT		
KLONIN, DR.HILARY	3711355	08/90	BROMT	NEPAL	FREE
GOEL, DR. SARYU	3711357	08/90	WORLD UNIVERSITY SERVICE	NIGERIA	FREE
DE GOMEZ, MA. LUISA	3711359	08/90	CINDEG/ REDUC	GUATEMALA	FREE
MBUGUA, KIARIE	3711361	08/90	MINISTRY OF HEALTH	KENYA	FREE
CHADWICK, MAGGIE	3710618	09/89	PRAGMA CORPORATION		FREE

TOTAL FOR CATEGORY FREE = 347

Total for page = 14

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SUBSCRIBER'S NAME	IDNUMBER	START DATE	ORGANIZATION	COUNTRY* *U.S. = 0	SUB TYPE
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Subscription category: RENEW (SUB- new paying, RENEW- renewals; EXCH- exchange)

FETT, JOHN	3704774	01/81	UNIVERSITY OF WISCONSIN		RENEW
	3707240	01/86	RESOURCE MATERIALS COLLECTION		RENEW
	3707882	01/86	LOMA LINDA UNIVERSITY LIBRARY		RENEW
GENTLE, TOM	3707191	01/86	AGRICULTURAL COMMUNICATIONS		RENEW
GREEN, CYNTHIA	3707192	01/86			RENEW
MANOFF, RICHARD	3707211	01/86	MANOFF INTERNATIONAL INC.		RENEW
MURPHY, ELAINE	3707220	01/86	POPULATION REFERENCE BUREAU		RENEW
	3708279	01/87	SERIALS SECTION LIBRARY	**CANADA	RENEW
BURKE, RICHARD	3708281	01/87	INDIANA UNIVERSITY		RENEW
	3709268	01/88	IEES CLEARINGHOUSE, LEARNING		RENEW
BERKLAND, MELVA	3709269	01/88	IOWA STATE UNIVERSITY		RENEW
MERCER, MALCOLM	3709278	01/88	OVERSEAS EDUCATION UNIT	ENGLAND	RENEW
	3709842	01/88	UNIVERSITY OF ANN ARBOR		RENEW
BIRT, PETER	3709858	01/89	PETER BIRT COMMUNICATIONS	**CANADA	RENEW
BROWN, RAYMOND	3709867	01/89	RAY BROWN & ASSOCIATES		RENEW
DIDIER, JOHN	3710546	01/89	ECONOMIC DEVELOPMENT INSTITUTE		RENEW
TITUS, AMY	3708400	02/80	TITUS AUSTIN, INC.		RENEW
GUSTAFSON, MARILYNE	3701825	02/81			RENEW
EVANS, JAMES	3705155	02/82	AGRICULTURE COMMUNICATION		RENEW
BROWNE, DONALD	3706229	02/83	DEPT. OF SPEECH COMMUNICATION		RENEW
SANER, RAYMOND	3706840	02/85	DRES. R. & L. SANER-YIU	SWITZERLA	RENEW
SATOMI, SAKIO	3708318	02/85	RES. INST. OF TELECOM. & EC.	JAPAN	RENEW
GARDINER, LAUREL	3709320	02/88		**CANADA	RENEW
WALKER, GELINE	3709300	02/88	A.C.C.I.S.	SWITZERLA	RENEW
Total for page -	24				.../

