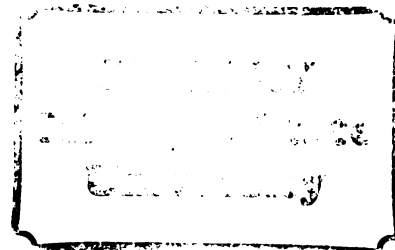


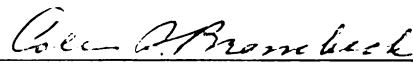
THESIS
V.1



This is to certify that the
dissertation entitled
AN ANALYSIS OF AN APPLIED TRANSNATIONAL/INTERNATIONAL
INFORMATION EXCHANGE NETWORK:
PLANNERS, PRACTITIONERS, AND RESEARCHERS OF
NON-FORMAL EDUCATION FOR DEVELOPMENT
presented by
JOAN MARIE CLAFFEY

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Administration & Curriculum


Major professor

Date 4-30-82



RETURNING MATERIALS:
Place in book drop to
remove this checkout from
your record. FINES will
be charged if book is
returned after the date
stamped below.

--	--	--

AN ANALYSIS OF AN APPLIED TRANSNATIONAL/INTERNATIONAL
INFORMATION EXCHANGE NETWORK:
PLANNERS, PRACTITIONERS, AND RESEARCHERS OF
NON-FORMAL EDUCATION FOR DEVELOPMENT

By

Joan Marie Claffey

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Administration and Curriculum
Social Philosophical Foundations of Education
Comparative and International Education

1982

© Copyright by
JOAN MARIE CLAFFEY
1982

6117931

of
pla:
conc
educ
the
Amer
one
deve
func
affi
compa
count
LDC

ABSTRACT

AN ANALYSIS OF AN APPLIED TRANSNATIONAL/INTERNATIONAL
INFORMATION EXCHANGE NETWORK: PLANNERS, PRACTITIONERS,
AND RESEARCHERS OF NON-FORMAL EDUCATION FOR DEVELOPMENT

By

Joan M. Claffey

This is a comparative analysis of the characteristics of an applied information exchange network of development planners, administrators, practitioners, and researchers concerned with the use of non-formal (out-of-school) education for social and economic development, generally in the context of conditions within Africa, Asia, and Latin America. The study examines demographic characteristics of one network population, the nature of their roles in development, particularly as these relate to broker functions, and their use and valuation of network affiliation. Two sets of categories are employed for comparative analysis of the respondents: (1) less developed country (LDC) versus developed country (DC) citizenship by LDC versus DC location of work, and (2) location by basic

dev

con

sum

and

whi

dir

a

ind

for

per

to

sen

pur

sat

sam

com

exa

in t

tha

vol

nuc

citi

development indicators. Selected characteristics are also considered within the former category by gender. The thesis summarizes key findings arising from analysis of the data, and suggests both theoretical and pragmatic implications, while pointing to emergent themes and new research directions.

The data on which the study is based come chiefly from a survey questionnaire distributed in April 1979 to individuals receiving a periodical on non-formal education for development. The thesis reports generally on 942 persons, residing in a total of 89 countries, who responded to the questionnaire, constituting 25.4 percent of those sent the survey. The comparative analyses concern a purposive sample of 510 who work in development and who satisfy other criteria for the categories of analysis.

The findings reveal discernible patterns among the sample when their specified characteristics are comparatively analyzed within the categories indicated. For example, expatriate status and gender emerge as significant in the finding that within LDCs women from DCs are more apt than the DC men or LDC women to be working as rurally-based volunteers in the applied development fields of health and nutrition in which almost, no female and few male LDC citizens are found and in which few male DC citizens are

found. Development role diversity, found greatest among LDC citizens in LDCs and among those in low-income countries, is associated with range of role linkages and with greater demand for, and reported use of, development information and with reliance upon collegial network support.

ACKNOWLEDGMENTS

To each of the members of my guidance committee -- Chairperson Cole S. Brembeck, Iwao Ishino, Denton E. Morrison, Ruth Hill Useem, and John Useem -- I owe a very large debt of gratitude for their wisdom and support over the years. Each has given enthusiastically of thoughts and most generously of time, exploring with me new avenues of inquiry and critically assessing my work along the way. Their encouragement has enabled me to pursue a variety of scholarly interests enriched but unbounded by the conventions of particular disciplines. Always, they afforded me a nurturing climate of stimulation, respect and rich personal association. To each I express my deepest personal and professional esteem and wish to dedicate this effort.

Special acknowledgment is also given to colleagues Jim Hoxeng and Ray San Giovanni with the Agency for International Development's Bureau of Science and Technology, for their support of the Non-Formal Education Information Center and Network which has engaged my attention during the last five and a half years.

Two colleagues at Michigan State University, Mary Joy Pigozzi and George Axinn, receive particular appreciation for the many recent occasions when they enabled me to devote extra time to this manuscript.

Several close personal friends were instrumental and encouraging in my doctoral pursuits and concurrent professional work. They have my silent thanks here but know they were at the heart of it all.

Thanks are also due the College of Education which has generously subsidized the extensive computer costs associated with processing the data and storing files and text. Tim Colburn input the manuscript and with Diana D'Angelo provided invaluable assistance in formatting the data and presenting the figures.

Finally, I wish to express my appreciation to the non-formal education planners and practitioners around the world who took the effort to participate in this survey. I hope that, in some way, this research serves to heighten consideration of these persons and others like them who are bridging societies and building new cultures during a critical period of global interdependency.

TABLE OF CONTENTS

	Page
LIST OF TABLES.....	ix
LIST OF FIGURES.....	xxi

PART I INTRODUCTION

CHAPTER

1. OVERVIEW.....	2
Focus and Organization of the Thesis.....	2
Distinguishing Features of this Study.....	6
Definition of Terms.....	9
How the Author Came to the Subject.....	13
2. CONTEXT OF THE STUDY.....	17
Historical Antecedents to Evolution of Interest in Non-Formal Education for Development.....	17
The Non-Formal Education Information Center and Network.....	23
3. RESEARCH QUESTIONS.....	35
Demographic, Development Role, and Network Use Characteristics.....	35
Structural Categories for Comparative Analysis....	36
Selected Variables.....	38
4. METHODOLOGY.....	40
A Survey Approach to Applied Network Study.....	40
The Population and the Purposive Sample.....	42
The Survey Questionnaire.....	45
Means of Data Analysis.....	49
5. THE NFEIC EXCHANGE NETWORK: AN AGGREGATE PROFILE OF RESPONDENTS.....	52
Mapping of Respondents.....	52
Profile of Demographic Characteristics of Respondents.....	60
Profile of Respondents' Roles in Development.....	87

Profile of Respondents' Use and Valuation of the NFEIC and Network.....	98
Composite Profile of Respondents.....	108

PART II COMPARATIVE ANALYSES

6. DEMOGRAPHIC CHARACTERISTICS.....	115
Introduction: The Comparative Setting.....	116
Constitution of the Categories of Analysis.....	120
Analysis of Demographic Characteristics.....	125
Gender.....	140
Age.....	143
Level of formal education.....	144
Foreign schooling.....	149
Formal schooling concentration.....	153
Student status.....	158
Language facility.....	161
7. DEVELOPMENT ROLE CHARACTERISTICS -- PART I: ROLE PERFORMANCE.....	167
Development Role Performance.....	167
Fields.....	168
Activities.....	180
Information sources.....	191
Non-Formal Education Role Performance.....	198
Fields.....	199
Activities.....	205
Information sources.....	210
Performance obstacles.....	226
8. DEVELOPMENT ROLE CHARACTERISTICS -- PART II: LINKAGES AND CAREER HISTORY.....	237
Development Broker Linkages.....	237
Location of work.....	237
Intended beneficiaries.....	242
First-order linkages.....	253
Career History.....	268
Duration of work in development and in non-formal education.....	268
Means of initial involvement in present work..	276
Kind of employing organization.....	280
Extent of volunteer and independent work in non-formal education.....	287
9. CHARACTERISTICS REGARDING USE AND VALUATION OF THE NFEIC AND NETWORK.....	300

Nature of Contact with the NFEIC.....	300
Initial discovery.....	301
Extent of contact.....	304
Purposes.....	306
Evaluation of Center Publications and Services...	313
Quality of response.....	314
Utility of response.....	316
Importance as a source for development.....	319
Importance as a source for non-formal education.....	323
Information-Influenced Change.....	326
Nature of Information Interests.....	331
Resource preferences.....	331
<u>The NFE Exchange</u> preferences.....	333
Topical interests in development and education.....	338
Information Outreach.....	340
Readership of <u>The NFE Exchange</u>	340
Information brokering.....	343
Intra-Network Outreach.....	350
Extent of self-initiated contacts.....	351
Extent of communications received.....	351
Network Collegiality.....	355
10. SELECTED CHARACTERISTICS CONTROLLING FOR GENDER...	361
Selected Demographic Characteristics.....	366
Selected Development Role Characteristics.....	376
Network Affiliation Characteristics.....	420

PART III SUMMARY AND CONCLUSIONS

11. KEY FINDINGS AND IMPLICATIONS.....	430
Key Findings.....	431
Set One: Demographic characteristics of NFEIC network affiliates.....	431
Set Two: Development role characteristics.....	432
Set Three: Development broker linkages and career history.....	441
Set Four: Network use and valuation characteristics.....	450
Set Five: Selected characteristics by gender...	457
Emergent Themes, Meanings for Development, and New Research Directions.....	461
The horizontal, development-information exchange network for the generation and sharing of information.....	461
Development role diversity and related development information use and valuation.....	469
Disparities in symbolic reliance on transnational resource networks.....	477

Gender role divergence and functionality in development work.....	479
Asymmetrical flow and valuation of development information.....	485
APPENDIX.....	489
Survey Questionnaire and Cover Letter of Introduction.....	489
BIBLIOGRAPHY.....	501

3

1

11

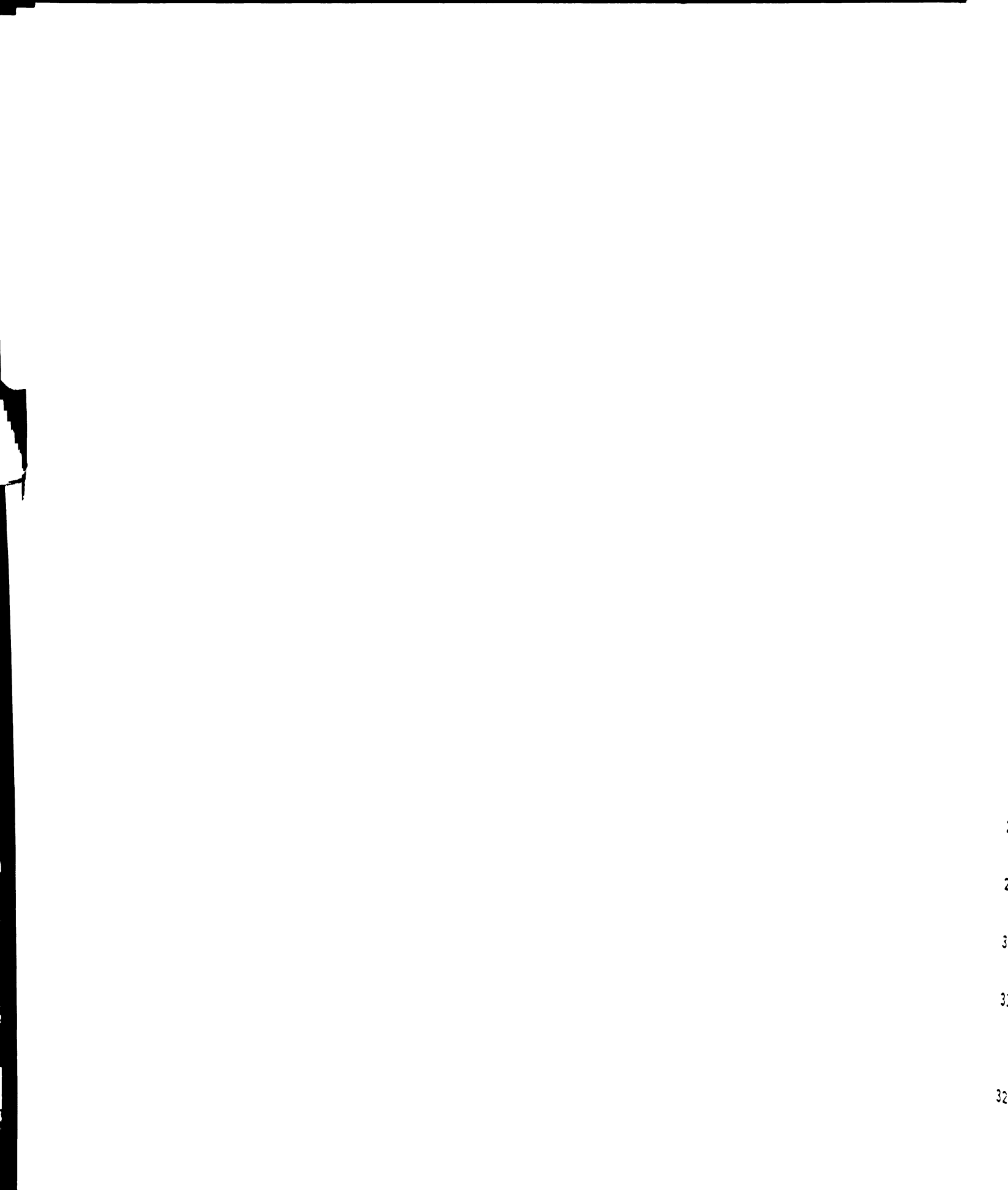
12

13

14

LIST OF TABLES

Table	Page
1 Locations of Mailing List Population and Survey Respondents by Country and World Region: Africa...	76
2 Locations of Mailing List Population and Survey Respondents by Country and World Region: Asia.....	78
3 Locations of Mailing List Population and Survey Respondents by Country and World Region: Latin America.....	80
4 Locations of Mailing List Population and Survey Respondents by Country and World Region: Oceania..	82
5 Locations of Mailing List Population and Survey Respondents by Country and World Region: Europe...	83
6 Locations of Mailing List Population and Survey Respondents by Country and World Region: North America.....	85
7 Citizenship and Work Location of Grouping I: 179 LDC Citizens in LDC Locations.....	126
8 Citizenship and Work Location of Grouping II: 115 DC Citizens in LDC Locations.....	129
9 Citizenship and Work Location of Grouping III: 20 LDC Citizens in DC Locations.....	132
10 Citizenship and Work Location of Grouping IV: 196 DC Citizens in DC Locations.....	134
11 Citizenship and Work Location of Grouping V: 103 Development Personnel in Low-Income Countries.....	135
12 Citizenship and Work Location of Grouping VI: 192 Development Personnel in Middle-Income Countries..	136
13 Citizenship and Work Location of Grouping VII: 215 Development Personnel in Industrialized Countries.	139
14 Gender of Development Personnel by Citizenship and Location of Work.....	141



15	Gender of Development Personnel by Location According to Basic Development Indicators.....	141
16	Age of Development Personnel by Citizenship and Location of Work.....	145
17	Age of Development Personnel by Location According to Basic Development Indicators.....	145
18	Level of Formal Education by Citizenship and Location of Work.....	147
19	Level of Formal Education by Location According to Basic Development Indicators.....	147
20	Foreign Schooling by Citizenship and Location of Work.....	151
21	Countries of Foreign Schooling by Citizenship and Location of Work.....	154
22	Foreign Schooling by Location According to Basic Development Indicators.....	156
23	Formal Schooling Concentration by Citizenship and Location of Work.....	159
24	Student Status by Citizenship and Location of Work	160
25	Student Status by Location According to Basic Development Indicators.....	160
26	Language Facility by Citizenship and Location of Work.....	163
27	Language Facility by Location According to Basic Development Indicators.....	163
29	Involvement in Fields of Development by Citizenship and Location of Work.....	169
30	Involvement in Fields of Development by Location According to Basic Development Indicators.....	170
31	Extent of Association between Work in Development Fields and Citizenship with Location of Work, and Location According to Basic Development Indicators.....	171
32	Involvement in Selected Development Fields by Citizenship and Location of Work.....	173

33	Involvement in Selected Development Fields by Location According to Basic Development Indicators.....	173
34	Development Field of Greatest Time Involvement by Citizenship and Location of Work.....	178
35	Development Field of Greatest Time Involvement by Location According to Basic Development Indicators.....	178
36	Extent of Association between Involvement in Development Activities and Citizenship with Location of Work, and Location According to Basic Development Indicators.....	183
37	Involvement in Selected Development Activities by Citizenship and Location of Work.....	183
38	Involvement in Selected Development Activities by Location According to Basic Development Indicators.....	183
39	Development Activity of Greatest Time Involvement by Citizenship and Location of Work.....	186
40	Development Activity of Greatest Time Involvement by Location According to Basic Development Indicators.....	186
41	Development Activity Cluster of Greatest Time Involvement by Location According to Basic Development Indicators.....	190
42	Extent of Association between Sources of Information on Development and Citizenship with Location of Work, and Location According to Basic Development Indicators.....	190
43	Sources of Development Information by Citizenship and Location of Work.....	192
44	Sources of Development Information by Location According to Basic Development Indicators.....	192
45	Two Development Information Sources Most Relied Upon by Citizenship and Location of Work.....	196
46	Two Development Information Sources Most Relied Upon by Location According to Basic Development Indicators.....	196

47	Involvement in Non-Formal Education by Citizenship and Location of Work.....	200
48	Involvement in Non-Formal Education by Location According to Basic Development Indicators.....	200
49	Extent of Association between Work in NFE Fields and Citizenship with Location of Work, and Location According to Basic Development Indicators.....	201
50	Fields of NFE Work by Citizenship and Location of Work.....	201
51	Fields of NFE Work by Location According to Basic Development Indicators.....	201
52	Non-Formal Education Field of Greatest Time Involvement by Citizenship and Location of Work...	204
53	Non-Formal Education Field of Greatest Time Involvement by Location According to Basic Development Indicators.....	204
54	Extent of Association between Involvement in NFE Activities and Citizenship with Location of Work, and Location According to Basic Development Indicators.....	206
55	Involvement in Selected NFE Activities by Citizenship and Location of Work.....	206
56	Involvement in Selected NFE Activities by Location According to Basic Development Indicators.....	206
57	Non-Formal Education Activity of Greatest Time Involvement by Citizenship and Location of Work..	209
58	Non-Formal Education Activity of Greatest Time Involvement by Location According to Basic Development Indicators.....	209
59	Extent of Association between Sources of Information on Non-Formal Education and Citizenship with Location of Work, and Location According to Basic Development Indicators.....	212
60	Selected Sources of Information on Non-Formal Education by Citizenship and Location of Work....	214
61	Selected Sources of Information on Non-Formal	

	Education by Location According to Basic Development Indicators.....	214
62	Two Non-Formal Education Sources Most Relied Upon by Citizenship and Location of Work.....	217
63	Two Non-Formal Education Sources Most Relied Upon by Location According to Basic Development Indicators.....	217
64	Non-Participation in NFE Training by Citizenship and Location of Work.....	220
65	Extent of Association between Participation in Types of NFE Training and Citizenship with Location of Work, and Location According to Basic Development Indicators.....	220
66	Participation in Selected Types of NFE Training by Citizenship and Location of Work.....	222
67	Participation in Selected Types of NFE Training by Location According to Basic Development Indicators.....	222
68	Use of Non-Formal Education in Development Programs by Citizenship and Location of Work.....	225
69	Use of Non-Formal Education in Development Programs by Location According to Basic Development Indicators.....	225
70	Extent of Association between Perceived Obstacles in Carrying Out Development Programs with NFE and Citizenship with Location of Work, and Location According to Basic Development Indicators.....	228
71	Selected Obstacles in Carrying Out Development Programs with NFE by Citizenship and Location of Work.....	230
72	Selected Obstacles in Carrying Out Development Programs with NFE by Location According to Basic Development Indicators.....	232
73	Most Important Obstacles, Values versus Structure, in Carrying Out Development Programs with NFE, by Citizenship and Location of Work.....	234
74	Most Important Obstacles, Values versus Structure, in Carrying Out Development Programs with NFE, by Location According to Basic Development	

6

8

8

86

	Indicators.....	234
75	Extent of Association between Location of NFE and Development Activities and Citizenship with Location of Work, and Location According to Basic Development Indicators.....	238
76	Selected Locations of NFE and Development Activities by Citizenship and Location of Work....	238
77	Selected Locations of NFE and Development Activities by Location According to Basic Development Indicators.....	238
78	Location, Urban versus Rural, Where Most Time Spent in NFE and Development Activities by Citizenship and Location of Work.....	241
79	Location, Urban versus Rural, Where Most Time Spent in NFE and Development Activities by Location According to Basic Development Indicators.....	241
80	Parts of Population toward whom NFE and Development Work is Primarily Directed by Citizenship and Location of Work, and by Location According to Basic Development Indicators.....	243
81	Extent of Association between Population to whom Work Primarily Directed and Citizenship with Location of Work, and Location According to Basic Development Indicators.....	245
82	Selected Parts of Population to whom Work Directed by Citizenship and Location of Work.....	248
83	Selected Parts of Population to whom Work Directed by Location According to Basic Development Indicators.....	250
84	Kinds of People Worked with Directly by Citizenship and Location of Work, and by Location According to Basic Development Indicators.....	254
85	Extent of Association between Types of People Worked with Directly and Citizenship with Location of Work, and Location According to Basic Development Indicators.....	256
86	Selected Types of People Worked with Directly by Citizenship and Location of Work.....	258

87	Selected Types of People Worked with Directly by Location According to Basic Development Indicators.....	260
88	Population Segments to Whom Work Directed and Population Segments with Whom Direct Work Linkages, for Aggregate of Selected Respondents....	263
89	Three Types of Groups with Whom Most Time Spent by Citizenship and Location of Work.....	265
90	Three Types of Groups with Whom Most Time Spent by Location According to Basic Development Indicators.....	267
91	Years of Development Experience by Citizenship and Location of Work.....	269
92	Years of Development Experience by Location According to Basic Development Indicators.....	269
93	Development Experience Clusters by Citizenship and Location of Work.....	271
94	Development Experience Clusters by Location According to Basic Development Indicators.....	271
95	Years of Non-Formal Education Experience by Citizenship and Location of Work.....	273
96	Years of Non-Formal Education Experience by Location According to Basic Development Indicators.....	273
97	Non-Formal Education Experience Clusters by Citizenship and Location of Work.....	275
98	Non-Formal Education Experience Clusters by Location According to Basic Development Indicators.....	275
99	Extent of Association between Means of Involvement in NFE-Development Activities, and Citizenship with Location of Work, and Location According to Basic Development Indicators.....	277
100	Selected Means of Involvement in NFE-Development Activities by Citizenship and Location of Work....	279
101	Selected Means of Involvement in NFE-Development Activities by Location According to Basic Development Indicators.....	279