111

SUBSCRIBER'S NAME	IDNUMBER	START DATE	ORGANIZATION	COUNTRY* *U.S. = 0	SUB TYPE
STEEVES, LESLIE	3709297	02/88	SCHOOL OF JOURNALISM		RENEW
	3710216	02/89	INDIANA UNIVERSITY LIBRARY		RENEW
AL HOWSHABI, MANSOUR	3710210	02/89	STATE UNIV OF MICHIGAN		RENEW
SHOOK, FREDERICK	3710194	02/89	COLORADO STATE UNIVERSITY		RENEW
KAJER, THOMAS SENIOR, MAXWELL	3710186	02/89		INDIA	RENEW
	3709857	02/89	JHU/PCS COUNTRY REPRESENTATIVE	BANGLADES	RENEW
	3710219	02/89	SERIALS DEPARTMENT		RENEW
HEINZE, KIRK	3710209	02/89	MICHIGAN STATE UNIV.		RENEW
DONOGHUE, BEVERLY	3710198	02/89	APPLIED RESEARCH LABORATORIES		RENEW
WILEMAN, RALPH	3705985	03/83	UNIVERSITY OF NORTH CAROLINA		RENEW
	3705969	03/83	UNIVERSITY OF FLORIDA		RENEW
GRANT LEWIS, SUZANNE	3706415	03/84			RENEW
	3707371	03/86	LEARNING RESOURCE CENTER		RENEW
STUART, SARA	3707368	03/86	MARTHA STUART COMMUNICATIONS		RENEW
MYTTON, GRAHAM	3707367	03/86	BRITISH BROADCASTING CORP.	ENGLAND	RENEW
OGILVIE, JEAN	3707372	03/86	QUITHE COMMUNICATIONS INC.	**CANADA	RENEW
RIFAS, LEONARD	3708786	03/87	EDUCOMICS		RENEW
VARADHAN, VASU	3709340	03/88			RENEW
WHITE, SHIRLEY	3709341	03/88	CORNELL UNIVERSITY		RENEW
BEMBRIDGE, TIMOTHY	3710246	03/89	UNIVERSITY OF FORT HARE	SOUTH AFR	RENEW
HETZER, WILLIAM	3711255	03/90	UNICEF		RENEW
	3706853	04/85	GEORGIA UNIVERSITY LIBRARIES		RENEW
	3706870	04/85	DOOLEY FOUND./INTERMED-U SA INC		RENEW
LORANTOS, MARTHA P.O. 31301405,	3707397	04/88			RENEW
	3709370	04/88	SAN DIEGO STATE UNIVERSITY		RENEW
CROWDER, VAN	3709382	04/88	INST OF FOOD & AG. SCI		RENEW
BURGELMAN, J. CLAUDE	3709391	04/88	FREE UNIVERSITY OF BRUSSELS	BELGIUM	RENEW

Total for page - 27

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100

SUBSCRIBER'S NAME	IDNUMBER	START DATE	ORGANIZATION	COUNTRY* *U.S. - 0	SUB TYPE
CANN, DR. ROGER	3709392	04/88	CANADIAN BAPTIST OVERSEAS MIS.	**CANADA	RENEW
MAYER, DOE	3709367	04/88	JOHNS HOPKINS UNIVERSITY, PCS		RENEW
YERBURY, J. COLIN	3710294	04/89	CENTER FOR DISTANCE EDUCATION	**CANADA	RENEW
MONGALO, ADELAIDE	3710300	04/89	UNIV. OF WITWATERSRAND	SOUTH AFR	RENEW
RYAN, JENNY	3710256	04/89	LAUBACH LITERACY INTERNATIONAL		RENEW
WEEKS, JOHN	3710319	04/89	GEONOMICS INSTITUTE		RENEW
JEDIG, DOROTHE	3710305	04/89	ROSKILDE UNIVERSITETS BIBLIOTEK	DANMARK	RENEW
	3710280	04/89	INST. INT. PLANIFICATION EDUC.	FRANCE	RENEW
STAHMER, ANNA	3710325	04/89		**CANADA	RENEW
HANSEN, PER	3710279	04/89	DANIDA DOCUMENTATION CENTRE	DANMARK	RENEW
FLOURNOY, DON	3708763	05/87	SCHOOL OF TELECOMMUNICATION		RENEW
OGAN, CHRISTINE	3708764	05/87	SCHOOL OF JOURNALISM		RENEW
WECHSLER, HOWELL	3709133	05/87	NEW YORK CITY DEPT. OF HEALTH		RENEW
	3708721	05/87	INSTITUTE OF INTERNATIONAL ED.		RENEW
MCCREA, EDWARD	3709453	05/88	NORTH AMER ASSOC OF ENVIR ED		RENEW
	3709368	05/88	INTERNATIONAL RESOURCE CENTER		RENEW
SCHMELING, DAVID	3710328	05/89	FAVA/CA		RENEW
GLADKIKH, OLGA	3710406	05/89	COODY INTERNATIONAL INSTITUTE	**CANADA	RENEW
GERACE, FRANK	3710394	05/89	NYC DEPT. OF TRANSPORTATION		RENEW
WOLF, CHARLES	3710415	05/89	ONEIDA DEVELOPMENT CONSULTANTS		RENEW
SIEGMUND, MARK	3710411	05/89	UNIVERSITY OF THE AIR		RENEW
BARRY, JANET	3710387	05/89	MCGILL UNIVERSITY	**CANADA	RENEW
JOYNER, ORVILL	3710417	05/89	SOUTHERN ILLINOIS UNIVERSITY		RENEW
RUBEN POWELL, BARBARA	3711269	05/89			RENEW
	3704847	06/81	DANMARKS PEDAGOGISKE BIBLIOTEK	DANMARK	RENEW