1

2

3

4

5

102	Employment for Wages or Salary with an Organization by Citizenship and Location of Work.....	281
103	Kind of Employing Organization by Citizenship and Location of Work.....	281
104	Kind of Employing Organization by Location According to Basic Development Indicators.....	282
105	Second Paid Employment by Citizenship and Location of Work.....	286
106	Second Paid Employment by Location According to Basic Development Indicators.....	286
107	Kind of Organization for which Volunteer Work Performed by Citizenship and Location of Work.....	289
108	Kind of Organization for which Volunteer Work Performed by Location According to Basic Development Indicators.....	290
109	Independent Involvement in NFE or Development by Citizenship and Location of Work.....	292
110	Independent Involvement in NFE or Development by Location According to Basic Development Indicators.....	292
111	Whether Independent NFE or Development Work on Voluntary or Paid Basis, by Citizenship and Location of Work.....	294
112	Whether Independent NFE or Development Work on Voluntary or Paid Basis, by Location According to Basic Development Indicators.....	294
113	Kind of Previous Employing Organization by Citizenship and Location of Work.....	296
114	Kind of Previous Employing Organization by Location According to Basic Development Indicators.....	298
115	Whether Communication Directed to the NFEIC by Citizenship and Location of Work.....	303
116	Whether Communication Directed to the NFEIC by Location According to Basic Development Indicators.....	303

117	Frequency of Communication with the NFEIC by Citizenship and Location of Work.....	305
118	Frequency of Communication with the NFEIC by Location According to Basic Development Indicators.....	305
119	Extent of Association between Reasons for Communicating with the NFEIC, and Citizenship with Location of Work, and Location According to Basic Development Indicators.....	307
120	Selected Reasons for Communicating with the NFEIC by Citizenship and Location of Work.....	309
121	Selected Reasons for Communicating with the NFEIC by Location According to Basic Development Indicators.....	311
122	Relevance of NFEIC Responses by Citizenship and Location of Work.....	315
123	Relevance of NFEIC Responses by Location According to Basic Development Indicators.....	315
124	Usefulness of NFEIC to Respondents' Work by Citizenship and Location of Work.....	317
125	Usefulness of <u>The NFE Exchange</u> to Respondents by Citizenship and Location of Work.....	317
126	Importance of the NFEIC as Development Source by Citizenship and Location of Work.....	321
127	Importance of the NFEIC as Development Source by Location According to Basic Development Indicators.....	321
128	Importance of the NFEIC as Non-Formal Education Source by Citizenship and Location of Work.....	324
129	Lack of Information-Influenced Changes by Citizenship and Location of Work.....	328
130	Extent of Association between Information- Influenced Changes and Citizenship with Location of Work, and Location According to Basic Development Indicators.....	328
131	Information-Influenced Changes by Citizenship and Location of Work.....	329

132	Selected Information-Influenced Changes by Location According to Basic Development Indicators.....	329
133	Kinds of Resources Most Useful for NFE and Develop- ment Work by Citizenship and Location of Work.....	332
134	Kinds of Resources Most Useful for NFE and Develop- ment Work by Location According to Basic Development Indicators.....	332
135	Most Useful Part of <u>The NFE Exchange</u> by Citizenship and Location of Work.....	334
136	Most Useful Part of <u>The NFE Exchange</u> by Location According to Basic Development Indicators.....	334
137	Preferred Selected Issues of <u>The NFE Exchange</u> by Citizenship and Location of Work.....	337
138	Preferred Selected Issues of <u>The NFE Exchange</u> by Location According to Basic Development Indicators.....	337
139	Preferred Selected Future Topics for <u>The NFE Exchange</u> by Citizenship and Location of Work.....	339
140	Preferred Selected Future Topics for <u>The NFE Exchange</u> by Location According to Basic Development Indicators.....	339
141	Number of Readers of <u>The NFE Exchange</u> by Citizenship and Location of Work.....	341
142	Number of Readers of <u>The NFE Exchange</u> by Location According to Basic Development Indicators.....	341
143	Whether <u>The NFE Exchange</u> Placed in Library by Citizenship and Location of Work.....	345
144	Whether <u>The NFE Exchange</u> Placed in Library by Location According to Basic Development Indicators.....	345
145	Whether <u>The NFE Exchange</u> Passed to Fieldworkers or Trainers by Citizenship and Location of Work...	346
146	Whether <u>The NFE Exchange</u> Passed to Fieldworkers or Trainers by Location According to Basic Development Indicators.....	346
147	Whether <u>The NFE Exchange</u> Passed to Planners or Policy Makers by Citizenship and Location of Work.	348

148	Whether <u>The NFE Exchange</u> Passed to Planners or Policy Makers by Location According to Basic Development Indicators.....	348
149	Whether <u>The NFE Exchange</u> Suggested to Others by Citizenship and Location of Work.....	349
150	Whether <u>The NFE Exchange</u> Reproduced for Others by Citizenship and Location of Work.....	349
151	Whether Respondent's Paper or Project Information in <u>The NFE Exchange</u> by Citizenship and Location of Work.....	352
152	Whether Respondent's Paper or Project Information in <u>The NFE Exchange</u> by Location According to Basic Development Indicators.....	352
153	Number of Requests Received for Further Information by Citizenship and Location of Work...	352
154	Perceived Sense of Commonality with Others through the NFEIC by Citizenship and Location of Work.....	356
155	Perceived Sense of Commonality with Others through the NFEIC by Location According to Basic Development Indicators.....	356
156	Unexpected Benefits Derived from Contact with NFEIC by Citizenship and Location of Work.....	359
157	Age of Development Personnel by Citizenship and Location of Work Controlling for Gender.....	369
158	Level of Formal Education by Citizenship and Location of Work Controlling for Gender.....	369
159	Foreign Schooling by Citizenship and Location of Work Controlling for Gender.....	373
160	Selected Primary Field of Development Work by Citizenship and Location of Work Controlling for Gender.....	378
161	Development Activity in which Most Time Spent by Citizenship and Location of Work Controlling for Gender.....	382
162	Primary Field of Non-Formal Education Work by Citizenship and Location of Work Controlling for Gender.....	387

163	NFE Activity in which Most Time Spent by Citizenship and Location of Work Controlling for Gender.....	391
164	Location where Most Time Spent in Development Activities by Citizenship and Location of Work Controlling for Gender.....	396
165	Selected Parts of Population to whom Development Efforts Directed by Citizenship and Location of Work Controlling for Gender.....	398
166	Selected Parts of Population with whom Work Directly in Development Efforts by Citizenship and Location of Work Controlling for Gender.....	402
167	Three Parts of Population with whom Most Time Spent in Development Work by Citizenship and Location of Work Controlling for Gender.....	406
168	Years of Development Experience by Citizenship and Location of Work Controlling for Gender.....	413
169	Years of Non-Formal Education Experience by Citizenship and Location of Work Controlling for Gender.....	413
170	Kind of Employing Organization by Citizenship and Location of Work Controlling for Gender.....	416
171	Whether Work as Volunteer for Organization Involved in Development by Citizenship and Location of Work Controlling for Gender.....	418
172	Information-Influenced Changes by Citizenship and Location of Work Controlling for Gender.....	422
173	Perceived Sense of Commonality with Others through the NFEIC by Citizenship and Location of Work Controlling for Gender.....	425

LIST OF FIGURES

Figure	Page
1.0 Map of Respondents by World Continent of Mailing Address.....	61
1.1 Map of Respondents by World Region of Mailing Address.....	62
1.2 Map of Respondents by World Region of Mailing Address: Africa.....	63
1.3 Map of Respondents by World Region of Mailing Address: Asia.....	64
1.4 Map of Respondents by World Region of Mailing Address: Latin America.....	65
1.5 Map of Respondents by World Region of Mailing Address: Oceania.....	66
1.6 Map of Respondents by World Region of Mailing Address: Europe.....	67
1.7 Map of Respondents by World Region of Mailing Address: North America.....	68
1.8 Map of Respondents by Country of Mailing Address: Africa.....	69
1.9 Map of Respondents by Country of Mailing Address: Asia.....	70
1.10 Map of Respondents by Country of Mailing Address: Latin America.....	71
1.11 Map of Respondents by Country of Mailing Address: Oceania.....	72
1.12 Map of Respondents by Country of Mailing Address: Europe.....	73
1.13 Map of Respondents by Country of Mailing Address: North America.....	74
2 Respondents as a Percentage of Persons Sent the	

	Survey by Continent and World Region.....	75
3	Gender Ratios of Selected Development Personnel by Citizenship and Location of Work and by Location According to Basic Development Indicators.....	142
4	Age of Development Personnel by Citizenship and Location of Work and by Location According to Basic Development Indicators.....	146
5	Level of Formal Education by Citizenship and Location of Work and by Location According to Basic Development Indicators.....	150
6	Foreign Schooling by Citizenship and Location of Work and by Location According to Basic Development Indicators.....	157
7	Student Status by Citizenship and Location of Work and by Location According to Basic Development Indicators.....	162
8	Language Facility by Citizenship and Location of Work and by Location According to Basic Development Indicators.....	166
9	Development Field of Primary Involvement by Citizenship and Location of Work and by Location According to Basic Development Indicators.....	181
10	Development Activity of Primary Involvement by Citizenship and Location of Work and by Location According to Basic Development Indicators.....	188
11	Non-Formal Education Activity of Primary Involvement by Citizenship and Location of Work and by Location According to Basic Development Indicators.....	211
12	Use of Non-Formal Education in Development Programs by Citizenship and Location of Work and by Location According to Basic Development Indicators.....	227
13	Selected Population Segments toward whom Work Directed by Location According to Basic Development Indicators.....	252
14	Selected Population Segments with whom Work Directly, by Location According to Basic Development Indicators.....	261

15	Selected Kinds of Employing Organizations by Citizenship and Location of Work, and by Location According to Basic Development Indicators.....	285
16	Importance of the NFEIC as Development Source, by Citizenship and Location of Work, and by Location According to Basic Development Indicators.....	322
17	Number of Readers of The NFE Exchange by Citizenship and Location of Work, and by Location According to Basic Development Indicators.....	344
18	Perceived Sense of Network Commonality by Citizenship and Location of Work, and by Location According to Basic Development Indicators.....	358
19	Formal Education Levels by Citizenship and Gender within Developing Countries.....	371
20	Primary Involvement in Selected Development Fields by Citizenship and Gender within Developing Countries.....	381
21	Primary Involvement in Selected Development Activi- ties by Citizenship and Gender within Developing Countries.....	385
22	Primary Involvement in Selected NFE Fields by Citizenship and Gender within Developing Countries.....	389
23	Primary Involvement in Selected NFE Activities by Citizenship and Gender within Developing Countries.....	393
24	Selected Parts of Population to whom Development Efforts Directed, by Citizenship and Gender within Developing Countries.....	400
25	Two or Three Parts of the Population with whom Most Time Spent by Citizenship and Gender within Developing Countries.....	410
26	Information-Influenced Changes by Citizenship and Gender within Developing Countries.....	424
27	Perceived Sense of Commonality with Others through the NFEIC by Citizenship and Gender in Developing Countries.....	427

PART I
INTRODUCTION

te
su
in
co
Th
us
ho
th

app
adm
vic
deve
Afr
of t
pers
Prac

CHAPTER 1

OVERVIEW

This chapter provides an overview of the thesis in terms of its purpose and process. First, it describes the subject and format of the thesis. Second, the chapter indicates how this study differs from previous work concerning planned education interventions for development. Third, it provides a definition of key terms as they are used throughout the thesis. Finally, it briefly explains how the author came to investigate the subject of the thesis.

Focus and Organization of the Thesis

This thesis is an analysis of the characteristics of an applied information exchange network of planners, administrators, practitioners, and researchers concerned with the use of non-formal education for social and economic development, generally in the context of conditions in Africa, Asia, and Latin America. It is also an exploration of the evolution and functions of a transnational network of persons endeavoring to build a new field of study and practice.

The study, first, portrays and analyzes characteristics of the population and a purposive sample in terms of demographic properties, the nature of their development roles, and the perceived significance of the information exchange network. In this regard, the subjects' roles as social change intermediaries or brokers among different groups are examined as are their valuations of sources of information on non-formal education and development. Selected gender differences are also considered. To detect possible variations deriving from exchange relations in the larger socio-economic system, particular attention is given to patterns emerging from consideration of development planners and practitioners in two sets of categories. The first category combines national origin with location of development work and the second derives from location of work by basic development indicators.

Second, the thesis summarizes significant findings arising from analysis of the data, and suggests both theoretical and pragmatic implications, while pointing to emergent themes and new research directions.

The thesis focuses on findings and inferences stemming from a mailed survey directed in 1979 to those in contact with the Non-Formal Education Information Center of Michigan

S

C

i

p

s

d

a

C

s

p

d

c

s

p

c

c

c

d

a

l

r

c

State University; specifically, to those then receiving the Center's periodical, The NFE Exchange. Of the 3711 persons in 135 countries sent the questionnaire, 947 (or 25.5 percent) responded.

Chapter 2 describes more fully the context of the study: the evolution of interest in non-formal education for development, and the Non-Formal Education Information Center and network. Research questions are next outlined in Chapter 3, and Chapter 4 details the methodology of the study. Chapter 5 presents a mapping of the respondents and provides an aggregate profile of their demographic, development role, and information use and valuation characteristics.

Chapters 6 through 10 comparatively consider 510 selected cases of development planners, administrators, practitioners, and researchers in two categories. The first category consists of four types: less developed country citizens in less developed country locations, developed country citizens in less developed country locations, less developed country citizens in developed country locations, and developed country citizens in developed country locations. The second category differentiates the respondents in three types: location of work in a low-income country, in a middle-income country, or in an industrialized

c:

d:

r:

E:

s:

Cl:

f:

co:

de:

ap:

th:

de:

p:

f:

de:

b:

co:

f:

se:

pa:

wo:

country. Chapter 6 comparatively analyzes the subjects' demographic backgrounds, Chapters 7 and 8 their development roles, Chapter 9 their use and valuation of the Non-Formal Education Information Center and network, and Chapter 10 selected gender-related distinctions.

Finally, a summary of key findings is presented in Chapter 11 together with a consideration of emergent themes for further research. Implications of the findings are considered in light of recent paradigms of development and dependency theory. Practical consequences for policy and application are inferred as well.

The process and organization of the thesis follow from the exploratory nature of the study. Data depicting the demographic and development role characteristics of the planners and practitioners selected for study are at the forefront of the thesis. This is so in order that a description of the group can be first formulated and then broadly interpreted. Restricting the study to a conventional testing of hypotheses flowing, for instance, from theories of modernization, dependency, or networking seemed premature and unnecessarily confining in view of the paucity of data and interpretive frameworks on persons working in the field of development and education.

Distinguishing Features of this Study

This thesis, on the demographic backgrounds, work roles, and network valuation of development mediators, differs in unique ways from previous studies of planned education interventions for the betterment of low-income societies. Earlier work in this area has tended to focus on the intended beneficiaries of basic development efforts (King, 1977; Huston, 1978, 1979); on prescriptions for change -- institutional (Sheffield, 1972; Coombs, 1973, 1980; Coombs and Ahmed, 1974; Ahmed and Coombs, 1975; Khan, 1974; Lele, 1975; Case and Niehoff, 1976; Niehoff, 1977; Axinn and Axinn, 1976; Dixon, 1978) or individual/communal through acquisition of "critical consciousness" (Hoxeng, 1973; Friere, 1971; Moulton, 1977; Gillette, 1977; Srinivasan, 1977; Kindervatter, 1979); or on products of the development process -- seen as modernization (e.g., Thomas, 1968, Adams and Bjork, 1971, as observed in Paulson, 1977) or as dependency (Carnoy, 1974, 1976; Bowles and Gintis, 1976; Foley, 1978; Kelly and Altbach, 1978). Others tended to be concerned with the systemic fit of formal and non-formal education (Coombs, 1968; Brembeck, 1973, 1974, 1978; Grandstaff, 1973, 1974a, 1974b, 1974c, 1974d) or with their comparative functionality (Derryck, 1979).

Missing from a composite of these contributions, however, is adequate consideration of those who serve as social mediators, brokers, bridges or links in planned change for development. Literature has dealt with professional elites and scientific communities as conductors of culture and ecumene, as it has with the functioning of their "invisible college" networks (Crane, 1969, 1972; Useem, Useem, Othman and McCarthy, 1977, 1981; Othman, 1977; Useem, Useem and McCarthy, 1979). Additional efforts have been made to identify ideal-type characteristics of development facilitators and change agents in terms of specific attitudes and qualities of their interpersonal interactions (Etling, 1975; O'Gorman, 1978). Others have focused on the strategically important roles of front-line paraprofessionals as change agents in the development process (Rogers and Solomon, n.d.; Esman, Colle, Uphoff and Taylor, 1980).

Little systematic study, however, has concerned development planners and practitioners as new conduits of culture and change. In particular, knowledge is scarce concerning those persons who administer, plan and implement programs of basic education and human resource development: their demographic and educational backgrounds, the nature of their development work roles, the persons with whom they

interact in their work, and the trans-societal exchanges in which they may participate. Nor does knowledge exist concerning the ways in which persons engaged in the emerging field of non-formal education for development come into contact with a worldwide information network of persons with converging interests and the relative significance such contact has in role-related terms.

This thesis thus seeks to contribute to an expanded knowledge summary of the diverse persons engaged in planned education interventions for social and economic development. An exploratory study of individuals not necessarily bonded by such common ties as nationality, academic discipline, and status, it offers empirically-grounded insights into broad, demographic patterns of participation in development intervention roles. By identifying particular points of development role intervention, hypotheses can be generated regarding the related broker functions of selected development specialists, both of a transnational and an intrasocietal character, and in terms of mediation between centers of power and the poor. And, by assessing the functions and relative significance of the international information exchange network for its users, further hypotheses and inquiries can be made concerning patterns of development role interdependencies. It is in this sense that the research is characterized as an applied rather than

basic network study, focusing as it does on the practical, utilitarian, role-related functions the NFE Information Center serves for its users rather than on basic structural patterns of the network itself.

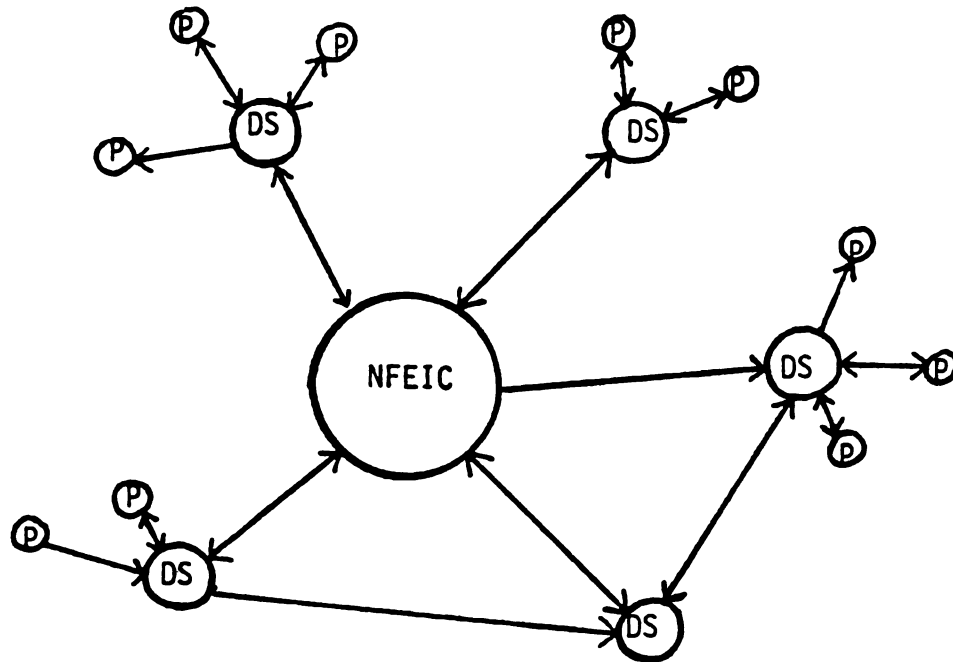
Definition of Terms

There are five terms that have been used earlier in this chapter and which will be used with considerable frequency throughout the thesis. Following is the manner in which they are here intended:

network

The term network generally refers to a set of dynamic social relations among actors. In the context of this study, "information exchange network" is used specifically to designate a composite of individuals bonded by intentional interpersonal links centered on a single actor. The focal actor in this case is the Non-Formal Education Information Center (NFEIC) and the bonded actors are the development specialists (DS) who are in communication with the Center, to some extent with each other, and with persons (P) directly linked to the performance of their development roles.

The following figure depicts the kinds of actors and linkages that comprise the focus of this study.



When the thesis refers to the NFEIC's information exchange network of development planners, administrators, practitioners, and researchers, this should be understood as consisting, in its entirety, of the 3711 persons on the Center's mailing list in April 1979.

non-formal education

Non-formal education refers to any systematic educational activity in which the form is freely shaped by various learning functions arising from the needs of particular clientele. It is generally distinguished from formal schooling structures with their relatively predetermined content and form (Coombs, 1973:11; Kleis,

1974:6; Niehoff, 1976:53).

With reference to this research, non-formal education for development tends to be thought of as basic education, most frequently evidenced in specific sectors of concern -- e.g., health, nutrition, agriculture, literacy, skills training; among special audiences -- e.g., women, migrants, farmers, children, out-of-school youth; and with such diverse instructional methodologies as radio study groups, folk drama, visuals, and "dialogical praxis" (Freire, 1972:40).

development

Development here signifies the complex and interrelated processes of change intentionally leading to patterns of life seen as quantitatively and qualitatively better or more humane (Goulet, 1977:332-333).

Throughout the text, the terms development worker, development specialist, and development intermediary are used interchangeably to refer to the survey respondents, 95 percent of whom report work or study in development and 89 percent of whom report work or study in non-formal education.

developing country - developed country

Based on World Bank definitional indicators for 1979 figures, developing countries are herein considered to include "low-income countries" having gross national products (GNP) per capita of US\$300 or less, and "middle-income countries" with GNPs per capita of more than US\$300 to a maximum of approximately US\$3000. Also in accord with World Bank usage, developed countries herein refer to industrialized countries. In 1979 these had GNPs per capita of between US\$2880 and US\$9970. Not included in either category are those nations that were, in 1979, capital surplus oil exporters and those that have centrally planned economies (World Bank, 1979).

For brevity throughout the thesis, the notation of "LDC" for "less developed country" is used interchangeably with "developing country," while "DC" is used for "developed country." The author intends no pejorative connotation to the terms "LDC," "less developed," and "developing," just as she implies no approbation to the terms "DC" and "developed." It should be clear that what constitutes development, broadly defined, is not merely the level and rate of annual increase of the GNP. Also included must be the composite of humanitarian social, political, and cultural goals which a nation embraces and the quality of the means chosen to realize them.

W

ec

a

c

c

a

k

C

i

e

o

d

f

b

ir

ex

si

of

se

world development basic indicators

The basic development indicators are features of economic and social development identified by the World Bank as indexing, in their composite, the relative level of a country's development. The basic indicators include GNP per capita, rate of inflation, literacy rate, life expectancy, and per capita food production (World Bank, 1979).

How the Author Came to the Subject

At this point it may be of interest to the reader to know how the author came to the subject of this thesis. Contributing factors include general experiences of work and intercultural education in developing countries and elsewhere, and a specific experience in directing an organization geared to study and service concerning development education.