Total for page - 25

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119

SUBSCRIBER'S NAME	IDNUMBER	START DATE	ORGANIZATION	COUNTRY* *U.S. = 0	SUB TYPE
KORZENNY, FELIPE	3706054	06/83			RENEW
HEIN, KURT	3706066	06/83	INTERNATIONAL BAHAI AV CENTRE	**CANADA	RENEW
MORRIS, ROBERT	3708743	06/87	MANAGEMENT TRAINING AND		RENEW
CAMBRIDGE, VIBERT	3709144	06/87	OHIO UNIVERSITY		RENEW
TOMLINSON, TIMOTHY	3709063	06/87	NORTHWESTERN COLLEGE		RENEW
GWYN, ROBERT	3709093	06/87	RADIO, TV MOTION PICTURES DEPT		RENEW
PETERS, JOAN	3707632	06/88	SCHOOL OF NUTRITION AND	**CANADA	RENEW
CARTER, GEORGE	3710441	06/89	RHODES UNIVERSITY	SOUTH AFR	RENEW
PEDERSEN, JANNICK	3710442	06/89	DANEDUC CONSULTING	DANMARK	RENEW
ROTA, JOSEP	3710464	06/89	CENTER FOR INTERNATIONAL STUDY		RENEW
GRANT, DR. SYDNEY	3710461	06/89			RENEW
KEOUGH, ERIN	3710488	06/89	TELEMEDICINE CENTRE	**CANADA	RENEW
	3710478	06/89	CIDA/ DEVELOPMENT INFO. CTR.	**CANADA	RENEW
LAUBJERG, AVIS	3710443	06/89		DANMARK	RENEW
BOZMAN, MARTHA	3710489	06/89	AMERICAN ASSOC. OF SCHOOL ADM		RENEW
LOW, JOHN	3706997	07/85	IAN MACDONALD AND ASSOCIATES	ENGLAND	RENEW
FRANKE, AMY	3706973	07/85	CORONET INTERNATIONAL		RENEW
MOLNAR, HELEN	3707003	07/85		AUSTRALIA	RENEW
BOURGAULT, LOUISE	3707702	07/86	NORTHERN MICHIGAN UNIVERSITY		RENEW
MCCLARY, ALICIA	3707730	07/86	UNIVERSITY OF TENNESSEE		RENEW
	3707710	07/86	SERIALS DEPARTMENT CB#3938		RENEW
SULLY, PAUL	3708019	07/86	GRESEA	BELGIUM	RENEW
	3708772	07/87	LOUISIANA DEPARTMENT OF HEALTH		RENEW
ABRAMS, LINDA	3708886	07/87	INSTITUTE FOR TRAINING & DEV.		RENEW
GOULD, CHARLES	3708887	07/87	ROCKWELL INTERNATIONAL, AD 21		RENEW
MANDELBAUM, JUAN	3710512	07/89			RENEW
DOZZI, AMELIA	3710511	07/89			RENEW
MACKEY, BERTHOLD	3710522	07/89	THE MARY MICHAEL LIBRARY	**CANADA	RENEW
MUNDY, PAUL	3710502	07/89	UNIV. OF WISCONSIN-MADISON		RENEW