With respect to the former, living with several families in Central and South America for short periods between 1966 and 1974 while participating in or directing intercultural programs for college students enabled the experiencing of two phenomena that proved personally significant -- what Louis-Joseph Lebret called "'the shock of underdevelopment'" (Goulet, 1974:30), and the intuitive sense of somehow being a link between societies and

cultures. Undergraduate and graduate study strengthened interest in the fields of culture and personality, international relations, cross-cultural communication, and in problems of poverty and development. Teaching several years in an innovative community college brought contact with many termed "non-traditional" students. Pedagogy and curricula consequently reflected much of the content and style considered appropriate to non-formal education. Education and training in intercultural communication (both as a student and as an instructor) led to a further interest in roles that may bridge, transform, and build cultures.

With regard to the author's specific work experience since 1976, this involved coordinating a worldwide information exchange network for people interested in non-formal education for development. The author became intrigued both with the Non-Formal Education Information Center's apparent function in linking persons with similar interests and with how participants in this applied network functioned as bridges between diverse sources of information and peoples. From this germinated the desire to learn more about these educational planners and practitioners, their development and mediator roles, and the relative significance that affiliation with the exchange network seems to have for them.

The work of John Useem and Ruth Hill Useem on the roles in development of the highly educated further served to foster and integrate the author's interest in those actively engaged in planning non-formal education. The author was particularly compelled by development intermediaries as both shapers and conduits of culture: while building a field of study and pioneering in its practice, they tend also to be working at the intersections of diverse social groupings and cultures. As such they may personally reflect many of the dynamic linkages and interdependencies coming to characterize an increasingly complex world system.

This research study of development mediators, however, is not necessarily predicated on their possible service either as micro reflections of exchange patterns in the macro system or as harbingers of new cultures and networks, though both functions may be realized. Instead, as earlier suggested, the intention simply has been to systematically gather together for the first time knowledge concerning one rather large, applied information network of planners and practitioners of development education in order to generate hypotheses regarding their demographic characteristics and their related development and network roles.

Chapter 2 now details the context for the research undertaken to explore these topics.

CHAPTER 2

CONTEXT OF THE STUDY

This chapter describes the setting in which the current study has been conducted. First, it provides the reader with a brief summary of recent historical developments that have helped to shape the present interest in non-formal education on the parts of planners and practitioners seeking to improve the quality of life in lower income countries. Second, the chapter indicates the origins and objectives of the Non-Formal Education (NFE) Information Center, and describes the nature of the applied network of development specialists or mediators in communication with it. Finally, the author's access to study of the network participants is briefly commented upon.

Historical Antecedents to Evolution of Interest in Non-Formal Education for Development

To provide the perspective necessary to understand the origin and evolution of the NFE Center and network, it may be instructive to briefly describe some of the recent historical and other circumstances that fostered its development. During the 1960's foreign assistance efforts of the United States predominately focused on economic

growth and, in the area of education, largely reflected concern with formal institution building. Human capital eventually became seen as more important than physical capital, and the development of human resources was believed to be a necessary step toward the development of national economies (Adams, 1977:298-299). Included in this orientation were notions of stages to economic growth (Rostow, 1962), the preeminence of the "Western model of development and growth, the emphasis on quantitative/correlational methods, and the tendency to equate education with schooling" (Kazamias and Schwartz, 1977:171-172). Some claimed the existence of "certain stages of growth through which all school systems must pass" (Beeby, 1966) while U.S. educational assistance "attempted to duplicate, in the LDCs, the school systems (but not the comprehensive learning environments) of the developed nations and to clothe the duplication in a rhetoric that links schooling with the development-economic growth process" (Grandstaff, 1974b:23).

By the late 1960's disenchantment was starting to grow with use of the Western model of development and with the capacity of schools in developing countries to handle all of the educational functions deemed necessary for development. Coombs (1968) spoke of the growing disparity between educational systems and their environments. Grandstaff

analyzed "the problem of location of educational function" (1973:4) considering the situation in developing countries as partially analogous to the Common School Revival period of 1830-1860 in the United States, and urged better "fit" between desired educational functions and the systems proposed to carry them out. (1974d:22). Brembeck sketched the distinct functions of formal and non-formal education and suggested that each provided means better suited to achieving certain educational ends (1973).

Formal schooling systems in developing countries were said to be incapable of, or inappropriate for, meeting the enormous and growing demand for education at affordable costs. The content of the schooling curriculum was seen as too detached from application and more oriented to urban, industrial society than to rural development. Schooling's long cycles and delayed payoffs also were regarded as unproductive for many would-be participants and not linked to real employment needs and opportunities.

At the same time non-formal education was viewed as having the capacity and flexibility to be better oriented toward rural development and to immediate employment. By precluding necessary reliance on literacy, non-formal education could have both broad accessibility for the populations of developing countries and be capable of taking

form in ways more consistent with local cultures and indigenous modes of learning (Grandstaff, 1974b, 1974c). These advantages were thought to be coupled with that of reduced cost vis-a-vis formal schooling.

A major impetus was given in 1969-1970 to the notion and operationalization of non-formal education by the Agency for International Development's (AID) Technical Assistance Bureau. Non-formal education, educational technology, and educational finance and management were selected as three key problem areas in which the Bureau would seek to make contributions during the early 1970's. Efforts to study and encourage non-formal education for development were also underway by the World Bank, UNICEF, Unesco and the International Institute of Educational Planning, and the International Council for Education and Development (Krueger and Moulton, 1981). The World Bank's Education Sector Working Paper for 1971 argued, for instance, for "a reorientation of the education (i.e., formal schooling) and training systems, with greater emphasis on vocational education and on non-formal training for agriculture and industry."

It is important to delineate further the role of AID's Technical Assistance Bureau (TAB), and specifically TAB's Office of Education, in strengthening non-formal education

because AID sponsorship underlie the related research, field support, and information network activities of Michigan State University and of various other institutions. The Education Office in December 1970 proposed in its Long Range Work Plan for FY 1971-1975 to promote

'the knowledge generation process and create the framework through which it will be possible for the LDCs, with such assistance as may be appropriate from ourselves and others' to...'create those institutions and make other such arrangements as will result in the further generation of operationally useful knowledge in the field, a continuing network of information exchange among nations on the subject, and a reasonable degree of organization to make effective the contribution of non-formal education to development.' (Krueger and Moulton, 1981:3)

The Plan also foresaw the need for an information center in calling for "'a high degree of access to information and actual exposure to nonformal education activities between and among responsible persons within the LDCs themselves'" (Krueger and Moulton, 1981:5).

While AID impetus was surely instrumental in building the field of non-formal education, AID held that its "'role cannot be that of exporting a tested product.'" Instead, "'sensitive and perceptive association with the LDCs in conceptualizing, experimenting, model-building and evaluating within the context of the societies, cultures and resources of the LDCs themselves'" was seen as the proper strategy for strengthening non-formal education (Krueger and Moulton, 1981:5).

co

ba

In

Br

st

he

no

re

(K

on

19

Br

be

bu

pr

fo

in

wi

no

In 1971 Michigan State University began its first contractual work with AID to build a systematic knowledge base on non-formal education. From 1971 through 1977 MSU's Institute for International Studies in Education with Cole Brembeck as director, published and disseminated series of study reports, discussion and supplementary papers which helped to break ground in the conceptualization of non-formal education for development. Some 24 countries received technical assistance from MSU during this period (Krueger and Moulton, 1981:15) and international conferences on non-formal education were held at MSU in 1974 and in 1976.

It was as a result of the first conference that Brembeck, observing a rush on the print materials displayed, began to focus more earnestly on the role of information in building the field of non-formal education. Thereafter, he presented a proposal, successfully received, to the Agency for International Development for the performance of the information service functions that came to be associated with the existing NFE Information Center.

The nature of the Center, its network and growth, are now described more fully.

The Non-Formal Education Information Center and Network

The Non-Formal Education Information Center is a clearinghouse for the collection, analysis, publication and exchange of materials on basic education for development. It is oriented toward pragmatic, responsive research and service particularly on behalf of development planners, practitioners, administrators, and researchers concerned with non-formal education in Africa, Asia, and Latin America.

The creation of the Center was in response to the need for an entity not merely to disseminate MSU publications on non-formal education but also to serve as a hub for the interchange of materials from sources worldwide. Michigan State University's 1974 conference on non-formal education served to provide an initial listing of approximately 200 names and addresses of persons interested in non-formal education for development. Forming the charter core of what came to be the NFE Center network, these persons had attended the conference, viewed collected monographs and project reports, and spoke of the need for a center to coordinate the gathering and distribution of materials.

This clearinghouse and referral function was especially important in light of the fact that those building

non-formal education as a new field of theory and practice tended to come from a variety of disciplines. No "invisible college" or common professional network yet existed for the formal and informal exchange of ideas necessary for the emergence of this applied and interdisciplinary field of inquiry.

Those on the initial list of names suggested the names of still others around the world who were thought to share interest in non-formal education, or be apt to profit from association with the NFE Information Center. By December 1976 the number of persons in contact with the Center had risen to 2016, in a total of 106 countries, directing an average of 40 inquiries and contributions weekly to the Center. At the end of 1977, 3231 persons were in direct contact with the Center, making approximately 75 requests and contributions per week. In 1981 the Non-Formal Education Information Center network nominally consisted of approximately 4500 persons who are recipients of the Center's periodical, The NFE Exchange.

The participants are scattered throughout the world, residing in a total of 145 different countries and representing a variety of development-related occupations or pursuits ranging, for example, from heads of non-governmental organizations to national policy makers to

field-based trainers. The interests of the development specialists in communication with the Center are highly diverse as will be detailed later in the thesis. But their interests converge in a common concern with the potential role of non-formal education in economic, social, and political development.

From its inception, the Non-Formal Education Information Center has sought to promote interaction among its affiliates by stressing broad-based, participatory knowledge generation and exchange rather than mere Center-directed knowledge dissemination per se. So, while functioning as a focal clearinghouse to put people in touch with resources and ideas related to non-formal education for development, the Center has attempted to facilitate contacts and promote horizontal linkages among the persons and organizations involved in non-formal education.

Several hundred planning documents, essays, project reports and field manuals are contributed to the Center each month, primarily from planners and practitioners in Africa, Asia, and Latin America. Most of these materials are considered "fugitive"; that is, unpublished or relatively inaccessible. It is largely with reference to such resources that the Center studies characteristics, innovations and trends in the field of non-formal education

for development and makes the findings available to persons in the NFE Center network.

The NFE Exchange periodical has been a principal vehicle for sharing knowledge summaries and resources with those in contact with the Center. Each issue is topically-oriented -- focusing on such themes as women in development, new roles for health workers, mobilizing youth for development, NFE and agriculture, and functional literacy -- and features a synthesizing overview of the topic, highlights from related project activities worldwide, an annotated bibliography of materials contributed by persons in the NFE Center network, reference reviews and news notes on diverse items of possible interest.

The Non-Formal Education Information Center also prepares topical annotated bibliographies that include reference to organizations as well as to print resources, often in direct response to requests from planners and practitioners. Research reports, occasional papers, and guides to resource center organization and management are also produced by the Center and made available upon request.

The nearly 100 weekly communications directed to the NFE Center are comprised of materials contributions, requests for The NFE Exchange, Center reports, occasional

papers and bibliographies, and publications of the early MSU Program of Studies in Non-Formal Education; invitations for critique of a project plan or a paper; solicitation for topical references; requests for the Center to extend its services and include others in the network; inquiries regarding education and training at Michigan State University and elsewhere; and requests for visits to the Center for consultation and to use its resources.

The following quotations illustrate these types of communications with the Center:

a) contributions of materials to the Center --

Having received numerous publications from your Centre, I have felt...that I had to make some sort of contribution. I decided on preparing a short paper on NFE in Singapore...particularly with your Centre in mind. (J.R., Singapore, 11/79)

I am sending you our Annual Reports for 1978/1979 which carry...programs in out-of-school education. This is part of the University Extension Services in offering non-credit courses mainly to help people in gaining skills. Apart from the University, we do have voluntary organizations and the churches which offer out-of-school activities for both the youth and adults. When I get their publications, I will send you the copies. (E.M., tutor, University of Zambia, 4/80)

b) interest in the Center's periodical The NFE Exchange --

We have received a copy of The NFE Exchange Issue No. 11-1978/1. We find it rather informative and are therefore writing to ask if you could please send us 50 complimentary copies for distribution to participants in our forthcoming Symposium on Non-Formal Education for Rural Development and 20 copies of the French version if available. (S.I.E., chief of public administration and manpower division of international governmental

organization, Ethiopia)

I am...working...on health and nutrition education in the highlands of Guatemala. I would very much like to receive your newsletter...because I think it would give us new ideas and maybe some encouragement -- the need and job is so big we get discouraged at our progress. (N.W., volunteer with non-governmental organization, Guatemala, 3/78)

c) requests for other Center publications on non-formal education --

I would appreciate very much your sending to this college some literature (books, papers, etc.) on non-formal education...Two months ago, we started two projects...One of these is a certificate training program in practical agriculture for out-of-school youth...We are trying to combine the residential high school with the extension-type short courses in agriculture...I took over as dean of this college only last year and I need all the advice I can get. (H.A., dean of agricultural college, Philippines, 11/76)

Thank you very much for sending me 25 copies of Non-Formal Education for Women in Bangladesh by Naseem Hogue. They arrived in good condition and are so popular that I would like to request 25 more copies if you can spare that many. Both women's programs and non-formal education are very relevant topics here in Bangladesh...and many organizations are quite interested in this publication that you have produced. (S.C.H., women's program advisor, development organization of North American country, Bangladesh, 12/76)

d) solicitations for topical references --

I am especially interested in teacher training materials employing non-formal techniques in preparing village-level persons to assume paraprofessional service delivery roles. (J.G., regional intergovernmental nutrition organization, Guatemala, 5/80)

As a follow-up to the organizational analysis of...agricultural extension (in an Asian country) we have had detailed discussions with the Minister...of Agriculture. The State Minister...is working on a plan for developing

"community schools"...The basic concept is to use the school facilities after hours for non-formal education, entertainment, and community affairs activities. This would make more effective use of already existing 4000 schools...(and) encourage a community center in many villages where none exists currently. The State Minister...asked if we could help him in finding any literature in this area (of community schools)...particularly in developing countries. (J.W., director of training division of international intergovernmental organization, Thailand, 12/78)

- e) requests to include others in the non-formal education network --

I am most grateful to hear that you will...accept the names and addresses that we send you from (a notice about the services of the Non-Formal Education Information Center that appeared in) our document, "Communication of Innovations"...(M)any thanks for the publicity you have given us about the "Child-to-child programme" and other parts of our work...I am glad to say it is going very well in a number of countries. (D.M., organization concerned with health needs of Third World children, England, 3/80)

- f) inquiries regarding education and training in non-formal education --

We write to inquire about possibilities regarding training for our staff...For the past six years we have been administering an integrated program of community development among the ---- of Lanao del Sur, growing from a one-man, part-time operation to a work force of 34 full-time personnel...To run such a program we need trained and management-oriented staff. Would it be possible for your agency to furnish such training or to help us seek avenues toward training? We are interested in both degree and non-degree, short-term and long-term training...(V.B.T., private college, Philippines, 8/76)

- g) requests for visits to the Center and for consultation --

I am likely to visit America...(and) wonder whether it would be possible...to visit your Centre. I am prepared to give a Seminar on "Non-formal Education in India" if you so desire. (G.B.S., director of university NFE program,

India, 6/81)

We are now starting our second clinic in Nigeria with Mobile Care Units working from each...giving medical care...(and) training village health workers...(W)e may be able to drive to MSU before leaving...and express future needs. (S.K., director of private voluntary organization, United States, 1/81)

- h) solicitations for suggestions or critique regarding a project or paper--

(T)he investigation phase for an information system on NFE for Botswana is now completed and the enclosed report, the result. I would be grateful for your comments or suggestions. (J.A., Ministry of Development Planning, Botswana, 2/78)

Thank you for all the books that you sent to me so that I may increase my knowledge in the field of adult and non-formal education...My government has seen my effort in this field and has...promoted me from the rank of assistant adult education officer to adult education officer...in charge of evening classes and vocational improvement classes throughout the State of Bauchi...I (send) a copy of the report of my case study on functional literacy along the Lake Chad Basin among the wheat farmers, and would like your comments, please. (M.M., state office of Ministry of Education, Nigeria, 11/76)

- i) comments offered on the use and results of Center contributions --

I must say, with much gratitude to your institute...that I learnt about the Searsolin Institution from The NFE Exchange, and the consequence to this has been most rewarding. (R.K., community development organization, Sri Lanka, 5/79)

(T)hank you...for sending the materials by air. We are using them right now. I have a planning group of six women - each from different Asian countries working with me for the next two days before all delegates arrive. I believe I do "nonformal" education in that none of the women I work with are educators - all work with groups of women and women's organizations. The materials you have sent are most readable. I can get

non-academics (as well as academics) interested.
(R.S.K., organization of women, Hong Kong, 5/79)

We have found the materials on rural theater and development highly informative and useful, and...are presently trying to use the Botswana experiment as a model for our Teatro Obrero project. The Agrarian Reform Communications Unit is also expanding its communication support to include rural women in development. Thus, the materials you sent us are very valuable. (R.P., officer of media center, Philippines, 5/78)

j) provision of information on development work and NFE project activities --

(W)e are a group of scientists trying to bring the benefits of science to the village mud huts, through popular science movements and training of village youths in appropriate rural industries. We are sending...our brief report and...our monthly bulletin "Science for Villages." (M.G., science resource center, India, 3/80)

Recently we successfully completed a three-year collaborative project with the Peruvian Ministry of Education...and negotiations are currently underway for program expansion. The project involved the development and testing of a non-formal, home-based preschool program in poverty urban and indigenous rural communities. (G.J., administrator of preschool program, United States, 5/80)

It should now be apparent that there is a highly personal quality to many of the communications with the Center. As might be gleaned from these few exchanges, individuals working in the field of non-formal education for development use the Center as a source not only for information and ideas, advice and referrals, but also for encouragement and for dialogue with persons who understand, without a great deal of background explanation, what is

being discussed.

This personal character is intentionally cultivated by the Center as each incoming communication receives an individually tailored response. The process upon the Center's receipt of a contribution of material, an inquiry, or a comment regarding the individual's work, ensues as follows. Any previous correspondence with the Center is retrieved from the files in order to review the individual's earlier comments about his or her work in development, and to recall what responses were made by the Center. Responses might include, for example, sending publications or making referrals to the work of other individuals and organizations. They might also entail expressions of encouragement, assessment of a project plan, or critique of a written work in draft. A tentative reply to the correspondent (or caller) is prepared by one of the graduate research staff and then reviewed, altered or supplemented by the Center director or assistant director, frequently "reading between the lines" to sense what is being sought.

To illustrate one response, thus personally and individually prepared by the Center, the reader is referred to the communication excerpted earlier under "h", from M.M. in Nigeria. The Center sought to comment appropriately on the project report received from M.M., reciprocate with

suitable resources in M.M.'s field of interest, and extend best wishes on M.M.'s promotion. The letter from the Center thus stated, in part:

Thank you for your very interesting report of the "Case Study on Functional Literacy for Wheat Farmers Along the Lake Chad Basin." I will share this with my associates here and place it in our Non-Formal Education library...

You may also enjoy seeing the...report of the...conference on "Non-Formal Education and the Rural Poor"...The report will discuss some principal elements found common to successful and enduring rural development programs, several of which you also mention in your case study (for example, the advisability of taking a "functional" approach to literacy, the importance of having rural development agents who possess technical agricultural skills, insuring that the necessary resources are available on time, etc.). I will send you a copy...

Congratulations on your promotion to the position of Adult Education Officer for Bauchi State. We...wish you much success in your efforts...Please let us know if we might be of further assistance...Meanwhile, we...hope that you will keep us posted on your program activities and findings. (J.C., 1/77)

A concluding note is warranted concerning the Non-Formal Education Information Center, its contacts, and the personal quality characterizing the exchange. It was largely through the experience of initiating and responding to letters with development planners and practitioners, administrators and researchers, and through occasional opportunities to meet with them in person at conferences or at the NFE Center, that the present investigator became

interested in learning more about this population and about their roles in development and as mediators of social change. The survey instrument designed to explore these interests (see Appendix) invited rather personal information concerning the demographic, education, and work backgrounds of the persons in contact with the Center, as well as their judgements about the value of the Center to their development work. The relatively good response to the mailed questionnaire may have been due, in some measure, to the personal exchange of correspondence and "bona fides" previously built between the Center and those in communication with it.

Chapter 3 now presents the research questions on which this thesis is focused.

CHAPTER 3

RESEARCH QUESTIONS

Who are the persons engaged in development who are in communication with the Non-Formal Education Information Center? To answer this question, several lines of inquiry were pursued to focus on the individuals' demographic backgrounds, their development roles, and their use and valuation of affiliation with the Center and its network.

Demographic, Development Role, and Network Use Characteristics

To probe demographic backgrounds the following questions were researched: Where in the world are these development planners and practitioners, administrators and researchers, located? From what countries do they come? How old are they? Male or female? What is their level of formal education? Were they educated in other countries? Where? What is the nature of their language facility?

Another battery of questions guided the inquiry into the development roles of the selected population: What is it that they do in development? In non-formal education? How do they acquire resources to perform their roles? With what kinds of organizations are they employed or affiliated? How long have they been involved with development? With

non-formal education? What did they do before? What parts of the population are intended as the principal beneficiaries of their efforts? With whom do they work directly? Where? How did they get involved in their work? What do they perceive as obstacles to realizing their development objectives?

To assess the subjects' use and value of affiliation with the Center and its information exchange network, responses were sought to these questions: How did the development specialists first make contact with the Center? To what extent have they interacted with the Center? With other persons in the Center's network? What kinds of information do they most value? How do they use the information acquired through contact with the Center? Do they share the information with others? Have they found any serendipitous effects of affiliation with the Center and network? Do they feel part of a global network of similarly interested persons? To what extent do they rely on or value the Center as a source of information on development? On non-formal education?

Structural Categories for Comparative Analysis

While demographic background, nature of development role, and network valuation form the basic entrees of

analysis for the thesis research, questions were also raised regarding the relative importance of two sets of macro-structural categories in distinguishing development planners and practitioners. In the first instance, interest lay in considering respondent types deriving from the mix of developing versus developed country national affiliation together with current location of work. Specifically, the following questions were posed for the research: Do the development specialists who are themselves citizens of less developed countries differ from other development specialists in their demographic backgrounds, development roles, and patterns of NFE network valuation? If so, in what ways? Do persons working in developing countries, regardless of LDC or DC citizenship, manifest response patterns that are different from those of persons working in developed countries? If so, how? When LDC versus DC citizenship is crossed with LDC versus DC location of work, what patterns are revealed?

In the second instance, interest lay in considering respondent types deriving from place of work according to national level of development by World Bank basic indicators. The questions specifically set forth were as follows: Can those working in development be differentiated in their demographic backgrounds, development roles, or patterns of NFE network valuation according to location of

work in a low-income, middle-income, or industrialized country? If so, in what ways?