Total for page - 29

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SUBSCRIBER'S NAME	IDNUMBER	START DATE	ORGANIZATION	COUNTRY* *U.S.- 0	SUB TYPE
KING, JAMES	3710525	07/89	UNIVERSITY OF NEBRASKA		RENEW
KING, PETER	3710517	07/89		ENGLAND	RENEW
COCKBURN, ELIZABETH	3711253	07/90	RURAL EXTENSION STUDIES	**CANADA	RENEW
	3711254	07/90	UNIVERSITY OF MINNESOTA		RENEW
	3700918	08/80	PERIODICALS SECTION, CLD	SWITZERLA	RENEW
GROOT, HANS	3701832	08/80	FAMILY PLANNING INT.ASSISTANCE		RENEW
HATESOHL, DELMAR	3701308	08/80			RENEW
CONWAY PISKORSKI, MAEV	3701466	08/80	RADIO TELEFIS EIREANN	IRELAND	RENEW
GRIESHOP, JAMES	3701838	08/80	UNIVERSITY OF CALIFORNIA		RENEW
FRIEND, JAMESINE	3702788	08/80			RENEW
GRIFFITHS, MARCIA	3701735	08/80	MANOFF GROUP, INC.		RENEW
	3701813	08/80	NORTHWESTERN UNIV. LIBRARY		RENEW
LARSON, PATRICIA	3702426	08/80	MFM / FFH FOUNDATION		RENEW
HUTAR, PATRICIA	3701032	08/80	AMERICAN MEDICAL ASSOCIATION		RENEW
PATERSON, GEOFFREY	3702509	08/80		AUSTRALIA	RENEW
HAWKINS, DR.	3702500	08/80	AGRICULTURE EXTENSION DEPT.	AUSTRALIA	RENEW
NEVILLE, P.	3702345	08/80	THE LEPROSY MISSION	ENGLAND	RENEW
DOSA, MARTA	3701696	08/80			RENEW
SIMMONS, JIM	3708320	08/80	SEATTLE PUBLIC SCHOOLS		RENEW
SWING, NANCY	3708341	08/80			RENEW
McANANY, EMILE	3708776	08/80	DEPARTMENT OF RADIO-TV-FILM		RENEW
	3708948	08/87	DONALD B. WATT LIBRARY		RENEW
HOBEN, SUSAN	3709037	08/87			RENEW
DIZARD, WILSON	3708924	08/87	CENTER FOR STRATEGIE AND UNIVERSITY OF HAWAI AT MANOA		RENEW
OGDEN, MICHAEL	3708944	08/87	UNIVERSITY OF HAWAI AT MANOA		RENEW
HEESTAND, DIANE	3709011	08/87	USC SCHOOL OF MEDICINE		RENEW
BAYLEY, RICHARD	3708959	08/87			RENEW
COWLAN, BURT	3708923	08/87	COWLAN ASSOCIATES		RENEW
CORNELL, JAMES	3709506	08/88	INTERN'L SCI WRITERS ASSOCIATE		RENEW
P.O.E5378674,	3710530	08/89	UNIVERSITY OF PENNSYLVANIA		RENEW
WILSON, DR.THOMAS	3711293	08/90		**CANADA	RENEW
	3711296	08/90	WINGS		RENEW

Total for page -

32

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SUBSCRIBER'S NAME	IDNUMBER	START DATE	ORGANIZATION	COUNTRY* *U.S. = 0	SUB TYPE
KENNEDY, DAUN	3711356	08/90	WORLD UNIVERSITY SERVICE CND	**CANADA	RENEW
MILTZ, ROBERT	3711314	08/90			RENEW
YOUNG, WANDA	3711312	08/90		**CANADA	RENEW
RUTH, PAUL	3700999	09/80	MARYKNOLL OVERSEAS EXT. SERV.		RENEW
	3705663	09/82	WASHINGTON STATE UNIVERSITY		RENEW
GROSSENBACHER, RENE	3706207	09/83		SWITZERLA	RENEW
HARRISON, PATRICK	3706586	09/84			RENEW
HOLLIS, CHRISTINE	3706590	09/84			RENEW
COMBIER, ELIZABETH	3706570	09/84	ECOMEDIA		RENEW
ELDERKIN, KENTON	3707060	09/85			RENEW
RAWKINS, PHILLIP	3707811	09/86	RYERSON POLYTECHNICAL INST.	**CANADA	RENEW
SITARAM, K.	3707801	09/86	RADIO-TV		RENEW
HANSEN, DAVID	3707942	09/86	MINNESOTA EXTENSION SERVICE		RENEW
	3707957	09/86	JENKINS RESEARCH LIBRARY		RENEW
LEBOW, GAIL	3708848	09/87			RENEW
	3708907	09/87	ARTHUR D. LITTLE, INC.		RENEW
KEHRBERG, NORMA	3708909	09/87	UMCOR		RENEW
BRUK, JUDITH	3708841	09/87	NEW YORK UNIVERSITY		RENEW
GALLAGHER, MARGARET	3708825	09/87		FRANCE	RENEW
NICHTER, MIMI	3709651	09/88			RENEW
PLOPPER, SUZANNE	3710270	09/88			RENEW
HEILMAN, PHILIP	3710647	09/89			RENEW
	3707173	10/85	CENTER FOR POPULATION OPTIONS		RENEW
LeMAY, SHARON	3707969	10/86	COMPASSION INTERNATIONAL		RENEW
DAUBER, ROSLYN	3708008	10/86	DAUBER FILM SERVICES		RENEW
HOWARD, WILLIAM	3707950	10/86	OHIO UNIVERSITY		RENEW
DORIGAN, CHARLES	3708020	10/86			RENEW
BOSCH, RONALD	3708094	10/86	UNIVERSITY OF MASSACHUSETTS		RENEW
KUBOTA, KENICHI	3707865	10/86			RENEW
WILLIAMS, GLEN	3707849	10/86		ENGLAND	RENEW
GEORGE, AMISO	3708800	10/87	OHIO UNIVERSITY		RENEW
EAGEN, M.	3708798	10/87	LIBRARY TELESAT	**CANADA	RENEW
DeSTEFANO, JOHANNA	3709150	10/87	OHIO STATE UNIVERSITY		RENEW
FARSAD, FOROUZ	3709188	10/87	FOOD & AGRIC. ORGANIZATION OF		RENEW
COLDEVIN, GARY	3709149	10/87	CONCORDIA UNIVERSITY	**CANADA	RENEW

Total for page - 35

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SUBSCRIBER'S NAME	IDNUMBER	START DATE	ORGANIZATION	COUNTRY* *U.S.- 0	SUB TYPE
CALHOUN, LONNIE	3709714	10/88	ALLPOINTS INTERNATIONAL LTD.		RENW
	3709735	10/88	GRESEA ASBL	BELGIUM	RENW
EWING, MARTHA	3709712	10/88			RENW
RICHARDSON, MEREDITH J	3709738	10/88	FOSTER PARENTS PLAN INTL		RENW
PETT, DENNIS	3708765	10/89	I. S. T.		RENW
RODRIGUEZ, ROSALIA	3709507	10/89	INST FOR INTERN'L STUDIES		RENW
SAMSON, MICHEL	3710714	10/89	CANADIAN BROADCASTING CORP.	**CANADA	RENW
	3706715	11/84	MONROE GUTMAN LIBRARY		RENW
BRUNGARDT, SAMUEL	3709201	11/87	MINNESOTA EXTENSION SERVICE		RENW
DECKER, PHILIP	3709222	11/87	ENLACE:CENTRO DE COMUNICACION		RENW
ARMSTRONG, CORINNE	3709233	11/87	WILLIAM CAREY INT. UNIVERSITY		RENW
DUNCAN, BURRIS	3709746	11/88	UNIV OF ARIZONA		RENW
PIERCE, PAULA	3709749	11/88			RENW
	3704983	12/81	WINROCK INTERNATIONAL LIBRARY		RENW
	3706221	12/83	LIBRARY, WORLD RESOURCES INST.		RENW
MOLENDIA, MICHAEL	3708117	12/86	INDIANA UNIVERSITY		RENW
PERSONS, HEATHER	3708150	12/86	EDUCATIONAL TELECOMMUN. PROJ.	**CANADA	RENW
	3708199	12/86	UNICEF / REFERENCE CENTRE	SWITZERLA	RENW
FEDALE, SCOTT	3708124	12/86	DEPT OF AGRICULTURAL INFORMATN		RENW
	3709253	12/87	JOURNALISM READING ROOM		RENW
HARDY, FIONA	3709258	12/87	SAVE THE CHILDREN ENGLAND FUND		RENW
	3709843	12/88	MSU/AFRICAN STUDIES CTR.		RENW
NISHINO, YOSHIMI	3709799	12/88			RENW
PEJSACH, MICHAEL	3709849	12/88	TULANE UNIVERSITY MEDICAL CTR.		RENW
	3709852	12/88	FORDHAM UNIVERSITY LIBRARY		RENW
FEUER, CARL	3709447	5/88			RENW
SELIGMAN, DAVID	3709420	5/88	DEVELOPMENT MEDIA ENGLAND SERVICES		RENW