Selected Variables

Referring again to the three basic components for the analysis of the characteristics of the development mediators, and considering the typological categories, various questions are explored from the interplay of demographic variables, development role, and nature of network affiliation. For instance, the question is raised whether certain kinds of roles in development tend to be played by particular collectivities of persons. Are women and men over- or under-represented in certain kinds of development work? Who occupies the lower status development positions? The higher status positions? Who is most apt to mediate between centers of power and the poor? Are they nationals of industrialized countries or of developed countries? Are they of the society in which they are working or from without? Are kinds of international experiences related to the kinds of development work in which persons are engaged?

In another instance, the differential meaning of participation in the information exchange network is examined. Are persons in certain kinds of development work

apt to rely to a greater extent on the network? Are persons working in less developed countries more or less likely to depend on the network for information and support than are persons in more developed countries who may have more numerous sources for these purposes?

With the lines of inquiry that guided this research now set forth, the next chapter explains the methodology used to explore these questions.

CHAPTER 4

METHODOLOGY

This chapter discusses the approach used for this applied network study of development intermediaries affiliated with the NFE Information Center, and then specifies the population and the sample examined. It next describes the survey instrument designed to gather the data and the means used to process and analyze it.

A Survey Approach to Applied Network Study

Because so little is known in any systematic way about the new roles being shaped and played by persons engaged in planned education interventions for basic social and economic development, the investigator chose to conduct a study that would delineate some of the characteristics of such individuals and their role patterns vis-a-vis their development work. The study's orientation is intentionally exploratory in order to describe broadly the demographic, educational, and professional backgrounds of the development specialists; the nature of their work in development and education; and the means they rely on to learn more about these areas and to create their own work roles in connection with them. For this reason, the author, while interested in examining several hypotheses concerning, for instance,

center versus periphery world-system affiliation and network use and valuation, gathered data also suited to a broader range of inquiry.

The investigator used a mailed survey rather than "going to the field" to ethnographically observe and interview the community of interest. This procedure resulted from the fact that development planners and practitioners are not usually found in their own face-to-face collectivities but, rather, dispersed throughout the population. The information exchange, social, and communication networks that they establish among themselves may only occasionally be seasoned with direct personal contact. Furthermore, it is not yet known to what extent they may participate in a common set of social understandings, a context assumed in classical ethnographic studies. A general field investigation of these development facilitators, however desirable to research in depth their complex relationships, would have been prohibitively expensive to mount. This research should pave the way, however, for subsequent field-based studies, historically and contextually richer, of diverse categories of persons serving as intermediaries in the processes of development and change.

Neither did the investigator limit herself to the units of analysis of communication network studies or of social network studies but, instead, incorporated components of both. While communication network studies seek to identify the structural patterns of communication flow within a human interaction system, they are not concerned, as is this thesis, with the effects of information exchange linkages on persons. In the case of social network studies, interest lies in the status ties between individuals rather than, as in this thesis, the qualities possessed by those persons in addition to their work status relationships.

The Population and the Purposive Sample

The population of study consists of those persons -- generally development planners, administrators, practitioners, and researchers interested in the use of non-formal education -- in communication with the Non-Formal Education Information Center and, specifically, on the Center's mailing list to receive its periodical The NFE Exchange. At the time the survey was mailed, in April 1979, the mailing list comprised 3711 individuals or organizations located in a total of 135 countries. Tables 1 through 6 and Figures 1.0 through 2 in the following chapter show the world continent, region, and country locations of the

mailing labels for persons in the population. Chapter 5 also presents a general, aggregate profile of the demographic, development role, and network use and valuation characteristics of the 942 respondents to the mailed survey.

A purposive sample of the respondents was then formed to enable the research to focus upon the comparative analysis of those respondents in the Non-Formal Education Information Center network whose work actually concerns development, as understood principally in the context of conditions in low- and middle-income countries. Six criteria were used to compile this sample:

1. Affirmative response to the query whether the individual's work (or study) concerns development (See Appendix, survey items 12 and 25): 692 (95.1%) of 728 reply affirmatively to item 25
2. Indication of development activity in which most time spent (survey item 27b): 644 reply to this item
3. Indication of country of citizenship (survey item 58): 751 reply
4. Indication of country where engaged in development work (survey item 59): 751 reply
5. Indication of highest level of formal schooling received (survey item 63): 727 reply

6. Return of survey in 1979 rather than later

510 individuals satisfied all the criteria and were thus selected for the comparative analyses.

It is important to note that participants in the NFE Information Center network were not pressed to complete the entire survey. The letter of introduction specifies that if "circumstances do not allow" completion of the entire questionnaire, only questions 1 through 12 could be answered and that portion returned. Time constraints or, possibly, political factors were thought to be circumstances which might prevent many from responding in full to the survey. About 200 of the respondents accepted the option of not completing most of the survey items, and occasional items were omitted by still more individuals, as detailed in Chapter 5.

A cursory examination of returned surveys led to an inference that the development planners, practitioners, administrators, and researchers in the purposive sample of 510 are not substantially different from the 942 total respondents. That is, non-completion of the indicated criteria items appears to be distributed rather evenly geographically and a result of time constraint or item confusion rather than lack of involvement in development roles. This should not be surprising since the content of

The NFE Exchange, the mailing list for which constitutes the population of study, is focused nearly entirely on out-of-school education in the context of development in Africa, Asia, and Latin America.

The 510 development workers in the purposive sample are divided into two sets of categories. The first category crosses location of citizenship with location of development work forming four types: LDC citizens in LDC locations, DC citizens in LDC locations, LDC citizens in DC locations, and DC citizens in DC locations. The second category derives from location of development work by World Bank basic development indicators and consists of three types: location of work in a low-income, a middle-income, or an industrialized country.

The reader is now provided with detail on the data gathering instrument.

The Survey Questionnaire

This part of the chapter discusses the research design phase of the survey, the mailed questionnaire as the survey mode, the means for gaining access to the respondents, and the format of the questionnaire.

The research design phase began over a year prior to the mailing of the questionnaire itself. Included in the design process was clarification of the purpose of the survey, the formulation of items to gather data on the three substantive areas of inquiry (i.e., NFEIC network affiliates' demographic and educational backgrounds, roles in development, and network use and valuation), decision about the universe of respondents and means to access them, and planning for data processing.

The items prepared to gather the data were subjected to several phases of revision and critique before being pretested. The pretest itself involved administration of the instrument to seven locally available persons engaged in non-formal education and training for development, five of these from different developing countries for whom English is not their first language. Extensive discussion was individually held with each person after the pretest to determine ambiguities needing clarification and to probe attitudes and other subjective responses to the survey's substance and format. The instrument was then finally revised and printed.

Concurrent with preparation of the survey items, specialists were consulted concerning questionnaire format

for ease in subsequent data processing. The formats providing the greatest ease in this regard (e.g., forms requiring the respondent to use a special pencil and to complete a response card) were rejected because of the technical demands placed on respondents.

A mailed questionnaire survey was chosen as the mode of data gathering in order to reach a large, geographically diverse population in a relatively economical way. Limitations of such a method are obvious. In particular, certain NFEIC network affiliates could not be reached by mail at the time of the survey owing, in some cases, to political disarray (e.g., in Iran) or to the curtailment of U.S. mail service (e.g., to Chad). In addition, respondents had to devote considerable time to completion of the survey (varying in the pretest from 40 minutes to one hour) and pay to return the survey by airmail (equivalent to at least US\$1.00 for overseas locations).

Nevertheless, as has been noted, 25.5 percent (947) of all 3711 questionnaires mailed were responded to and returned, the majority by the requested deadline of 1 June 1979, but virtually all by August 1979. A few questionnaires continued to trickle in throughout the ensuing year, generally with letters of apology and explanation for the tardiness.

Access to the respondents was gained by enclosing the questionnaire, together with an accompanying cover letter from the director of the Non-Formal Education Information Center, with the mailing of issue number 14 of The NFE Exchange. The cover letter (see Appendix) specifically requested completion of the survey to enable the investigator to (1) update the Center's mailing list, (2) evaluate the activities of the Center, (3) learn more about those using the Center's services, and (4) understand the workings of the Center's network. As earlier noted, recipients were advised that if their work does not concern non-formal education or development, or if circumstances did not allow their completion of the entire questionnaire, they could respond to the first twelve items only.

Continued receipt of The NFE Exchange on a complimentary basis likely provided some incentive to individuals in the population to respond to the survey. In addition, the "bona fides" built up through personal exchanges of correspondence between the Center and some of the members of the NFEIC network probably encouraged some to undertake the task of completion.

The format of the questionnaire can be observed in the Appendix. The English-language survey, 11 pages in length,

consisted of 69 items, many of which had multiple parts. The majority of the items were forced choice, with the remainder free-response. Items to assess the use and evaluation of the Center were placed at the beginning of the survey, while more personal items (e.g., regarding age, career pattern, level of formal schooling) were placed towards the end.

The survey was professionally printed in an attempt to lend importance to it visually, and a printed, addressed return envelope was provided with each questionnaire.

Means of Data Processing and Analysis

The first step to prepare for processing the data entailed the construction of a detailed code book. Additionally, codes had to be developed for selected open-ended items such as level of formal education.

Next came the lengthy process of coding the questionnaire data into the right hand margins of each page so that the data could be quickly key punched onto computer cards. At the same time that the questionnaire responses were being coded, all free responses and other comments were transferred to Unisort cards, one corresponding to each respondent. These cards are retrievable by respondent

identification number as well as by particular item responses.

After the questionnaires were thus coded and visually double-checked, they were professionally key punched and key verified. Four IBM cards were required to record the data for each respondent, each card identified as to respondent number and card order.

The data on the cards were read onto a computer tape and an SPSS (Statistical Package for the Social Sciences) file then created to permit various computations of the data. When initial tabulations of the data revealed excessive responses in unacceptable codes, subsequent inspection of the data file revealed three cases without four properly sequenced data cards. The elimination of these three cases and reconstitution of the SPSS file yielded a clean data set having no more than two unacceptable code responses in tabulations of a few questionnaire items.

After frequencies were obtained for all of the items, a subfile was created of persons working in development who had responded to selected items judged significant for later analysis. (See the discussion of the Population and the Purposive Sample earlier in this chapter.) Frequencies were

then obtained for the survey items, first, when location of citizenship (LDC vs. DC) by location of development work (LDC vs. DC) was shown as an independent variable, and, second, when location of development work by World Bank basic indicators was shown as an independent variable.

CHAPTER 5

THE NFEIC EXCHANGE NETWORK: AN AGGREGATE PROFILE OF RESPONDENTS

This chapter offers an aggregate overview of the surveyed participants in the Non-Formal Education Information Center network, and is intended primarily to provide a broad context for better viewing the comparative analyses detailed in the subsequent chapters. The chapter first presents a mapping of the locations of the respondents to the survey of persons in contact with the NFE Center, and then profiles the respondents' characteristics concerning their demographic backgrounds, the nature of their work in development and non-formal education, and their use and valuation of affiliation with the Center and the network associated with it.

Mapping of Respondents

At the time the survey was conducted, 3711 individuals and organizations were on the Center's mailing list to receive The NFE Exchange and, hence, were sent the questionnaire. Of these, 947 (25.5%) responded to the survey, and data tabulated on 942 cases.

Of the population sent the questionnaire, 377 (10.2%) names were eventually removed from the mailing list for The NFE Exchange owing most often to inadequate or changed addresses, postal problems, or, occasionally, to the individual's request because of duplication within the organization or change to a different line of work. Two years after the questionnaire was mailed, another 1750 (47.2%) names of persons in the original population were removed from the mailing list if, in addition to not responding to the survey, the individuals had not initiated communication with the Non-Formal Education Information Center in the most recent two and one-half year period. Many of these non-respondents were found to be persons who were placed on the mailing list in the early years of building the Center network, and added at the request of Michigan State University faculty rather than at the individual's specific request. No pattern is evident to suggest that these non-respondents share other unique characteristics such as being of lower socio-economic status or lesser education level. About 637 (17.2%) names of non-respondents were kept on the mailing list. These tended to include librarians, USAID personnel, and other selected individuals who may not have communicated recently with the Center, as well as development personnel who did maintain on-going communication with the Center. While a majority of

the non-respondents to the questionnaire are found to be inactive members of the network population surveyed, the response rates nevertheless differ markedly within several world regions, as discussed more fully below.

Several observations can be made about the respondents. These initially concern large geographic categories and then more particular ones. Figures and tables depicting data on the geographic dispersion of the respondents are provided at the conclusion of this section.

First, considering the 942 persons for whom data were processed, 431 have mailing addresses in Asia (185), Africa (129), Latin America (101), or Oceania (16). Another 511 individuals have mailing addresses in North America (427) or in Europe (84). Figure 1.0 presents a map of respondents by continent of mailing address.

It should be noted that there tend to be more respondents located in developing countries than the numerical count indicates. This is so because some persons affiliated with development agencies, foundations, and international organizations use the organizations's headquarters address, which may be located in a developed country. There are two instances in which there is a difference of more than 10 between the number of mailing

labels accounted for from respondents and the number reporting their actual development work as occurring in that particular country. For the United Kingdom (UK), 39 respondents with UK mailing labels are accounted for, but only 27 of these report carrying out their development work there. For the United States of America (US), respondents account for 396 mailing labels but only 228 individuals report working in the US.

These data on respondents by world continents can be expanded to indicate the number of individuals with mailing addresses in the various world regions, as depicted in Figures 1.1 through 1.7. The world regions with more than 20 respondents are as follows: North America, 427; Southeast Asia, 107; Middle South Asia, 65; West Africa, 65; South America, 56; Northern Europe, 43; Western Europe, 36; East Africa, 35; Middle America, 29; and Southern Africa, 21.

It is also instructive to know what percent of individuals responded to the survey from the actual total sent the questionnaire in each world region. The bar graph shown in Figure 2 reveals the world regions accounting for percentages of respondents greater than the mean percent of 25.4, as well as those areas accounting for less than the mean.

As illustrated, the world regions having the highest percent of respondents compared with non-respondents are Southeast Asia (33%), East Asia (32%), Southern Africa (31%), and West Africa (30%), followed by Northern Europe (29%), Western Europe (29%), and Middle America (27%). The world regions having the lowest percent of respondents compared with non-respondents are North Africa (12%), Middle Africa (12%), Southwest Asia (the Middle East) (12%), and Southern Europe (13%), followed by East Africa (21%), Middle South Asia (21%), and South America (21%).

To explain some of the large variations from the mean of 25.4 percent of respondents by world region, it is necessary to examine respondents by countries comprising the world regions. These tabulations are found in Tables 1 through 6, and portrayed in Figures 1.8 through 1.13.

Considering the five regions of Africa, Table 1 indicates that the greatest number of respondents is found in West Africa (64). Of these, 45 individuals (70%) are in Anglophone countries: Nigeria (28), Liberia (7), Ghana (7), and Gambia (3). The remaining 19 persons are in Francophone countries. While there are no respondents from Portuguese-speaking Guinea-Bissau, the response rate for those in Anglophone countries (30%) is not greater than for

those in Francophone countries (32%), as might be expected given the English-language nature of the NFE Center's publications.

The response rate in Southern Africa is 31 percent. There are, unexplainably, no respondents from Lesotho of the 10 mailed the survey, while 10 (83%) of the 12 persons in Swaziland did respond.

In East Africa, with a response mean of 21 percent, English is widely spoken by the highly educated in all save Burundi, Rwanda, Mozambique, and Somalia. The single respondent from this collection of non-English speaking countries represents only 11 percent of those sent the survey.

It is North Africa and Middle Africa, however, that fall much below the mean percent of respondents for all world regions. These low rates (12 percent in each case) might be accounted for by the predominance of Arabic in the former and French in the latter. Attention is also called to the special case of Chad in Middle Africa because US mail service to that country was suspended when the survey was mailed; hence, the nine individuals there were unable to receive or respond to the questionnaire.

When next considering the four regions of Asia, in Table 2, Southeast Asia, with a 33 percent response rate, is noteworthy in providing 107 (58%) of the 184 respondents in Asia. This high rate can be partially accounted for by the large response from Indonesia and the Philippines. In Indonesia where 45 percent of 66 individuals responded, Michigan State University had been recently engaged in a non-formal education project. In the Philippines where 36 percent of 144 persons responded, English is widely spoken, and non-formal education has been nationally promoted since 1977 from the Ministry of Education and Culture.

Middle South Asia accounts for the next greatest number of respondents in Asia (64) with a response rate of 21 percent. India has 34 of the respondents from this region. The cases of Iran and Afghanistan should be noted because of their low response rates (4% and 0%, respectively). In February 1979 the Iranian revolution began and many persons affiliated with the Non-Formal Education Information Center were displaced. Afghanistan was also in political turmoil during this time.

While East Asia had 9 of 28 individuals respond (32%), Southwest Asia had only 5 of 42 persons respond (12%). The very low rate in Southwest Asia (the Middle East) might be

accounted for by the predominance of Arabic in the region.

Examination of the three regions of Latin America, shown in Table 3, reveals no great variation in response rate. South America, with 21 percent response, accounts for the greatest number of respondents (56). Middle or Central America, with a rate of 27 percent, contains 29 of the respondents, while the Caribbean, with 25 percent response, has 16 respondents.

Oceania with a relatively high response of 31 percent, has 16 respondents, as can be noted in Table 4.

The 84 respondents with mailing addresses in Europe constitute 28 percent of those sent the survey there. Table 5 shows that most of these are in Northern Europe (43) or in Western Europe (36), each with a response rate of 29 percent. Only 5 of 35 respondents (14%) are accounted for in Eastern Europe and in Southern Europe.

Finally, Table 6 indicates that North America with a near-mean response rate, has 93 percent of its 427 respondents with mailing addresses in the US and the remainder in Canada.

With this mapping of continental, regional and country response patterns set forth, an overview of the respondents themselves is presented following Tables 1 through 6.

Profile of Demographic Characteristics of Respondents

Gender. Of the 942 respondents, males (71.6%) are two and a half times more numerous than females (28.4%).

Age. Respondents (738) range in age from 13 to 71 (only one case was under 18) with a mean of 40.7 and a median of 40, and a distribution as follows: 13-19 years, 3; 20-29 years, 82; 30-39 years, 283; 40-49 years, 224; 50-59 years, 113; 60-69 years, 32; 71 years, 1.

Level of Formal Education. Fully 76.3 percent of the respondents (727) have been formally educated to the masters or doctoral levels, or their equivalents. The distribution of the respondents, according to highest level of formal schooling received, is as follows: primary, 1 (0.1%); intermediate, 1 (0.1%); some secondary, 4 (0.6%); secondary graduate, 6 (0.8%); vocational or normal, 5 (0.7%); some university, 14 (1.9%); university graduate or equivalent, 89 (12.2%); some post university, 52 (7.2%); masters or

FIGURE 1.0: MAP OF RESPONDENTS BY WORLD CONTINENT OF MAILING
ADDRESS



CONTINENT	f
Africa	129
Asia	185
Latin America	101
Oceania	16
Europe	84
North America	427
TOTAL N	942

FIGURE 1.1: MAP OF RESPONDENTS BY WORLD REGION OF MAILING ADDRESS



WORLD REGION	f
North Africa	4
East Africa	35
Southern Africa	21
West Africa	64
Middle Africa	5
Southwest Asia	5
Middle So. Asia	64
Southeast Asia	107
East Asia	9
South America	56
Middle America	29
Caribbean	16
Oceania	16

WORLD REGION	f
Northern Europe	43
Western Europe	36
Eastern Europe	1
Southern Europe	4
North America	427

FIGURE 1.2: MAP OF RESPONDENTS BY WORLD REGION OF MAILING ADDRESS: AFRICA

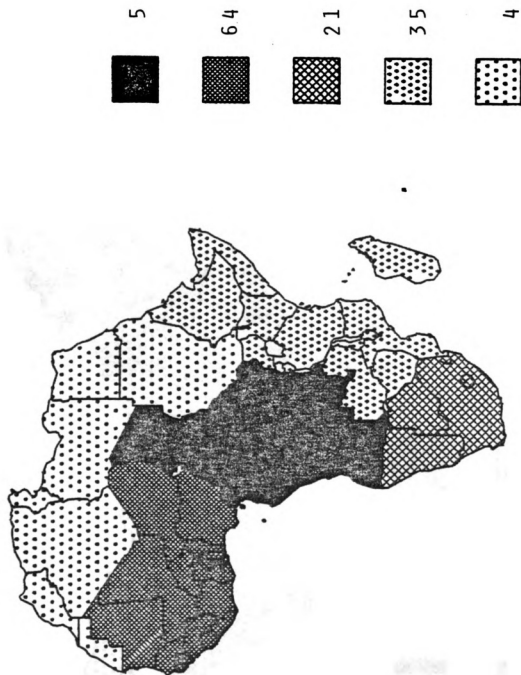


FIGURE 1.3: MAP OF RESPONDENTS BY WORLD REGION OF MAILING ADDRESS: ASIA

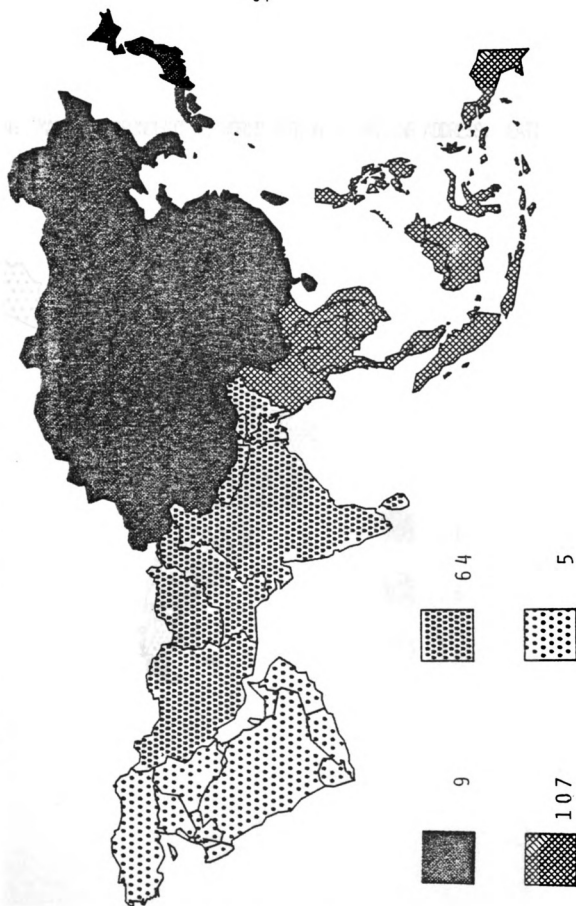
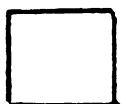


FIGURE 1.4: MAP OF RESPONDENTS BY WORLD REGION OF MAILING ADDRESS: LATIN AMERICA



FIGURE 1.5: MAP OF RESPONDENTS BY WORLD REGION OF MAILING ADDRESS: OCEANIA



16

FIGURE 1.6: MAP OF RESPONDENTS BY WORLD REGION OF MAILING ADDRESS:
EUROPE



FIGURE 1.7: MAP OF RESPONDENTS BY WORLD REGION OF MAILING ADDRESS:
NORTH AMERICA



4 2 7

FIGURE 1.9: MAP OF RESPONDENTS BY COUNTRY OF MAILING ADDRESS:

ASIA



FIGURE 1.10: MAP OF RESPONDENTS BY COUNTRY OF MAILING ADDRESS:
LATIN AMERICA



FIGURE 1.11: MAP OF RESPONDENTS BY COUNTRY OF MAILING ADDRESS:

OCEANIA

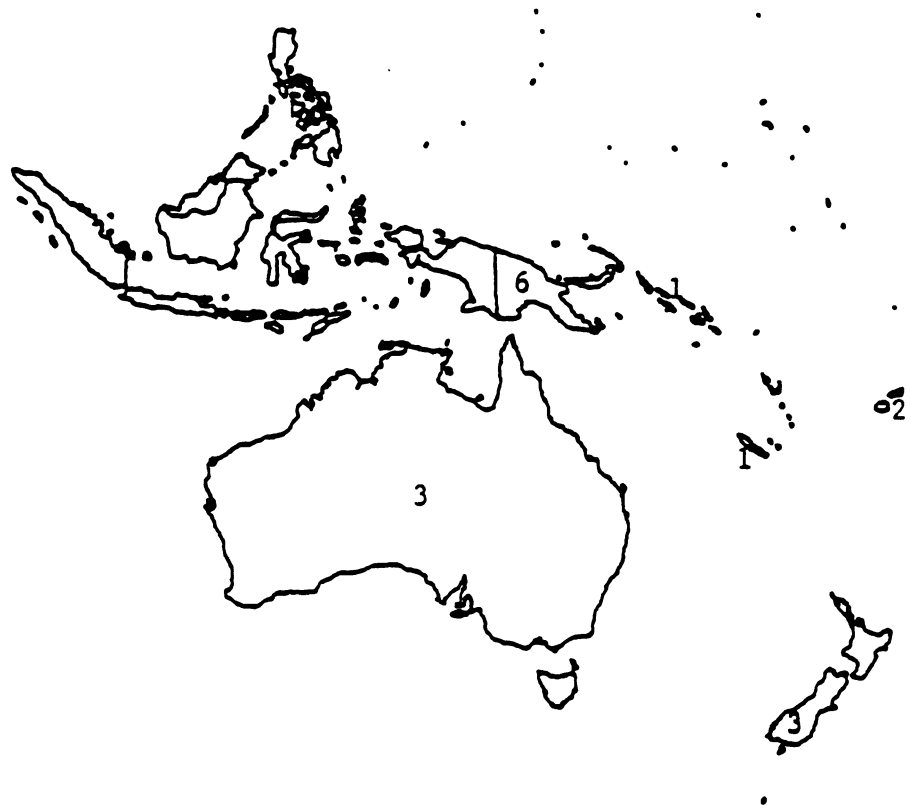


FIGURE 1.12: MAP OF RESPONDENTS BY COUNTRY OF MAILING ADDRESS:

EUROPE



FIGURE 1.13: MAP OF RESPONDENTS BY COUNTRY OF MAILING ADDRESS:
NORTH AMERICA

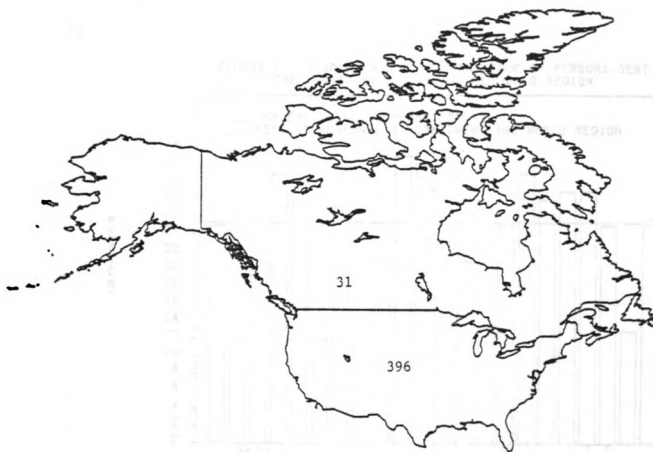


FIGURE 2. RESPONDENTS AS A PERCENTAGE OF PERSONS SENT THE SURVEY BY CONTINENT AND WORLD REGION

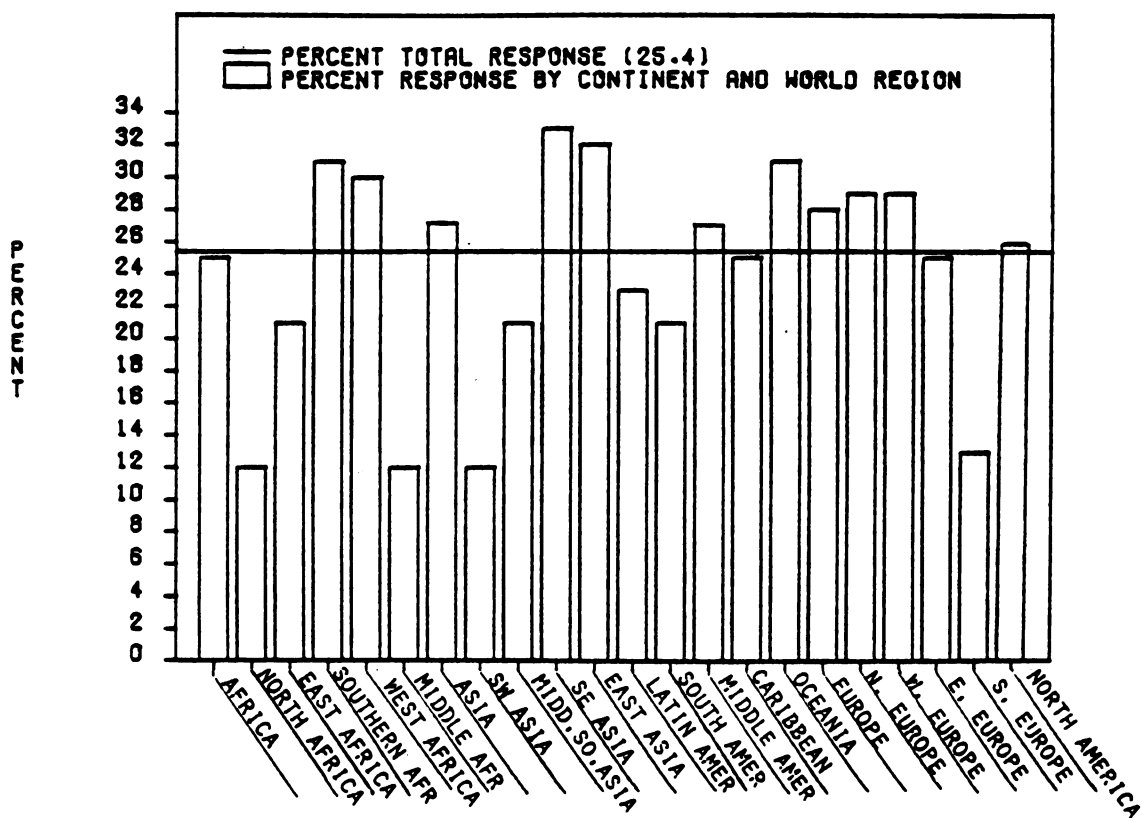


TABLE 1: Locations of Mailing List Population and Survey Respondents by Country and World Region: Africa

	No. in NFEIC Mailg. List April 1979 Respondents Percent		
	-----	-----	-----
<u>AFRICA</u>	521	129	25
<u>NORTH AFRICA</u>	34	4	12
Algeria	---	---	---
Djibouti	---	---	---
Egypt	14	2	14
Libya	---	---	---
Morocco	5	1	20
Sudan	12	1	8
Tunisia	3	0	0
<u>EAST AFRICA</u>	167	35	21
Burundi	1	0	0
Comoro Isllds	---	---	---
Ethiopia	40	8	20
Kenya	47	11	23
Madagascar	---	---	---
Malawi	14	3	21
Mauritius	5	0	0
Mozambique	1	0	0
Rwanda	4	1	25
Seychelles	---	---	---
Somalia	3	0	0
Tanzania	25	6	24
Uganda	10	2	20
Zambia	11	2	18
Zimbabwe (Rh)	6	2	33
<u>SOUTHERN AFRICA</u>	68	21	31
Botswana	27	6	22
Lesotho	10	0	0
Namibia	---	---	---
South Africa	19	5	26
Swaziland	12	10	83

TABLE 1: (cont'd) Locations of Mailing List Population
and Survey Respondents by Country and World
Region: Africa

	No. in NFEIC Mailg.		
	List April 1979	Respondents	Percent

<u>WEST AFRICA</u>	211	64	30
Benin	1	0	0
Cape Verde	---	---	---
Gambia	6	3	50
Ghana	37	7	19
Guinea	---	---	---
Guinea-Bissau	3	0	0
Ivory Coast	12	4	33
Liberia	17	7	41
Mali	7	2	29
Mauritania	---	---	---
Niger	4	0	0
Nigeria	88	28	32
Sao Tome & Princ.	---	---	---
Senegal	15	6	40
Sierra Leone.	11	4	36
Togo	1	0	0
Upper Volta	9	3	33
<u>MIDDLE AFRICA</u>	41	5	12
Angola	---	---	---
Cameroon	12	2	17
Central African Rep.	5	1	20
Chad	9	0	0
Congo	1	0	0
Equatorial Guinea	---	---	---
Gabon	3	0	0
Zaire	11	2	18

**TABLE 2: Locations of Mailing List Population and Survey
Respondents by Country and World Region: Asia**

	No. in NFEIC Mailg.		
	List April 1979	Respondents	Percent
	-----	-----	-----
<u>ASIA</u>	696	185	27
<u>SOUTHWEST ASIA</u>	42	5	12
Bahrain	2	0	0
Cyprus	2	0	0
Iraq	3	0	0
Israel	6	2	33
Jordan	3	0	0
Kuwait	1	0	0
Lebanon	4	0	0
Oman	1	0	0
Qatar	1	0	0
Saudi Arabia	2	0	0
Syria	3	1	33
Turkey	10	1	10
U. A. Emirates	1	0	0
Yemen Arab Rep.	3	1	33
Yemen Dem. Rep.	---	---	---
<u>MIDDLE SOUTH ASIA</u>	299	64	21
Afghanistan	10	0	0
Bangladesh	39	10	26
Bhutan	---	---	---
India	147	34	23
Iran	23	1	4
Maldives	---	---	---
Nepal	23	6	26
Pakistan	40	8	20
Sri Lanka	17	5	29

TABLE 2: (cont'd) Locations of Mailing List Population
and Survey Respondents by Country and World
Region: Asia

	No. in NFEIC Mailg.		
	List April 1979	Respondents	Percent

<u>SOUTHEAST ASIA</u>	327	107	33
Burma	---	---	---
Indonesia	66	30	45
Kampuchea	---	---	---
Laos	---	---	---
Malaysia	24	3	13
Philippines	144	52	36
Singapore	6	3	50
Thailand	86	19	22
Vietnam	1	0	0
<u>EAST ASIA</u>	28	9	32
China, People's Rep.	---	---	---
Hong Kong	6	3	50
Japan	4	1	25
Korea, Dem. Rep.	---	---	---
Korea, Rep. (S)	13	4	31
Macau	---	---	---
Mongolia	---	---	---
Taiwan (Rep. China)	5	1	20

TABLE 3: Locations of Mailing List Population and Survey Respondents by Country and World Region: Latin America

	No. in NFEIC Mailg. List April 1979 Respondents Percent		
<u>LATIN AMERICA</u>	446	101	23
<u>SOUTH AMERICA</u>	273	56	21
Argentina	13	3	23
Bolivia	25	4	17
Brazil	97	15	15
Chile	27	6	22
Colombia	50	14	28
Ecuador	10	4	40
Guyana	6	0	0
Paraguay	8	0	0
Peru	19	1	5
Surinam	---	---	---
Uruguay	6	2	33
Venezuela	12	7	58
<u>MIDDLE AMERICA</u>	109	29	27
Belize	5	1	20
Costa Rica	18	5	28
El Salvador	8	2	25
Guatemala	23	7	30
Honduras	11	3	27
Mexico	26	7	27
Nicaragua	10	3	30
Panama	8	1	13

TABLE 3: (Cont'd) Locations of Mailing List Population
and Survey Respondents by Country and World
Region: Latin America

	No. in NFEIC Mailg.		
	List April 1979	Respondents	Percent

<u>CARIBBEAN</u>	65	16	25
Antigua	---	---	---
Bahamas	5	3	60
Barbados	8	1	13
Cuba	---	---	---
Dominica	1	0	0
Dominican Republic	18	5	28
Grenada	---	---	---
Guadeloupe	---	---	---
Haiti	1	0	0
Jamaica	13	4	31
Martinique	---	---	---
Montserrat	1	1	100
Puerto Rico	8	0	0
Saint Kitts	---	---	---
Saint Lucia	1	0	0
Trinidad & Tobago	3	0	0
Virgin Islands	5	2	40
Saint Vincent	1	0	0

TABLE 4: Locations of Mailing List Population and Survey Respondents by Country and World Region: Oceania

	No. in NFEIC Mailg. List April 1979 Respondents Percent		
	-----	-----	-----
<u>OCEANIA</u>	52	16	31
Australia	13	3	23
Fiji	5	2	40
New Zealand	6	3	50
Papua New Guinea	15	6	40
Caroline Islands	3	0	0
Kiribati	---	---	---
Marshall Islands	1	0	0
Nauru	---	---	---
New Caledonia	2	1	50
N. Mariana Islands	1	0	0
Solomon Islands	3	1	33
Tongo	1	0	0
Tuvalu	---	---	---
Western Samoa	2	0	0

TABLE 5: Locations of Mailing List Population and Survey Respondents by Country and World Region: Europe

	No. in NFEIC Mailg. List April 1979 Respondents Percent		
<u>EUROPE</u>	305	84	28
<u>NORTHERN EUROPE</u>	146	43	29
Denmark	3	0	0
Finland	---	---	---
Iceland	---	---	---
Norway	5	2	40
Sweden	12	2	17
United Kingdom	120	39	33
Ireland	5	0	0
Greenland	1	0	0
<u>WESTERN EUROPE</u>	124	36	29
Austria	5	1	20
Belgium	9	3	33
France	27	6	22
Germany, Federal Rep.	29	8	28
Liechtenstein	---	---	---
Luxembourg	1	1	100
Monaco	---	---	---
Netherlands	17	10	59
Switzerland	36	7	19
<u>EASTERN EUROPE</u>	4	1	25
Bulgaria	---	---	---
Czechoslovakia	---	---	---
Germany, Dem. Rep.	---	---	---
Hungary	---	---	---
Poland	3	1	33
Romania	1	0	0

TABLE 5: (Cont'd) Locations of Mailing List Population
and Survey Respondents by Country and World
Region: Europe

	No. in NFEIC Mailg.		
	List April 1979	Respondents	Percent

<u>SOUTHERN EUROPE</u>	31	4	13
Albania	---	---	---
Greece	2	0	0
Italy	13	2	15
Malta	1	0	0
Portugal	6	0	0
San Marino	---	---	---
Spain	2	2	100
Yugoslavia	7	0	0
<u>USSR</u>	---	---	---

TABLE 6: Locations of Mailing List Population and Survey Respondents by Country and World Region: North America

	No. in NFEIC Mailg.		
	List April 1979	Respondents	Percent
	-----	-----	-----
<u>NORTH AMERICA</u>	1671	427	26
Canada	107	31	29
U.S.A.	1564	396	25
 <u>TOTAL FOR TABLES 1-6</u>	 3692	 942	 26

equivalent, 272 (37.4%); Ph.D. or equivalent, 283 (38.9%).

Foreign Schooling. Nearly one-half (46.8%) of the respondents (739) report having received some formal schooling outside their country of citizenship. Of those so indicating foreign education, 56 are unclassified in terms of level, 202 have graduate education, 68 received other higher education, 15 undergraduate, and 3 primary.

Of those who are foreign educated, the distribution by world area of the schooling is as follows: Africa, 14; Asia, 27; Latin America, 31; Oceania, 2; Europe, 87; North America, 122; USSR, 2; Multi-Country Response, 57. The countries mentioned most frequently are: USA, 114; UK, 40; France, 20; Philippines, 11; Mexico, 9; West Germany, 9; Canada, 8; India, 5.

Formal Schooling Concentration. Of 739 responding, the following concentrations are indicated (some indicate two concentrations): education, 275; social science/social work, 194; general studies/liberal arts, 96; philosophy/humanities, 53; agriculture, 40; nursing/medicine, 28; physical sciences, 20; biological sciences, 12; law, 5; and other, or more than two responses, 236.

Student Status. Only 15.4 percent of the respondents (729) report that they are currently students.

Language Facility. Concerning the languages they speak or read, the respondents (746) report from one to nine languages with a mean of 3.05. The distribution of respondents by languages spoken or read is as follows: 1 language, 72 (9.7%); 2 languages, 229 (30.7%); 3 languages, 221 (29.6%); 4 languages, 113 (15.1%); 5 languages, 63 (8.4%); 6 languages, 34 (4.6%); 7 to 9 languages, 14 (1.8%).

Profile of Respondents' Roles in Development

To profile the respondents' roles in development, this section provides an overview of four areas concerning the respondents' work: development role performance and learning, non-formal education role performance and learning, development broker linkages, and career history.

Development role performance and learning. Nearly all (95.1%) of the individuals responding (728) affirm that their work or study concerns development.

When the respondents were requested to indicate in what fields of development they work, it becomes evident that

most of the NFEIC network affiliates are engaged in many areas concurrently. The distribution of fields is as follows: (1) education or training of others to work in development, 509; (2) integrated rural development, 409; (3) general non-formal education, 372; (4) literacy and/or basic education, 365; (5) health, 297; (6) nutrition, 273; (7) extension, 266; (8) agriculture, 262; (9) communication and media, 260; (10) a numerical tie between vocational skills programs, 251, and higher education, 251; (12) family planning, 198; (13) other formal education, 179; (14) other fields not mentioned, 154; (15) management consultation, 114; (16) the servicing of development, 98; (17) urban settlements, 69; (18) business, manufacturing, or commerce, 63.

Asked in what field of development they spend the most time, 548 respondents give the following fields the greatest number of responses: (1) education or training of others to work in development, 92, 16.8%; (2) integrated rural development-comprehensive programs, 65, 11.9%; (3) higher education, 49, 8.9%; (4) literacy and/or basic education, 46, 8.4%; (5) general non-formal education, 44, 8.0%; (6) communication and media, 42, 7.7%; (7) health, 31, 5.7%; (8) agriculture, 23, 4.2%.

Indicating the various development activities in which they are involved, the respondents again demonstrate the diversity of their roles. The distribution of activities, by greatest frequency, is as follows: (1) planning or program design, 521; (2) teaching or training, 516; (3) research or evaluation, 475; (4) administration, 361; (5) tie between policy making, 275, and community-level field work, 275; (7) tie between study, 220, and documentation or information services, 220; (9) other support services, 66; (10) other activities not specified, 63.

Identifying the development activity in which they spend the most time, 644 respondents name the following activities most frequently: (1) teaching or training, 150, 23.3%; (2) planning or program design, 121, 18.8%; (3) research or evaluation, 96, 14.9%; (4) administration, 90, 14.0%; and (5) community-level field work, 53, 8.2%.

When queried as to their sources for getting information, resources and ideas to learn about development, the respondents indicate the following sources, in order of frequency: (1) publications, 641; (2) direct, face-to-face contact with organizations, advisors or specialists in development, 550; (3) work associates, 548; (4) development projects with which personally familiar, 515; (5) people for

whom the development projects are intended, 500; (6) indirect communication with persons or organizations, 465; (7) instructors and courses, 212; (8) radio or other non-print materials, 101; (9) other, 56.

The following are indicated most frequently when respondents (567) select the two sources that they rely on most for information, resources and ideas about development: (1) publications, 235; (2) organizations, advisors or specialists with whom they have direct contact, 215; (3) people for whom the development projects are intended, 182; (4) work associates, 154; (5) development projects with which they are personally familiar, 141.

Non-formal education role performance and learning. The great majority (88.9%) of the individuals responding (741) affirm that their work or study concerns non-formal education. Nearly that many (80.1% of 680) indicate that they use non-formal education to carry out development programs. When recalling that 95 percent of the respondents are engaged in development work or study, it becomes more evident that most of those working in non-formal education are oriented to basic education needs in Africa, Asia, and Latin America.

When requested to indicate the fields of non-formal education in which they work, the respondents create a distribution as follows: (1) basic needs education, 403; (2) vocational skill training or upgrading, 333; (3) professional skill upgrading, 332; (4) enrichment education, 233; (5) other, 197.

Asked in what field of non-formal education they spend the most time, 445 respondents identify the following fields in order of frequency: (1) basic needs education, 163, 36.6%; (2) professional skill upgrading, 90, 20.2%; (3) other, 74, 16.6%; (4) vocational skill training, 71, 16.0%; and (5) enrichment education, 27, 6.1%. 20 respondents (4.5%) indicated more than one field.

Indicating the various kinds of non-formal education activities in which they are engaged, the respondents are characterized by great role diversity. The distribution of activities, in order of greatest frequency, is as follows: (1) program design, 475; (2) research and evaluation, 416; (3) instruction, 364; (4) curriculum development, 357; (5) administration, 346; (6) support services, 167; (7) other, 97.

Identifying the non-formal education activity in which they spend the most time, 555 respondents name the following activities most frequently: (1) program design, 124, 22.3%; (2) administration, 119, 21.4%; (3) research and evaluation, 95, 17.1%; and (4) instruction, 88, 15.9%.

When queried as to their sources for getting information, resources and ideas to learn about non-formal education, the respondents indicate the following sources, in order of frequency: (1) publications, 572; (2) work associates, 461; (3) organizations, advisors or specialists with whom direct, face-to-face contact, 401; (4) persons or organizations with whom indirect communication, 396; (5) people for whom the NFE programs are intended, 377; (6) NFE programs with which personally familiar, 374; (7) instructors and courses, 207; (8) radio or other non-print materials, 93; (9) other, 49.

The following are noted most frequently when respondents (516) identify the two sources that they rely on the most for information, resources and ideas about non-formal education: (1) publications, 244; (2) work associates, 156; (3) organizations and NFE specialists with whom direct contact, 142; (4) people for whom the NFE programs are intended, 135; and (5) NFE programs with which

personally familiar, 102.

Concerning their participation in education or training programs on non-formal education, the individuals comment as follows: 261 respondents report having not participated in any education or training program on NFE. However, 268 report having participated in an international workshop or conference, 265 report having participated in a national training session, and 271 indicate participation in a local session. 120 persons report having participated in a formal degree program in non-formal education.

When asked to identify their greatest obstacles in carrying out development programs involving non-formal education, the respondents indicate the following (giving multiple responses): (1) lack of integration and coordination among ministries or local service agencies, 355; (2) development workers inadequately trained for the task, 329; (3) local resources (people and organizations) not sufficiently involved in the program, 323; (4) numerical tie between insufficient numbers of trained local people to provide needed services, 297, and lack of adequate financial resources, 297; (6) participants insufficiently involved in the design and management of the NFE program, 273; (7) tie between program conflict with cultural values and norms, 220, and lack of supplies and resources when needed, 220;

(9) lack of interest or support among the local people, 156; and (10) other, 78.