Total for page - 27

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SUBSCRIBER'S NAME	IDNUMBER	START DATE	ORGANIZATION	COUNTRY* *U.S.- 0	SUB TYPE
KIETZMAN, DALE	3709463	6/88	WILLIM CAREY INTERNATION UNVI		RENEW
BLANCHARD, JAY	3709502	7/6/88	ARIZONA STATE UNIVERSITY		RENEW
BALIN, MARIANNE	3709501	7/6/88	SAN FRANCISCO GEN HOSPITAL		RENEW
OGUNDIMU, FOLU	3709503	7/88	INDIANA UNIVERSITY		RENEW
FRYER, MICHELLE	3707531		BLOOMINGTON USAID/ LA PAZ		RENEW
TOTAL FOR CATEGORY RENEW -					204

Total for page -					5
					.../

SUBSCRIBER'S NAME	IDNUMBER	START DATE	ORGANIZATION	COUNTRY* *U.S. = 0	SUB TYPE
Subscription category: SUB (SUB= new paying, RENW= renewals; EXCH= exchange)					
JALLOV, BIRGITTE	3706725	02/85		FRANCE	SUB
CASSTEVENS, KENNETH	3709331	02/87	UNIVERSITY OF TEXAS AT TYLER		SUB
DAY, JAMES	3705316	03/82	BROOKLYN COLLEGE		SUB
GOODELL, GRACE	3709357	03/88	THE JOHNS HOPKINS UNIVERSITY		SUB
TERRELL, NENA	3709356	03/88	OEF INTERNATIONAL		SUB
MAYER JR., ARNOLD	3710928	03/90	JOHN BROWN UNIVERSITY		SUB
SABA, FARHAD	3710934	03/90	SAN DIEGO STATE UNIVERSITY		SUB
CLARK, SHERRI	3710959	03/90			SUB
KWON, MEE SIK	3710972	03/90	CENTER FOR INTL EDUCATION		SUB
MISSEN, CLIFF	3710969	03/90	NEWSPRING AFRICA		SUB
FEASLEY, CHARLES	3710958	03/90	OKLAHOMA STATE UNIVERSITY		SUB
AITKIN, HELEN	3710965	03/90		**CANADA	SUB
SHEIL, MARGARET	3710938	03/90	LANGUAGES & MULTICULTURAL CENT	AUSTRALIA	SUB
HOLLIS, CHRISTINE	3706814	04/85	EDC INC		SUB
GWIN, PAUL	3711034	04/90	KANSAS STATE UNIVERSITY		SUB
	3711022	04/90	PAN AMERICAN HEALTH ORGANIZATN		SUB
GRAYBILL, DR. DONALD	3711036	04/90			SUB
CHAMBERLAIN, JOAN	3711025	04/90	NTL INST OF DIABETES DIGESTIVE		SUB
BARGMAN, CAROLYN	3711042	04/90			SUB
SIARA DECKER, MARY ANN	3711039	04/90	AKADEMIE DES DEUTSCHEN	FED REP G	SUB
	3711044	04/90	HOMER BABBIDGE LIBRARY BOX U-5		SUB
MACKIE, MAGGIE	3711045	04/90	CERETECH LTD		SUB
TORREY KHTIKIAN, NANCY	3706789	05/81	INTER-CULTURAL COMMUN. SERVICES		SUB
	3708767	05/87	UNIVERSITY OF IOWA, T 73686		SUB
FRASER, COLIN	3710367	05/89	AGRISYSTEMS SRL	ITALY	SUB
GOMEZ, RICARDO	3711121	05/90		**CANADA	SUB
FERGUSON, FRANK	3711132	05/90	C. A. INC.		SUB
	3711117	05/90	NATIONAL CANCER INSTITUTE		SUB
STOCKMAN, SHAWN	3711124	05/90			SUB
TIENE, DREW	3711164	05/90	KENT STATE UNIVERSITY		SUB