Development broker linkages. Most of the respondents carry out their work in development and non-formal education in a capital city or in rural villages. When asked to indicate all the locations in which they usually work, the respondents provide the following distribution: (1) rural villages, 420; (2) capital city, 388; (3) towns, 283; (4) other cities, 274; (5) countryside, 246.

When specifying the single location in which they spend the most time, the respondents (416) are distributed as follows: (1) capital city, 161, 38.7%; (2) rural villages, 130, 31.3%; (3) other cities, 49, 11.8%; (4) towns, 41, 9.9%; (5) countryside, 22, 5.3%. 13 respondents (1.4%) indicate two locations.

Identifying the parts of the population toward which their work is primarily directed, the respondents give the following distribution of intended beneficiaries, in order of frequency:

(1) adults	504	(13) students	281
(2) poor people	478	(14) mid-level officials	245
(3) women	472	(15) children	222
(4) rural people	461	(16) high-level officials	212
(5) trainers or teachers	432	(17) urban people	207
(6) men	427	(18) middle-class people	158
(7) youth	396	(19) old people	155
(8) development workers	347	(20) whole population	123
(9) local leaders	335	(21) foreigners	115
(10) families	306	(22) other	67
(11) policy makers	301	(23) wealthy people	44
(12) planners	298		

When indicating the people with whom they usually work directly, the respondents reveal that, although rural people and the poor are principal targets of their development efforts, the rural poor are not party to their most numerous first-order linkages. The distribution is as follows:

(1) adults	450	(12) poor people	253
(2) trainers or teachers	430	(13) students	251
(3) women	419	(14) youth	239
(4) men	417	(15) middle class people	210
(5) planners	366	(16) foreigners	151
(6) policy makers	358	(17) urban leaders	119
(7) development workers	334	(18) families	115
(8) mid-level officials	322	(19) children	100
(9) local leaders	302	(20) old people	85
(10) rural people	290	(21) wealthy people	75
(11) high-level officials	280	(22) other	40

Career History. Respondents (707) range in experience in development work from less than one year to 36 years, with a mean of 10.6 years experience and a median of 10 years. The distribution is as follows: 0-4 years, 162; 5-9 years, 184; 10-14 years, 151; 15-19 years, 110; 20-24 years, 51; 25-29 years, 28; 30-34 years, 20; 36 years, 1.

Regarding respondents' (638) experience in non-formal education work, this is somewhat less than their experience in development generally. The range is from less than one year to 40 years, with a mean of 8.6 years' experience and a median of 6 years. The distribution is: 0-4 years, 233; 5-9 years, 175; 10-14 years, 106; 15-19 years, 54; 20-24 years, 29; 25-29 years, 24; 30-34 years, 15; 35-39 years, 1; 40 years, 1.

Asked how they became involved in their present activities in non-formal education and/or development, the respondents give multiple responses with the following frequency distribution: (1) working in the field several years, 332; (2) experiences in the past which led to desire for work in non-formal education and/or development, 331; (3) commitment to working to help poor people that led to the work, 267; (4) asked to work in the field because of certain skills possessed, 251; (5) looked for a job in the field, 124.

Most (87.5%) of those responding (738) report being employed for wages or salary with an organization. And most respondents (91.9% of 678) indicate that it is in connection with this organization that they are involved in non-formal education and/or development. Asked what kind of

organization employs them, 691 respondents reply as follows, in order of frequency: (1) academic or training institution, 186, 26.9%; (2) national government organization, 144, 20.8%; (3) other, or multiple response, 110, 15.9%; (4) private, voluntary organization, 80, 11.6%; (5) international government organization, 60, 8.7%; (6) religious organization, 37, 5.4%; (7) local government, 30, 4.3%; (8) foundation, 20, 2.9%; (9) other public organization, 19, 2.7%; (10) business, industry, or commerce, 5, 0.7%.

Of 667 respondents, 94 (14.1%) report having a second paid employment. Slightly over half (57.9%) of these say that this employment concerns non-formal education and/or development. The kinds of organizations accounting, in nearly balanced proportions, for 72.2 percent of this second employment are: (1) academic/training institutions, 26; (2) other, or multiple responses, 26; and (3) national government organizations, 21.

More interesting is the finding that 22.8 percent (161) of 707 respondents indicate that they are working as a volunteer for an organization involved in non-formal education and/or development. These organizations are most frequently characterized as private, voluntary (60, 37.3%); other, or multiple response (39, 24.2%); national government

agencies (25, 15.5%); and religious (18, 11.2%).

Fully 29.9 percent (209) of the respondents (698) indicate that they are independently involved in other activities in non-formal education and/or development, 68.8 percent of these on a voluntary basis, 18.6 percent on a paid basis, and 12.6 percent both voluntary and paid.

Finally, it is noted that 67.9 percent (423) of the respondents (623) were involved in non-formal education or development in their most previous position.

Profile of Respondents' Use and Valuation of NFE Information Center and Network

To profile the respondents' use and evaluation of the NFE Information Center and affiliation with its network, this section presents an overview of seven areas: nature of contact with the NFEIC, evaluation of Center publications and services, information-influenced change, nature of information interests, information outreach, intra-network contact, and perceived network benefit.

Nature of contact with the NFEIC. When queried as to how they first learned about the NFE Information Center, 896 respondents, checking one or two items, provide the following frequency distribution: (1) saw an NFEIC

publication or The NFE Exchange, 224; (2) from person(s) already in contact with the Center, 218; (3) read about the NFEIC publications or services, 204; (4) personal contact with someone from the NFEIC or Michigan State University, 202; (5) respondent's organization on the Center's mailing list, 98; (6) other, 59; (7) correspondence from the NFEIC, 54; (8) learned about the Center at an international conference, 37; (9) learned about the Center at a national or local conference, 29.

Of 899 respondents, 60.5 percent (544) indicate that they have written to or called the NFE Information Center. The number of times the respondents (424) wrote to or called the Center ranges from one to nine or more times, with a median of two times and a mean of more than 3.2. It is important to bear in mind that responses of 10 times or more were categorized as "nine times" in the data processing; hence, the under-representation of the true mean. (Four cases giving a frequency of 0 were not included in the calculations.)

The 544 respondents initiating communication with the NFE Information Center indicate a variety of reasons for doing so. Desire for Center distributed NFE publications figures most prominently among these reasons. Frequencies for the different responses are as follows: (1) to ask for

The NFE Exchange newsletter, 357, 65.6%; (2) to ask for other NFE publications of Michigan State University, 348, 64.0%; (3) to ask for a paper or document mentioned in The NFE Exchange or in a Center bibliography, 229, 42.1%; (4) to ask for materials on a particular topic, 155, 28.5%; (5) to send information about the respondent's own organization or training program in non-formal education, 149, 27.4%; (6) to request publications from the Center for someone else, 91, 16.7%; (7) to ask about MSU's academic or training programs in non-formal education, 85, 15.6%; (8) to get professional encouragement in the respondent's work, 71, 13.1%; (9) other, 63, 11.6%; (10) to ask about other groups working in the respondent's field of interest, 44, 8.1%; (11) to ask that something be included in The NFE Exchange, 33, 6.1%.

Evaluation of Center publications and services. A large majority (392, 70.9%) of the respondents (553) report receiving very satisfactory responses of the Center to them. Another 27.7 percent (153) call the responses satisfactory, while only 1.4 percent (8) label them unsatisfactory. In terms of the speed of the Center's responses, of 530 respondents 79.4 percent (421) consider these to be prompt replies, 20.0 percent (106) medium-speed, and 0.6 percent (3) slow replies. Regarding the relevance of the Center's responses, of 474 respondents 63.3 percent (300) feel the responses were very appropriate, 35.9 percent (170)

appropriate, and 0.8 percent (4) inappropriate.

Asked to indicate how useful, overall, the Center's publications and services have been to them, 33.1 percent (290) of 875 respondents call these very useful, and another 53.6 percent (469) consider them useful, with 1.4 percent (12) indicating not useful and 11.9 percent (104) reporting an inadequate basis for response.

When specifically evaluating the usefulness of The NFE Exchange to them, the network participants give the periodical a higher rating than for the Center's publications and services generally. Of 776 respondents, 41.6 percent (323) of 776 respondents indicate that The NFE Exchange is very useful to them, 52.4 percent (407) moderately useful, 3.1 percent (24) not very useful, and 2.8 percent (22) report an inadequate basis for response.

Evaluating the importance of the NFE Information Center as a source for ideas, contacts, or resources about development, most (83.7%) of the 713 respondents term the Center of average importance or one of their most important sources concerning development. The responses are distributed as follows: the most important source, 28, 3.9%; one of the most important sources, 248, 34.8%; of average importance as a source, 349, 48.9%; rarely important as a

source, 79, 11.1%; never an important source, 9, 1.3%.

Considering the importance of the NFE Center as a source for contacts and ideas relative to non-formal education, higher percentages of the 646 respondents judge this their most important source or one of their most important sources than when evaluating the Center's usefulness as a source for development ideas and contacts. The distribution of responses is as follows: the most important source, 72, 11.1%; one of the most important sources, 244, 37.8%; of average importance as a source, 267, 41.3%; rarely an important source, 55, 8.5%; never an important source, 8, 1.2%.

Information-influenced change. Of the 700 (of 756) respondents indicating their involvement with education programs, only 164 (23.4%) of these report that they have not used the information received from the Center to make changes or do something new. The remaining, affirmative responses are as follows: (1) NFEIC information used to write a report or position paper, 218; (2) used to suggest a new design or new guidelines for an existing program, 216; (3) used to employ different kinds of training (instructional) materials or approaches, 208; (4) used to propose or plan a new program, 188; (5) used for other purposes not specified, 109; (6) used to begin a new

program, 81.

Nature of information interests. When asked what kinds of resources they find most useful in their work in non-formal education and/or development, 806 respondents, checking one or two responses, name project case studies and practical materials most frequently. Fully 170 respondents identify more than two items, however. The other frequencies are: (1) case studies and project descriptions, 364; (2) practical materials like manuals and guides, 343; (3) theoretical materials concerning ideas and issues, 284; (4) annotated bibliographies, 171; (5) other, 15.

However, when asked what parts of The NFE Exchange they find most useful (in order of first and second preference), 722 respondents overwhelmingly name the lead, synthesizing article as the most useful part. The frequencies are as follows, with the number of first preferences preceeding the number of second preferences: (1) main article, 347/105; (2) project highlights, 163/195; (3) annotated bibliography, 123/175; special listings of organizations, periodicals, etc., 68/129; readers/news/notes, 21/60.

Two items attempt to tap respondents' topical interests in development and education. The first item lists the themes of the eight most recently published issues of The

NFE Exchange and asks the development intermediaries which two issues they would like to see reprinted. The frequency distribution for 736 respondents is as follows: (1) Training for Development (no. 14), 347; (2) NFE and the Rural Poor (no. 5), 304; (3) Skills Training for Adults (no. 11), 262; (4) Women in Development (no. 13), 194; (5) Mobilizing Youth for Development (no. 9/10), 131; (6) Front-line Development Workers (no. 7/8), 97; (7) NFE Information Center (no. 6), 72; (8) NFE and Entertainment (no. 12), 31.

The second item is open-ended and asks the development intermediaries what topics they wish to see treated in future issues of The NFE Exchange. Responses are coded into 50 topical categories. Of 450 responding, the following topics receive mention five or more times:

(1) health	29
(2) mass media	25
(3) evaluation	20
(4) literacy	19
(5) youth	17
(6) training	16
(7) women and development	12
(8) appropriate technology	11
(9) integrated development programs	10
(9) linkages between formal and non-formal education	10
(9) agriculture	10
(12) children	8
(12) instructional materials	8
(12) vocational/industrial NFE	8
(15) communication (e.g., with peasants)	7
(15) distance education	7
(15) management of development projects	7
(15) participation	7
(19) adults	6
(20) community development	5

(20) management/business	5
(20) organizations (e.g., peasant, women's)	5

Information outreach. To sense the extent of information flow deriving from The NFE Exchange, those in contact with the Center are asked about the readership of the newsletter and whether they have done certain things with it. 691 respondents indicate that from none to 85 persons read their copy of the last issue of The NFE Exchange. (Another 16 respondents say that they do not know how many readers there have been.) This gives a mean of 5.1 readers of The NFE Exchange with a median of 2 readers. The frequencies are distributed as follows: 0 readers, 22, 3.2%; 1 reader, 124, 17.9%; 2 readers, 134, 19.4%; 3 readers, 127, 18.4%; 4 readers, 65, 9.4%; 5-9 readers, 121, 17.5%; 10-19 readers, 65, 9.4%; 20-29 readers, 17, 2.5%; 30-39 readers, 7, 1.0%; 40-85 readers, 9, 1.1%.

Those in the NFEIC network are active as development information and idea brokers. Over half of all those responding report having placed The NFE Exchange in a library (often, 318, 53.2%, or occasionally, 96, 16.1% -- of 598 respondents), reproduced sections to send to others (often, 60, 11.2%, or occasionally, 268, 50.2% -- of 534 respondents), passed it on to planners or policy-makers (often, 115, 20.7%, or occasionally, 266, 47.8% -- of 556 respondents), passed it on to field workers or trainers

(often, 176, 30.1%, or occasionally, 259, 44.3% -- of 585 respondents), and suggested that others write to the NFE Information Center for a copy (often, 130, 21.8%, or occasionally, 318, 53.4% -- of 596 respondents).

Intra-network contact. Affiliates of the NFEIC are also asked about both the extent of their specially initiated contacts with others in the network, and the extent to which they themselves have been contacted. They reveal a high degree of self-initiated communications with others in the NFEIC network.

Of 747 respondents, 39.0 percent (291) indicate that they have requested materials or further information from persons or organizations identified in the Center's newsletter, correspondence or bibliographies. When asked approximately how many persons or organizations were contacted, 209 respondents indicate a range from one to more than 98. (Another seven respondents report they do not know how many.) This gives an approximate mean of 8.0 contacts and a median of 4, with a distribution of responses as follows: 1 contact, 22, 10.5%; 2 contacts, 36, 17.2%; 3 contacts, 40, 19.1%; 4 contacts, 18, 8.6%; 5-9 contacts, 35, 16.7%; 10-19 contacts, 35, 16.7%; 20-29 contacts, 13, 6.2%; 30-39 contacts, 4, 1.9%; 40-98 plus contacts, 6, 2.9%.

When queried as to whether one of their projects, papers, or publications has ever been mentioned in The NFE Exchange, 104 (13.8%) of 753 respondents indicate "yes" and 139 (18.5%) say they are not certain. Those responding affirmatively were asked how many persons or organizations have requested them to send a paper or further project information after it was cited in The NFE Exchange. The 61 replying range in response from none to more than 98. (Another 15 respond that they do not know how many.) The mean number of requests to the respondents for information is 7.2, with a median of 2.5, and a distribution as follows: 0 contacts, 25, 41.0%; 1-4 contacts, 14, 23.0%; 5-9 contacts, 7, 11.5%; 10-14 contacts, 6, 9.8%; 15-19 contacts, 3, 4.9%; 20-98 plus contacts, 6, 9.8%.

Network Commonality. To sense subjective feelings of shared bonds and purpose, and of beneficial association through the NFEIC network, two items are used. The first questions the network affiliates whether, through their contacts with the NFE Center, they feel a sense of commonality with some of the nearly 4000 others in 131 countries who share their interests. The majority (54.0%, 408) of the respondents (756) reply affirmatively and another 34.7 percent (262) indicate they are not certain, while only 11.4 percent (86) say no.

The second item queries whether the network affiliates have had any unexpected benefits as a result of their contact with the NFE Information Center. One quarter (25.1%, 184) of the respondents (732) indicate that they have had such unanticipated benefits and the rest that they have not.

Those who indicate receiving unexpected benefits are rather evenly divided in their mention of subjective reasons, interpersonal contacts, or impersonal contacts with new knowledge and ideas. Fifty of the individuals cite personal, subjective benefits such as support, increased confidence, better preparation for work, and acquisition of new attitudes. Another 61 respondents refer to contact with persons and organizations as unanticipated benefits of affiliation with the NFE Information Center network. And, 58 mention contact with information, materials, project examples, and new ideas as their unexpected benefits.

Composite Profile of Respondents

At this point a composite profile is presented to sketch predominant characteristics of the respondents' demographic backgrounds, development roles, and use and

valuation of affiliation with the NFE Information Center and network.

From a demographic perspective, the "average" respondent (statistically, realizing that description in such terms always obscures much important variation) can be typified as having a mailing address in an industrialized country but more likely to reside in a developing country because of the respondent's work in development.

Most apt to be male, the composite respondent is 40 years of age and is educated at the masters or doctoral level. He is likely to have had a formal schooling concentration in education and to have facility with three languages.

Considering his role in development, the respondent is most likely to be involved in the education or training of others to work in development. His primary activity in terms of occurrence is planning or program design, while in terms of actual time spent is teaching or training. He is most apt to rely on publications for his information about development.

Concerning his role in non-formal education, the respondent is likely to be most involved in basic needs

education. His primary activity in this regard, in terms of both occurrence and time spent, is program design. Publications are, again, his primary source for information about non-formal education.

The respondent is apt to have participated in education or training programs on non-formal education. He is likely to identify his greatest obstacle in carrying out development programs involving non-formal education as lack of integration and coordination among ministries or local service organizations.

Carrying out his work in development most often in rural villages, he nevertheless spends his most time in a capital city. Adults, poor people, women, and rural people are most likely to be the target populations of the respondent's development efforts, but he often works directly with adults, trainers or teachers, women, and men.

Concerning his career history, the respondent has been involved in development for 10 years and in non-formal education for a median of six years. He is most apt to explain his current involvement in non-formal education and development as the result of having worked several years in the field, and having past experiences which led to his desire for work in non-formal education and development.

The development specialist is employed for wages or salary with an academic or training institution, and tended to be engaged in non-formal education or development in his previous position.

Concerning the respondent's use and valuation of the NFE Information Center and network, his first contact with the Center is most likely to have come from his seeing an NFEIC publication or The NFE Exchange, or from a person already in contact with the Center.

The respondent is likely to have initiated contacts with the Center a mean of three times, most probably to ask for The NFE Exchange newsletter and to ask for other NFE publications of Michigan State University.

The development specialist is apt to evaluate the responses of the Center to him as very satisfactory, prompt, and very appropriate. He judges the overall usefulness of the Center's publications and services to him as very useful. The respondent also evaluates The NFE Exchange as very useful. He considers the Non-Formal Education Information Center of average importance as a source for ideas, contacts, and resources about development and about non-formal education.

Nevertheless, the respondent is likely to have used the information received from the Center to make changes or to do something new, most commonly to write a report or position paper or to suggest a new design or guidelines for an existing program.

The kinds of resources the respondent finds most useful in his development work are case studies and project descriptions followed by practical materials like manuals and guides. Yet, he values the lead, synthesizing article in The NFE Exchange the most of any part of the newsletter.

Of the issues of The NFE Exchange published by the time of the survey, the respondent judges the issues on Training for Development (no. 14) and on NFE and the Rural Poor (no. 5) as most significant. Health is the topic he most wishes to see treated in a subsequent issue of the periodical.

The respondent's issue of The NFE Exchange is read by a mean of five readers. The respondent often places the periodical in a library, and often reproduces sections to send to others. He occasionally passes it on to planners and policy makers and suggests that others write to the NFE Information Center for a copy.

Finally, the respondent is more likely to have initiated contacts within the NFEIC network than to have been the recipient of them. There is only 39 percent likelihood that the respondent has requested materials or further information from persons or organizations identified in the Center's newsletter, correspondence or bibliographies. If he makes such requests, however, he is apt to do so with a median of four and a mean of eight individuals. While there is less likelihood that the respondent has had his project, paper or article mentioned in The NFE Exchange, he is apt, in such a case, to have received a median of 2.5 and a mean of 7.2 requests for further information.

Having thus sketched a profile of the survey respondents in contact with the Non-Formal Education Information Center, the question is now raised: How do structural comparisons among the respondents lend further detail to this profile?

PART II

COMPARATIVE ANALYSES

CHAPTER 6

DEMOGRAPHIC CHARACTERISTICS

This chapter and the three following form a sort of trilogy by focusing on the comparative analysis of selected development personnel for three sets of characteristics. In this chapter the specific focus is on demographic characteristics of the subjects. The more lengthy consideration of development role characteristics is separated, for ease in reading, into two parts, forming Chapters 7 and 8. Chapter 9 analyzes characteristics concerning the subjects' use and valuation of the Non-Formal Education Information Center and network. Each chapter in this section of comparative analyses provides significant refinements to the composite profile sketched in the previous chapter.

Chapter 10 then probes variations in these three sets of characteristics by gender. Two modes are used for the presentation of data in this and the succeeding chapters of Part II. First, tables present data deriving from the analysis of respondents by citizenship and location of work, and from separate analysis by location according to basic development indicators. Second, combining selected data from these comparative analyses, bar graphs serve to show,

in a glance, the extent of each grouping's variation from the overall mean.

Interpretation of the findings is being reserved, in general, for the final chapter of the thesis. However, interpretation specific to the individual traits or values being described is provided whenever judged appropriate.

As a prerequisite to the discussion ensuing in this chapter and in those following, an introduction to the basis for the comparative analyses must first be provided. Following the presentation of this analytical framework, the constitution of each category of analysis is described in detail to provide a proper context for portrayal of the development intermediaries who are the focus of this study.

Introduction: The Comparative Setting

Comparative analyses of the development specialists affiliated with the Non-Formal Education Information Center were carried out in order to detect possible variations deriving from conditions and exchange relations in the larger socio-economic system. Interest lay not only in exploring macro-structural reflections in the characteristics of the development planners and practitioners being studied. It also lay in identifying

constants not apparently differentiated by the typologies created. Such exploration, it is believed, might lead to strengthened conceptual frameworks for understanding the development and information broker roles of persons working at the intersections of diverse groupings in an increasingly complex era of postmodernity and interdependency.

The author became poignantly aware of the potential influence of LDC versus DC nationality and development work location as factors differentiating kinds of development information sought, when conducting an analysis of inquiries regarding women in development that were directed to the NFE Information Center. (Claffey, Kelly, Pigozzi and Useem, 1981) These units of analysis were deemed important, therefore, for the comparative explorations of this thesis.

As noted in Chapter 4 on Methodology, the units of analysis selected for comparative study in this thesis derive from two typologies. The first typology considers developing or developed country national origin together with developing or developed country location of work, and consists of four groupings of 510 selected development personnel. The 510 individuals, it is recalled, form a purposive sample of survey respondents affiliated with the NFE Information Center who, in their responses, satisfy six criteria: affirmation that their work concerns development;

indications of the development activity in which they spend the most time, their country of citizenship, the country of their present work, and the highest level of formal schooling which they received; and response to the survey in 1979. Since 95 percent of the total respondents (942) indicate that their work concerns development and since those surveyed were given the option not to respond to all items, it may be inferred that the purposive sample of 510 is highly reflective of the total respondents and distinguished principally by the availability of complete responses to the items indicated.

The groupings formed in the first typology, diagramed below, and the number of persons in each are as follows: I. LDC citizens in LDC locations, 179; II. DC citizens in LDC locations, 115; III. LDC citizens in DC locations, 20; and IV. DC citizens in DC locations, 196.

Typology I: LDC versus DC Citizenship with LDC versus DC
Location of Work

		Citizenship	
		LDC	DC
Location of Work	LDC	Group I	Group II
		n=179	n=115
	DC	Group III	Group IV
		n=20	n=196

Because Group III is very small, it must be noted that the theoretical conditions for computation and interpretation of the chi-square statistic are often not met.

The second typology consists of three groupings of the same 510 development personnel based on location of work by World Bank basic development indicators. The groupings and the number of persons in each are as follows: V. Development personnel in low-income countries, 103; VI. Development personnel in middle-income countries, 192; and VII. Development personnel in industrialized countries, 215.

The reader will note that the development personnel found in the unity of groupings V and VI are found in the unity of groupings I and II. Similarly, those found in grouping VII are also found (with one exception) in the

unity of groupings III and IV. (This inconsistency concerns a single development worker located in Spain who is found in both Group IV and Group VI. Spain is thereby considered an industrialized country in Group IV and a middle-income country in Group VI.) Several Venn diagrams on the following page should help illustrate relationships between the two typologies.

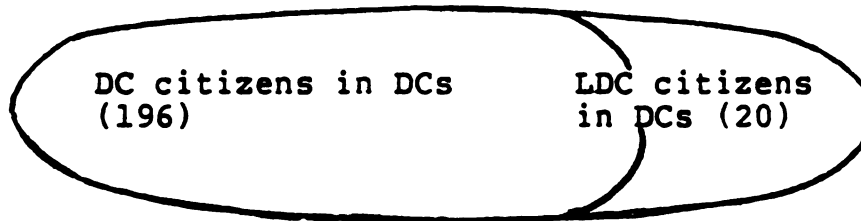
Because the two typologies are similar with respect to their economic context and their macro-structural orientation, they are both referred to, though distinctly, for the comparative analyses in this chapter. Consideration is thus given to a fuller, comparative description of the demographic, development role, and information valuation and exchange characteristics of the planners, administrators, practitioners, researchers, and students in contact with the NFEIC network.

Before turning to the comparative analyses, however, it is important to consider the make-up of the groupings comprising both categories of analysis.

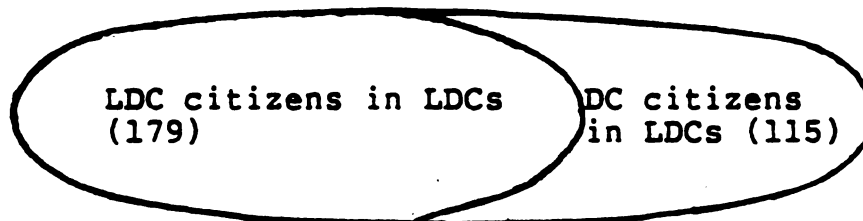
Constitution of the Categories of Analysis

The following discussion of the constituent groupings is drawn from the data presented in Tables 7-13, located at

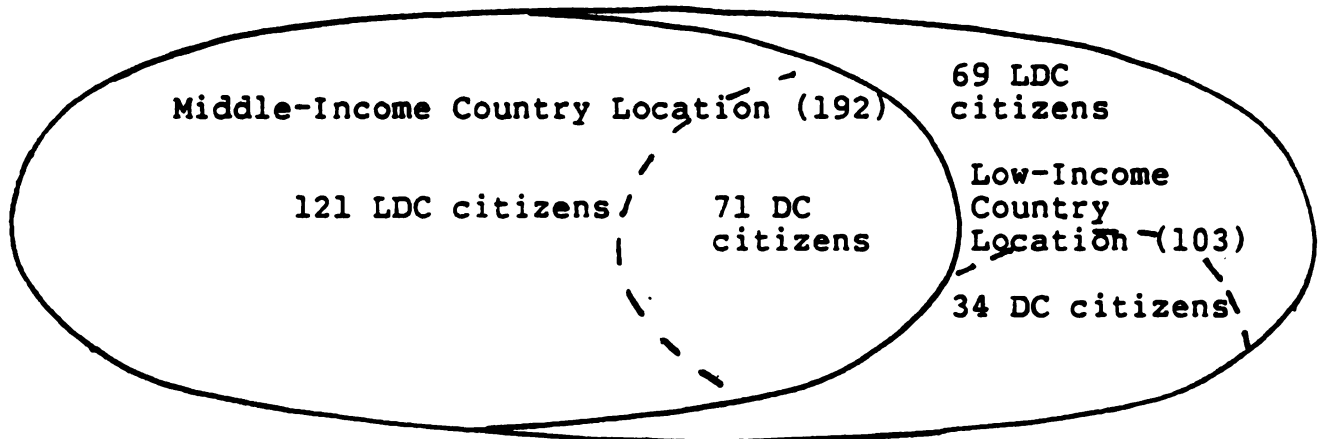
Industrialized Country Location / Group VII (n=215);
Groups III (20)
and IV (196)



Developing Country Location / Groups V and VI (n=295);
Groups I (179)
and II (115)



Developing Country Location / Groups V (192) and VI (103);
Groups I (69 and 121) and
II (34 and 71)



the end of this section.

Considering the four groupings in the first analytical category, the 179 LDC citizens working in LDC countries who form Group I are found most concentrated in Asia (101), as noted in Table 7. In fact, Asians make up 56.4 percent of this group, followed by Africans (45, 25.1%), Latin Americans (30, 16.8%), and persons of Oceania (3, 1.7%). Four world regions include 20 or more persons in Group I working in them: Southeast Asia (57), Middle South Asia (37), West Africa (22), and South America (20). Four countries account for the location of at least 10 individuals: Philippines (30), India (22), Nigeria (18), and Indonesia (16).

Examining Group II, 115 DC citizens in LDC locations, it is noted that they comprise 39.1 percent of the subjects working in developing countries. Table 8 reveals that Africa is the location of development work for most (44.3%) of the individuals (51). Latin America is the base for the next largest number (40, 34.8%), followed by Asia (22, 19.1%) and Oceania (2, 1.7%). The world regions with 10 or more DC citizens of Group II working in them are: West Africa (30), Middle America (16), South America (15), Middle South Asia (12), and Southern Africa (10). No single country contains a large number of the development

specialists in this group, seven being the most individuals.

Group III, LDC citizens in DC countries, consists of only 20 persons. Ten individuals come from Asia, six from Latin America, and four from Africa. Most are located in the US (16), with the remaining in the UK (3) and Canada (1). Table 9 depicts this group.

Referring to Group IV, the 196 DC citizens in DC countries are heavily concentrated in North America (162, 82.7%), with the others in Europe (29, 14.8%) and Oceania (5, 2.6%). The US contains the largest number of individuals in this group (147), followed by Canada (15) and the UK (15). Other countries have at most four persons in this group. The data for Group IV is summarized in Table 10.

Looking again at Groups I and II it can be observed that while Asia accounts for the largest number of developing country citizens among the selected development specialists, Asia contains a relatively small number of DC development personnel. The longer history of Asian independence, vis-a-vis Latin America and Africa, might help to explain this. Similarly, the recency of post-colonial African independence appears to relate to the larger number of industrialized country development personnel working

there.

Next considered are the three groupings in the second analytical category, derived from location according to basic development indicators. 103 development specialists working in low-income countries form Group V. Table 11 indicates that most of these individuals are in Asia (69, 67.0%), with about a third in Africa (33, 32.0%), and one person in Oceania. One world region, Middle South Asia, accounts for almost one-half of the subjects (48, 46.6%). Southeast Asia with 21 persons contains the next largest number (20.4%), followed by East Africa (14, 13.6%) and West Africa (11, 10.7%). Two countries together contain nearly half of the persons in this group: India, 26, and Indonesia, 21. By examining Tables 8 and 11 together, it can be deduced that 34 persons of Group V, constituting 33 percent, are DC citizens.

Group VI, consisting of 192 development personnel in middle-income countries, is primarily divided among location in Latin America (68, 35.4%), Africa (63, 32.8%), and Asia (55, 28.6%), as noted in Table 12. Four world regions account for at least 20 individuals each: Southeast Asia (45), West Africa (41), South America (35), and Middle America (22). There are four countries in which a minimum of ten persons are located: Philippines, 31; Nigeria, 21;

Brazil, 11; and Thailand, 10. By studying Tables 8 and 12 together, it is found that 71 persons of Group VI, constituting 37 percent, are DC citizens.

Finally, Group VII contains 215 development specialists located in industrialized countries, the majority of these in North America (179, 83.3%), with 32 in Europe (14.4%) and 5 in Oceania (2.3%). Three countries account for most of the cases: US (163), UK (18), and Canada (16). Table 13 depicts the make-up of Group VII.

Following Tables 7-13 which support this description of the analytical categories of the selected development specialists, attention is turned to the comparative analyses of their characteristics.

Comparative Analysis of Demographic Characteristics

This analysis consists of re-examination of gender, age, level of formal education, foreign schooling, formal schooling concentration, student status, and language facility, for the purposive sample of 510 development personnel in contact with the Non-Formal Education Information Center.

TABLE 7: Citizenship and Work Location of Grouping I:
179 LDC Citizens in LDC Locations

	citizenship f -----	location f -----
AFRICA	45	45
NORTH AFRICA	4	5
Egypt	1	1
Ethiopia	3	4
EAST AFRICA	12	10
Kenya	2	1
Malawi	1	1
Zimbabwe	1	1
Tanzania	4	4
Uganda	3	2
Zambia	1	1
SOUTHERN AFRICA	4	7
Botswana	---	1
Lesotho	---	1
South Africa	4	3
Swaziland	---	2
WEST AFRICA	24	22
Gambia	1	---
Ghana	1	1
Mali	1	1
Nigeria	18	18
Senegal	1	1
Sierra Leone	1	1
Togo	1	---
MIDDLE AFRICA	1	1
Cameroon	1	1

**TABLE 7: (Cont'd) Citizenship and Work Location of
Grouping I: 179 LDC Citizens in LDC Locations**

	citizenship f -----	location f -----
ASIA	101	101
SOUTHWEST ASIA	2	2
Israel	1	1
Turkey	1	1
MIDDLE SOUTH ASIA	41	37
Bangladesh	4	4
India	23	22
Nepal	3	2
Pakistan	6	5
Sri Lanka	5	4
SOUTHEAST ASIA	53	57
Indonesia	15	16
Malaysia	2	1
Philippines	28	30
Singapore	2	2
Thailand	6	8
EAST ASIA	5	5
South Korea	4	4
Taiwan	1	1
OCEANIA	3	3
Fiji	1	1
Paupa New Guinea	1	1
Solomon Islands	1	1

TABLE 7: (Cont'd) Citizenship and Work Location of
Grouping I: 179 LDC Citizens in LDC Locations

	citizenship f -----	location f -----
LATIN AMERICA	30	30
SOUTH AMERICA	23	20
Argentina	3	1
Bolivia	1	1
Brazil	4	7
Chile	5	1
Colombia	5	4
Ecuador	1	2
Paraguay	1	---
Peru	2	1
Venezuela	1	3
MIDDLE AMERICA	4	6
Costa Rica	2	2
El Salvador	1	1
Mexico	1	3
CARIBBEAN	3	4
Bahamas	1	1
Barbados	---	1
Jamaica	2	2

TABLE 8: Citizenship and Work Location of Grouping II:
115 DC Citizens in LDC Locations

	citizenship f -----	location f -----
EUROPE	28	
NORTHERN EUROPE	20	
Sweden	1	
UK	18	
Ireland	1	
WESTERN EUROPE	7	
Belgium	3	
West Germany	1	
Netherlands	3	
SOUTHERN EUROPE	1	
Spain	1	
NORTH AMERICA	87	
Canada	4	
USA	83	
ASIA		22
SOUTHWEST ASIA		1
Yemen Arab Rep.		1
MIDDLE SOUTH ASIA		12
Bangladesh		4
India		4
Iran		1
Nepal		3
SOUTHEAST ASIA		9
Indonesia		5
Malaysia		1
Philippines		1
Thailand		2

TABLE 8: (Cont'd) Citizenship and Work Location of
Grouping II: 115 DC Citizens in LDC Locations

	citizenship f -----	location f -----
AFRICA		51
NORTH AFRICA		3
Burundi		1
Ethiopia		2
EAST AFRICA		8
Kenya		3
Malawi		2
Tanzania		1
Zambia		2
SOUTHERN AFRICA		10
Botswana		5
Swaziland		5
WEST AFRICA		30
Gambia		2
Ghana		4
Ivory Coast		3
Liberia		7
Mali		2
Nigeria		3
Senegal		4
Sierra Leone		2
Upper Volta		3
OCEANIA		2
Fiji		1
Paupa New Guinea		1

TABLE 8: (Cont'd) Citizenship and Work Location of
Grouping II: 115 DC Citizens in LDC Locations

	citizenship f -----	location f -----
LATIN AMERICA		40
SOUTH AMERICA		15
Bolivia		3
Brazil		4
Chile		1
Colombia		3
Ecuador		1
Peru		1
Uruguay		1
Venezuela		1
MIDDLE AMERICA		16
Belize		1
Costa Rica		2
El Salvador		1
Guatemala		7
Honduras		3
Nicaragua		1
Panama		1
CARIBBEAN		9
Dominican Republic		6
Jamaica		1
Virgin Islands		2

TABLE 9: Citizenship and Work Location of Grouping III:
20 LDC Citizens in DC Locations

	citizenship f	location f
-----	-----	-----
AFRICA	4	
EAST AFRICA	2	
Ethiopia	1	
Tanzania	1	
WEST AFRICA	2	
Nigeria	2	
ASIA	10	
SOUTHWEST ASIA	1	
Jordan	1	
MIDDLE SOUTH ASIA	4	
Bangladesh	1	
India	1	
Pakistan	1	
Sri Lanka	1	
SOUTHEAST ASIA	5	
Indonesia	1	
Malaysia	1	
Thailand	3	
LATIN AMERICA	6	
SOUTH AMERICA	3	
Argentina	1	
Chile	1	
Guyana	1	
MIDDLE AMERICA	1	
Mexico	1	
CARIBBEAN	2	
Cuba	1	
Jamaica	1	

TABLE 9: (Cont'd) Citizenship and Work Location of
Grouping III: 20 LDC Citizens in DC Locations

	citizenship f -----	location f -----
EUROPE		3
NORTHERN EUROPE		3
UK		3
NORTH AMERICA		17
Canada		1
USA		16

TABLE 10: Citizenship and Work Location of Grouping IV:
196 DC Citizens in DC Locations

	citizenship f -----	location f -----
OCEANIA	5	5
Australia	4	4
New Zealand	1	1
EUROPE	31	29
NORTHERN EUROPE	16	16
Finland	1	---
Sweden	---	1
UK	15	15
WESTERN EUROPE	13	11
Austria	1	1
Belgium	2	1
France	1	2
West Germany	5	3
Netherlands	4	3
Switzerland	---	1
SOUTHERN EUROPE	2	2
Italy	1	1
Spain	1	1
NORTH AMERICA	160	162
Canada	14	15
USA	146	147

**TABLE 11: Work Locations of Grouping V: 103 Development
Personnel in Low-Income Countries**

AFRICA	33
NORTH AFRICA	7
Burundi	1
Ethiopia	6
EAST AFRICA	14
Kenya	4
Malawi	3
Tanzania	5
Uganda	2
SOUTHERN AFRICA	1
Lesotho	1
WEST AFRICA	11
Gambia	2
Mali	3
Sierra Leone	3
Upper Volta	3
ASIA	69
MIDDLE SOUTH ASIA	48
Bangladesh	8
India	26
Nepal	5
Pakistan	5
Sri Lanka	4
SOUTHEAST ASIA	21
Indonesia	21
OCEANIA	1
Solomon Islands	1

**TABLE 12: Work Locations of Grouping VI: 192 Development
Personnel in Middle-Income Countries**

AFRICA	63
NORTH AFRICA	1
Egypt	1
EAST AFRICA	4
Zimbabwe	1
Zambia	3
SOUTHERN AFRICA	16
Botswana	6
South Africa	3
Swaziland	7
WEST AFRICA	41
Ghana	5
Ivory Coast	3
Liberia	7
Nigeria	21
Senegal	5
MIDDLE AFRICA	1
Cameroon	1

**TABLE 12: (Cont'd) Work Locations of Grouping VI: 192
Development Personnel in Middle-Income
Countries**

ASIA	55
SOUTHWEST ASIA	3
Israel	1
Turkey	1
Yemen Arab Rep.	1
MIDDLE SOUTH ASIA	1
Iran	1
SOUTHEAST ASIA	45
Malaysia	2
Philippines	31
Singapore	2
Thailand	10
EAST ASIA	5
South Korea	4
Taiwan	1

TABLE 12: (Cont'd) Work Locations of Grouping VI: 192
Development Personnel in Middle-Income
Countries

LATIN AMERICA	68
SOUTH AMERICA	35
Argentina	1
Bolivia	4
Brazil	11
Chile	2
Colombia	7
Ecuador	3
Peru	2
Uruguay	1
Venezuela	4
MIDDLE AMERICA	22
Belize	1
Costa Rica	4
El Salvador	2
Guatemala	7
Honduras	3
Mexico	3
Nicaragua	1
Panama	1
CARIBBEAN	13
Bahamas	1
Barbados	1
Dominican Republic	6
Jamaica	3
Virgin Islands	2
OCEANIA	4
Fiji	2
Papua New Guinea	2
EUROPE	1
SOUTHERN EUROPE	1
Spain	1

**TABLE 13: Work Locations of Grouping VII: 215 Development
Personnel in Industrialized Countries**

OCEANIA	5
Australia	4
New Zealand	1
EUROPE	31
NORTHERN EUROPE	19
Sweden	1
UK	18
WESTERN EUROPE	11
Austria	1
Belgium	1
France	2
West Germany	3
Netherlands	3
Switzerland	1
SOUTHERN EUROPE	1
Italy	1
NORTH AMERICA	179
Canada	16
USA	163

Gender. While the profile of all respondents revealed a ratio of 71.6 percent males to 28.4 percent females, the ratio in the subset of 510 development workers is increased to a 74.6 to 25.4 ratio. Table 14[1] reports the numbers of males and females in each of the four groupings deriving from national origin and work location, and Table 15 reports corresponding data for the three groupings based on basic development indicators. What is particularly noteworthy is the grouping of development personnel in low-income countries, only 3.9 percent of which consists of females, perhaps owing to the lower rates of highly educated females in those countries. Also of note is the fact that, considering the 70 women (in Groups I and II) working in developing countries, half of these are from the industrialized world. The corresponding percentage for men is only 35.0.

The bar graph depicted in Figure 3 makes more visually apparent the large variation from the means for male and female development specialists working in low-income countries.

[1] The reader should note that where less than 510 cases are accounted for in a table, this owes to lack of reply or coded response for the particular item with reference to one or more individuals.

TABLE 14: GENDER OF DEVELOPMENT PERSONNEL BY CITIZENSHIP
AND LOCATION OF WORK

Gender	I LDC/LDC		II DC/LDC		III LDC/DC		IV DC/DC		SUM I-IV	
	n	%	n	%	n	%	n	%	n	%
Males	144	80.4	78	69.0	15	75.0	141	72.3	378	74.6
Females	35	19.6	35	31.0	5	25.0	54	27.7	129	25.4
N=507	179	100.0	113	100.0	20	100.0	195	100.0	507	100.0

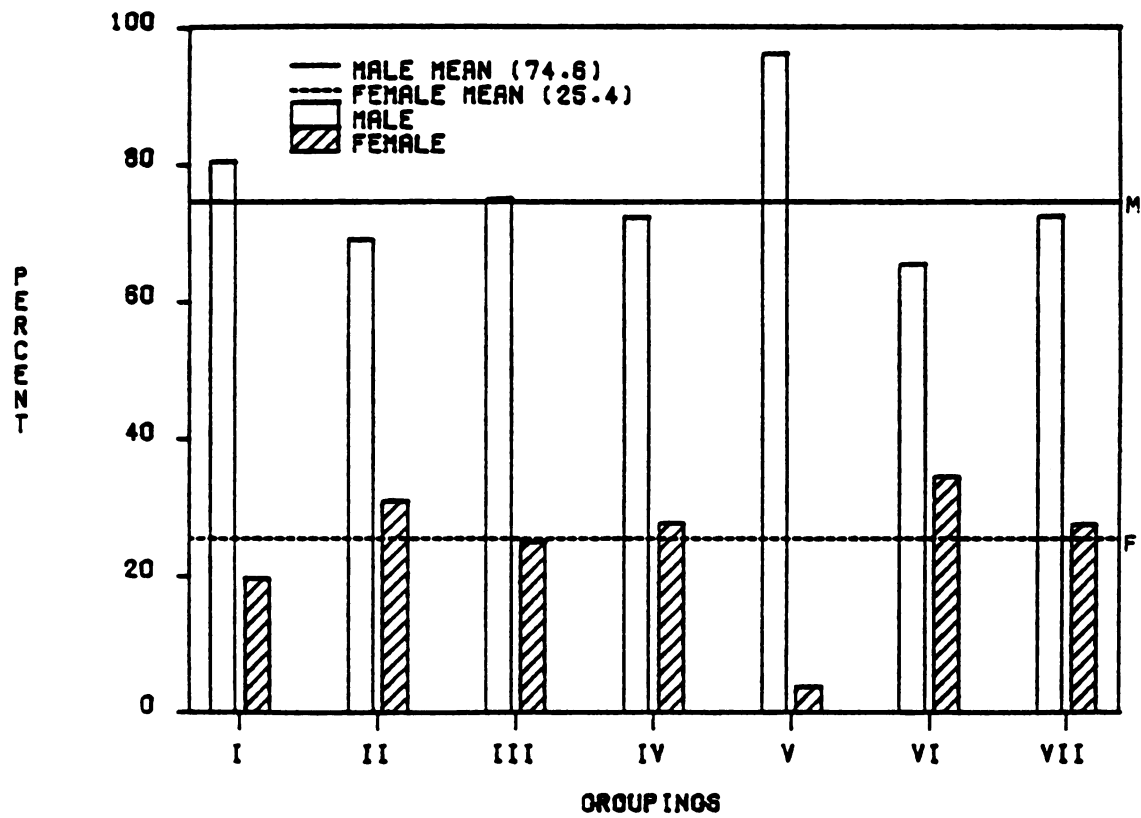
Chi-square(3df)=5.62; $P \leq .13$

TABLE 15: GENDER OF DEVELOPMENT PERSONNEL BY LOCATION
ACCORDING TO BASIC DEVELOPMENT INDICATORS

Gender	V Low-Inc		VI Mid-Inc		VII Indust		SUM V-VII	
	n	%	n	%	n	%	n	%
Males	98	96.1	125	65.4	155	72.4	378	74.6
Females	4	3.9	66	34.6	59	27.6	129	25.4
N=507	102	100.0	191	100.0	214	100.0	507	100.0

Chi-square(2df)=33.77; $P \leq .00$

FIGURE 3. GENDER RATIOS OF SELECTED DEVELOPMENT PERSONNEL



Age. To recall, the profile of all respondents indicated a mean age of 40.7 years and a median of 40. The mean age of the subset of development specialists approximates these figures at 39.9 years.