Total for page - 30

.../

119

SUBSCRIBER'S NAME	IDNUMBER	START DATE	ORGANIZATION	COUNTRY* *U.S. = 0	SUB TYPE
SOANE, ANNETTE	3711151	05/90	THE COMMONWEALTH OF LEARNING	**CANADA	SUB
TOBIN, J.	3706539	06/84	TVONTARIO	**CANADA	SUB
ALEXANDER, BARBARA	3711184	06/90	CGNET SERVICES		SUB
MAHONEY, MARK	3711168	06/90	FLORIDA STATE UNIVERSITY		SUB
HORWITH, BRUCE	3711188	06/90	ISLAND RESOURCES FOUNDATION		SUB
LUTHRA, RASHMI	3711177	06/90	UNIV. OF WISCONSIN-MADISON		SUB
	3711216	06/90	STG RADIO NETHERLAND	NETHERLAN	SUB
KENDRICK, ODIS	3711175	06/90	NATL. AGRAL. RESEARCH PROJECT	EGYPT	SUB
MCLEAN, POLLY	3711221	06/90	UNIVERSITY OF COLORADO		SUB
	3711217	06/90	SAVE THE CHILDREN FUND	ENGLAND	SUB
KINYANJUI, PETER	3711174	06/90	THE COMMONWEALTH OF LEARNING	**CANADA	SUB
OEPEN, MANFRED	3711241	06/90		FED REP G	SUB
COLTER, BARBARA	3710497	07/89	UNIVERSITY OF GUELPH	**CANADA	SUB
BUCKLEY, TIMOTHY	3710521	07/89	BUCKLEY COMMUNICATIONS		SUB
FREIMUTH, VICKI	3710518	07/89	UNIVERSITY OF MARYLAND		SUB
HANSON, DR. MARK	3710499	07/89	UNIVERSITY OF CALIFORNIA		SUB
JENKS, FREDERICK	3710508	07/89	FLORIDA STATE UNIVERSITY		SUB
DAWSON P.O.A27224, GE	3710500	07/89	INTERACTIVE MEDIA SCIENCE PROJ		SUB
	3711260	07/90	BAYERISCHER RUNDFUNK	FED REP G	SUB
	3711251	07/90	BUREAU DE L'O.I.T.	SENEGAL	SUB
CURRIE, DIANE	3711266	07/90	UNIVERSITY OF GUELPH	**CANADA	SUB
AABENHUS, OLE	3711252	07/90	DANICOM	DANMARK	SUB
	3701561	08/80	JOURNALISM READING ROOM		SUB
SHUTE, JAMES	3701996	08/80	UNIVERSITY OF GUELPH	**CANADA	SUB
SHEARS, ARTHUR	3706526	08/89	SHEAR. COM. SERVICES	**CANADA	SUB
WOODWARD, BETTY	3710587	08/89	SAVE THE CHILDREN		SUB
BAYGELL, RUTH	3710544	08/89			SUB
COBB, EDWIN	3710545	08/89	RURAL COMMUNITY ASSISTANCE		SUB
KENYON, JANET	3710541	08/89	LUTHERAN WORLD FEDERATION	ENGLAND	SUB

Total for page -

29

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100

SUBSCRIBER'S NAME	IDNUMBER	START DATE	ORGANIZATION	COUNTRY* *U.S. - 0	SUB TYPE
KNIGHTLY, TRISH	3710543	08/89	PLANNED PARENTHOOD OF AMERICA		SUB
MERCHANT, VASANT	3710557	08/89			SUB
TOWNE, RICHARD	3710563	08/89			SUB
RUSH, RAMONA	3710565	08/89	UNIVERSITY OF KENTUCKY		SUB
HUDSPETH, DELAYNE	3710566	08/89	UNIVERSITY OF TEXAS		SUB
MAGARICK, RONALD	3710567	08/89	JHPIEGO		SUB
BRADLEY, SARRAH	3710568	08/89		ENGLAND	SUB
POSTLETHWAITE, ROBERT	3710580	08/89			SUB
	3710581	08/89	INDIANA WESLEYAN UNIV. LIBRARY		SUB
FREEDMAN, MICHAEL	3710596	08/89			SUB
DEARDEN, REGINA	3710590	08/89			SUB
DEDOLPH, CAROLYN	3710592	08/89			SUB
DUBLIN, SELMA	3710595	08/89	INTERNATIONAL TECHNICAL SVCES.		SUB
FORMAN, KENNETH	3710550	08/89			SUB
JACOBSON, THOMAS	3711279	08/90	SUNY/BUFFALO AMHERST CAMPUS		SUB
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121

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10/12

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155

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159-