Differentiation of the subjects by citizenship and location of work in Table 16 reveals younger personnel in Groups II and III and older personnel in Groups I and IV. This suggests that persons who are internationally mobile and working in economically different environments from those of their national origins tend to be of younger age than those working in economic environments similar to those of their origin. For DC citizens in LDC locations the mean age is 37.8 years with a median of 34.9 years. For LDC citizens in DC locations this is 36.7 years and 37.8 years, respectively. It will be later seen that 14 (70%) of this group (III) are students, a fact explaining a somewhat younger average age. DC citizens in DC locations average the greatest age with a mean of 41.7 years and a median of 39.6 years.

When comparing age for groupings by work in low-income, middle-income, and industrialized countries, it is seen in Table 17 that the mean age of the development specialists in low-income countries is 41.6, 1.7 years greater than the

mean for all groups, while the mean in middle-income countries is 36.5, 3.4 years less than the mean. Since the mean age of LDC nationals in LDC locations is 39.6, with that of DC nationals in LDC locations less (37.8), it can be supposed that the presence of younger DC foreigners in the middle-income countries helps to explain some of the lower average age in middle-income countries. It is similarly observed that it tends to be DC rather than LDC nationals in DC locations who account for the higher mean age (41.2) in industrialized countries.

Comparative detail on the age composition for each grouping deriving from citizenship and work location is provided in Table 16, while Table 17 gives data for the groupings by basic development indicators. The bar graph presented in Figure 4 shows the mean age of each of the groupings of development specialists together with the average for all groups.

Level of Formal Education. The 510 development specialists examined tend to be highly educated. A total of 72.9 percent (372) report having been formally educated at the masters or doctoral levels, or their equivalents. As the reader will note in Table 18, this mean is exceeded both by DC citizens in DC locations (83.7%, 164) and by LDC citizens in DC locations (75.0%, 15), while DC citizens in

TABLE 16: AGE OF DEVELOPMENT PERSONNEL BY CITIZENSHIP AND LOCATION OF WORK

Age	I LDC/LDC	II DC/LDC	III LDC/DC	IV DC/DC
---	-----	-----	-----	-----
Mean	39.6	37.8	36.7	41.7
Median	39.3	34.9	37.8	39.6
Mode	44.0	34.0	34.0	37.0
Range	18-60	20-68	24-60	22-71
S.D.	9.0	11.6	7.6	10.0
N=502	(179)	(115)	(19)	(189)

TABLE 17: AGE OF DEVELOPMENT PERSONNEL BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Age	V Low-inc	VI Mid-Inc	VII Indust
---	-----	-----	-----
Mean	41.6	37.5	41.2
Median	40.7	36.5	39.2
Mode	44.0	34.0	34.0
Range	24-68	18-63	22-71
S.D.	9.6	10.1	10.0
N=501	(102)	(192)	(207)

FIGURE 4. AGE OF DEVELOPMENT PERSONNEL

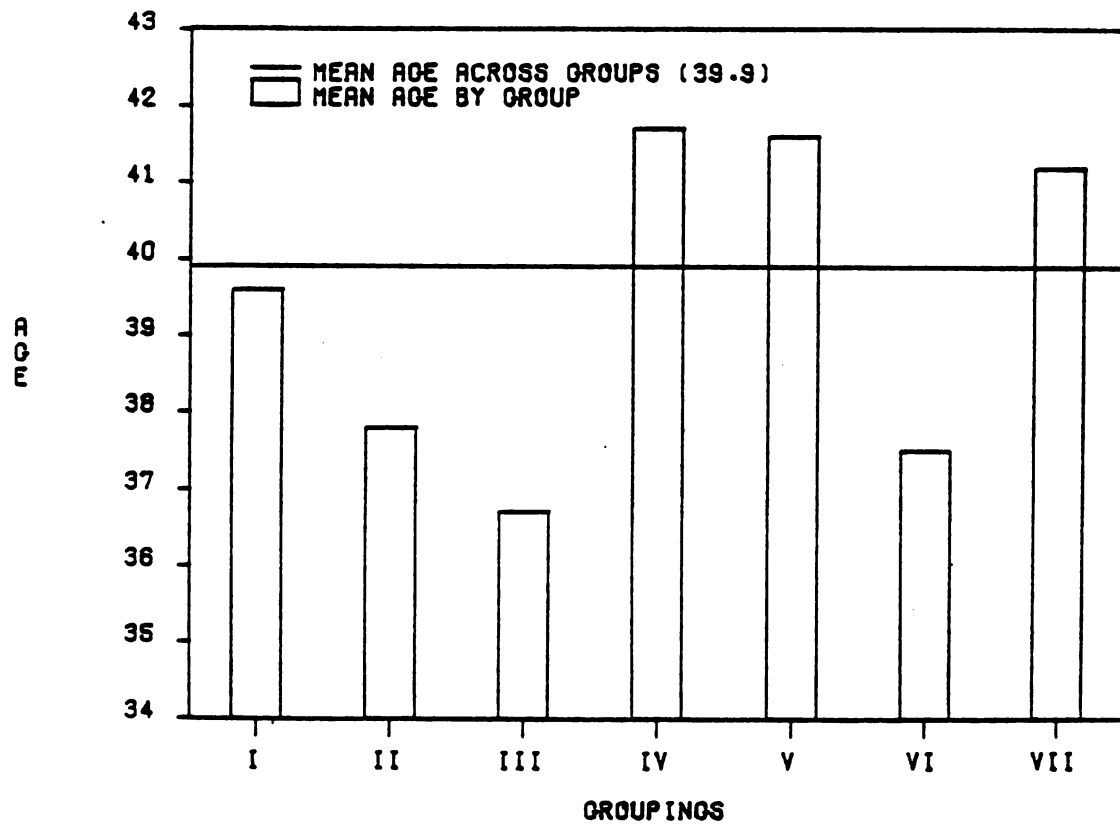


TABLE 18: LEVEL OF FORMAL EDUCATION BY CITIZENSHIP AND LOCATION OF WORK

Lev Fml Ed	I LDC/LDC		II DC/LDC		III LDC/DC		IV DC/DC		SUM I-IV	
	n	%	n	%	n	%	n	%	n	%
NR	0	0	0	0	0	0	1	0.5	1	0.2
Intermed.	1	0.6	0	0	0	0	0	0	1	0.2
Some Sec.	4	2.2	0	0	0	0	0	0	4	0.8
Sec. Grad.	4	2.2	0	0	0	0	1	0.5	5	1.0
Voc./Norm.	4	2.2	0	0	0	0	1	0.5	5	1.0
Some Univ.	6	3.4	2	1.7	1	5.0	0	0	9	1.8
Univ. Grad	25	14.0	30	26.1	1	5.0	17	8.7	73	14.3
Post Univ.	16	8.9	9	7.8	3	15.0	12	6.1	40	7.8
Masters	75	41.9	38	33.0	10	50.0	69	35.2	192	37.6
Doctors	44	24.6	36	31.3	5	25.0	95	48.5	180	35.3
N=510	179	100.0	115	22.5	20	100.0	196	100.0	510	100.0

TABLE 19: LEVEL OF FORMAL EDUCATION BY LOCATION OF WORK ACCORDING TO BASIC DEVELOPMENT INDICATORS

Lev Fml Ed	V Low-Inc		VI Mid-Inc		VII Indust		SUM V-VII	
	n	%	n	%	n	%	n	%
NR	0	0	0	0	1	0.5	1	0.2
Intermed.	0	0	1	0.5	0	0	1	0.2
Some Sec.	0	0	4	2.1	0	0	4	0.8
Sec. Grad.	0	0	4	2.1	1	0.5	5	1.0
Voc./Norm.	2	1.9	2	1.0	1	0.5	5	1.0
Some Univ.	3	2.9	5	2.6	1	0.5	9	1.8
Univ. Grad.	15	14.6	40	20.8	18	8.4	73	14.3
Post Univ.	8	7.8	17	8.9	15	7.0	40	7.8
Masters	48	46.6	65	33.9	79	36.7	192	37.6
Doctors	27	26.2	54	28.1	99	46.0	180	35.3
N=510	103	100.0	192	100.0	215	100.0	510	100.0

LDC locations (64.3%, 74) and LDC citizens in LDC locations (66.5%, 119) fall below it. Observing that DC citizens in LDC locations have the lowest rate of masters and doctoral level studies considered together, it is recalled that this group has the lowest median age (34.9) of any of the groupings.

Of the 180 (35.3%) individuals with doctoral study, nearly half of these (95, 48.5%) are DC citizens in DC locations. For DC citizens in LDC locations, the rate is 31.3 percent (36), for LDC citizens in DC locations, 25.0 percent (5), and for LDC citizens in LDC locations, 24.6 percent (44). While the LDC citizens have a somewhat lower rate of doctoral level study, their rate for study at the masters level is somewhat higher, at 41.9 percent (75) for those in LDC locations, and 50 percent (10) for those in DC locations.

At the other end of the formal schooling spectrum, it is noted that 10.6 percent (19) of the LDC citizens in LDC locations have not completed university, while for DC citizens in DC and in LDC locations this rate is less than two percent.

As can be observed in Table 19, 82.7 percent (178) of those specialists working in industrialized countries have

studied at the masters or doctoral levels, or their equivalents, followed next by those in low-income countries (72.8%, 75) and, last, by those in middle-income countries (62.0%, 119).

Tables 18 and 19 provide further detail on the formal education of the development personnel studied.

Figure 5 graphically illustrates for each of the seven groupings the levels of formal education received. It also shows the mean percentages for each level of formal schooling considering all the groupings together so that variations from the mean can be readily seen.

Foreign Schooling. Nearly half (230, 46.1%) of the development intermediaries reporting data (499) indicated having received foreign schooling.

In Table 20 it can be seen that, for the 193 LDC citizens, overall, the rate of foreign schooling is considerably higher (122, 63.2%) than for DC citizens. Considering the 104 LDC citizens in LDC locations who have received foreign schooling, this has tended to be at the graduate level (for 81 individuals) and in industrialized countries (for at least 75 persons; 15 individuals indicated more than one country of foreign schooling). Considering

FIGURE 5. LEVEL OF FORMAL EDUCATION BY CITIZENSHIP AND LOCATION OF WORK ACCORDING TO BASIC DEVELOPMENT INDICATORS

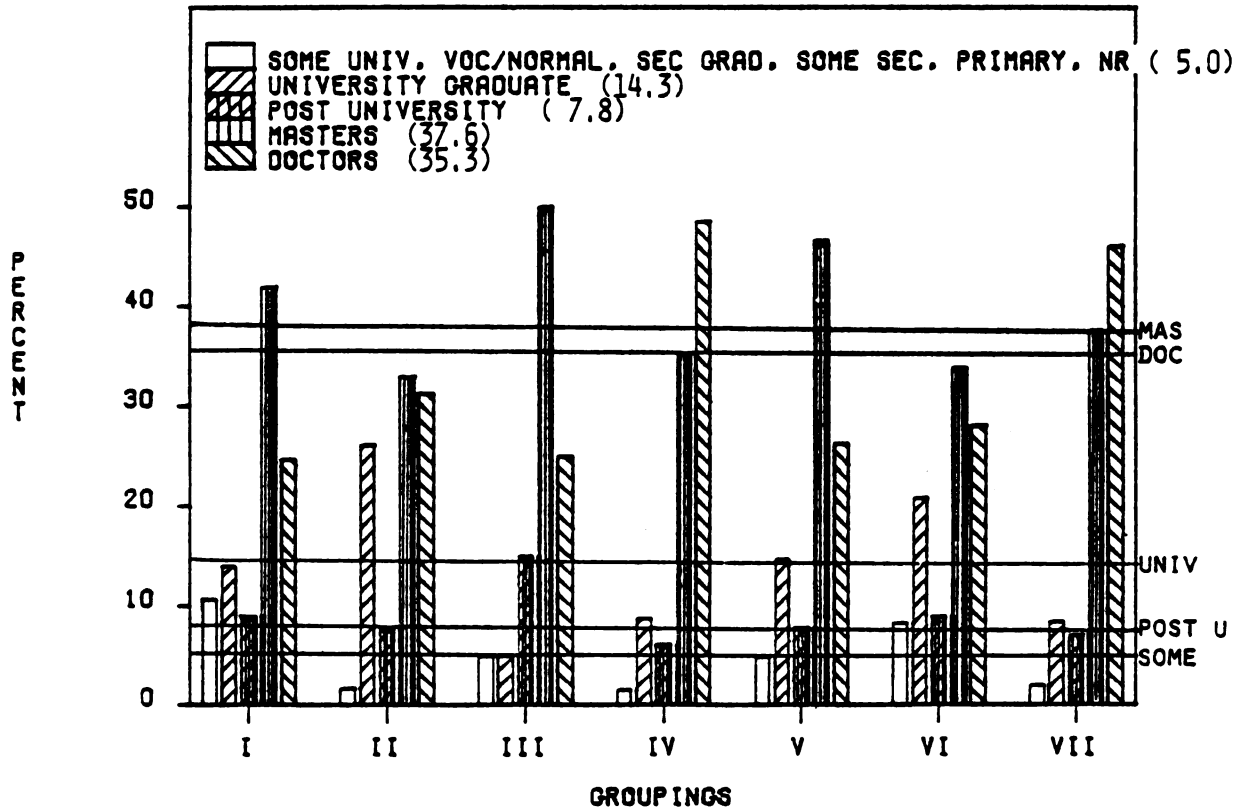


TABLE 20: FOREIGN SCHOOLING BY CITIZENSHIP AND LOCATION OF WORK

Forgn Schl	I LDC/LDC		II DC/LDC		III LDC/DC		IV DC/DC		SUM I-IV	
	n	%	n	%	n	%	n	%	n	%
None	69	39.9	69	60.0	2	10.0	129	67.5	269	53.9
Yes, unclass	11	6.4	9	7.8	1	5.0	14	7.3	35	7.0
Yes, grad	81	46.8	18	15.7	15	75.0	24	12.6	138	27.7
other hghr	8	4.6	12	10.4	2	10.0	20	10.5	42	8.4
secondary	4	2.3	5	4.3	0	0	3	1.6	12	2.4
primary	0	0	1	0.9	0	0	1	0.5	2	0.4
other	0	0	1	0.9	0	0	0	0	1	0.2
N=499	173	100.0	115	100.0	20	100.0	191	100.0	499	100.0

the 18 LDC citizens in DC locations who have received foreign schooling, similar tendencies hold true. Fifteen report having foreign study at the graduate level and at least 12 have studied in industrialized countries (5 giving multiple country response).

For the 306 DC citizens, overall, the rate of foreign schooling is 35.3 percent (108). Considering the 62 DC citizens in DC locations who have received foreign schooling, this has tended to be at various levels of higher education and in industrialized countries (at least in 39 cases, with 10 giving multiple country response). Considering the 46 DC citizens in LDC locations who have received foreign schooling, the same tendencies are found, with at least 22 having studied in industrialized countries (11 giving multiple country response). However, since at least 12 DC citizens in LDCs report foreign schooling in a developing country, it might be profitably queried, in further research, whether these individuals have particular international life histories. For example, are they children of missionaries or of multinational company executives, with experience living in a variety of countries, especially in developing countries? How many others may have obtained such foreign education during a "junior year abroad" program while attending college?

Table 20 shows the levels of foreign schooling received for each of the four groupings by citizenship and location of work, and Table 21 reports, for each grouping, the countries in which the foreign education was received.

When the respondents are grouped by location of work according to basic development indicators, as seen in Table 22, there is a slightly greater tendency for those in low-income countries to have received foreign schooling vis-a-vis those in middle-income countries, 53.5 percent and 51.3 percent, respectively. For those in industrialized countries, the rate is 37.9 percent.

To visually summarize the data on foreign education, Figure 6 graphically depicts the percentages of no formal schooling, foreign graduate schooling, and other foreign schooling for each of the seven groupings, along with the corresponding means.

Formal Schooling Concentration. Because many individuals indicated more than one response when asked about their formal schooling concentration, this item was recoded to allow two possible responses. If only one response was given, that code was repeated in each of two columns. If more than two responses were given, the code

TABLE 21: COUNTRIES OF FOREIGN SCHOOLING BY CITIZENSHIP
AND LOCATION OF WORK

I. LDC Citizens/LDC Locations		II. DC Citizens/LDC Locations	
-----		-----	
Uganda	1	Zimbabwe	1
South Africa	1	Turkey	1
Bangladesh	1	India	1
India	2	Philippines	1
Malaysia	1	Brazil	1
Philippines	3	Colombia	1
Japan	1	Ecuador	2
Chile	2	Peru	1
Honduras	1	Mexico	3
Australia	1	Australia	1
UK	14	Denmark	1
Ireland	1	UK	6
Belgium	1	France	5
West Germany	1	West Germany	2
Netherlands	1	Netherlands	1
Canada	3	Canada	1
USA	52	USA	5
USSR	2	Multiple Response	11
Multiple Response	15	N=45	
N=104			

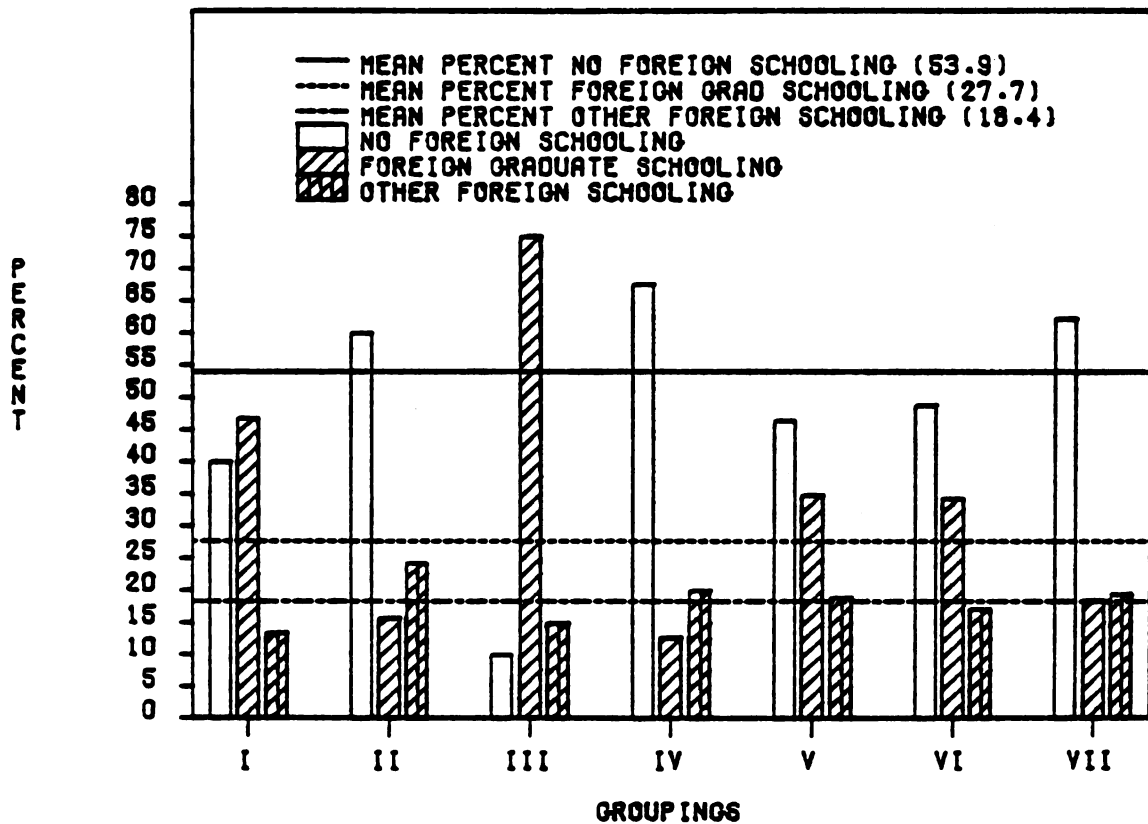
TABLE 21: (Cont'd) COUNTRIES OF FOREIGN SCHOOLING BY
CITIZENSHIP AND LOCATION OF WORK

III. LDC Citizens/DC Locations		IV. DC Citizens/DC Locations	
-----		-----	
UK	2	Ethiopia	1
Canada	1	Zimbabwe	1
USA	9	Uganda	1
Multiple Response	5	South Africa	1
N=17		Ghana	1
		India	1
		Philippines	2
		Japan	1
		Taiwan	1
		Chile	1
		Colombia	1
		Mexico	1
		Puerto Rico	1
		Sweden	1
		UK	10
		Austria	1
		Belgium	1
		France	8
		West Germany	2
		Canada	2
		USA	12
		Multiple Response	10
		N=61	

TABLE 22: FOREIGN SCHOOLING BY LOCATION ACCORDING TO
BASIC DEVELOPMENT INDICATORS

Forgn Schl	V Low-Inc		VI Mid-Inc		VII Indust		SUM V-VII	
	n	%	n	%	n	%	n	%
None	47	46.5	91	48.7	131	62.1	269	53.9
Yes, unclass	8	7.9	12	6.4	15	7.1	35	7.0
Yes, grad	35	34.7	64	34.2	39	18.5	138	27.7
other hghr	7	6.9	13	7.0	22	10.4	42	8.4
secondary	2	2.0	7	3.7	3	1.4	12	2.4
primary	1	1.0	0	0	1	0.5	2	0.4
other	1	1.0	0	0	0	0	1	0.2
N=499	101	100.0	187	100.0	211	100.0	499	100.0

FIGURE 6. FOREIGN SCHOOLING BY CITIZENSHIP & WORK LOCATION
AND BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS



for "other" was used. The tabulations for this item should therefore be allowed to suggest only broad patterns in the data.

Keeping these considerations in mind, it is noted that education has been the formal schooling concentration of most of the development specialists, followed by concentration in the social sciences, named by 25.1 percent and 20.7 percent of the respondents, respectively. This pattern, in terms of order of frequency, is evidenced for all but one grouping when citizenship is crossed with work location, as seen in Table 23. DC citizens in LDC locations are the single exception, with more of this grouping naming social science as their formal schooling concentration.

Student Status. Only 15.9 percent (79), of the selected development personnel responding (498), report that they are currently students. Table 24 reveals that while a majority (70%, 14) of the LDC citizens in DC locations indicates being students, the percentage for the other groupings is low: LDC citizens in LDC locations, 13.5 percent (23); DC citizens in LDC locations, 6.1 percent (7); DC citizens in DC locations, 18.1 percent (35). Although the numbers represented are few, a pattern is suggested in which most of the LDC citizens in DCs have come there for academic study of development, while most of the DC citizens

**TABLE 23: FORMAL SCHOOLING CONCENTRATION BY CITIZENSHIP
AND LOCATION OF WORK**

Concentra	I LDC/LDC		II DC/LDC		III LDC/DC		IV DC/DC		SUM I-IV	
	n	%	n	%	n	%	n	%	n	%
General St.	41	11.5	24	10.4	6	15.0	28	7.1	99	9.7
Phil/Human.	10	2.8	12	5.2	0	0	15	3.8	37	3.6
Soc.Sci/Wk	63	17.6	56	24.3	8	20.0	84	21.4	211	20.7
Agriculture	11	3.1	10	4.3	4	10.0	12	3.1	37	3.6
Education	108	30.2	34	14.8	13	32.5	101	25.8	256	25.1
Bio Science	2	0.6	8	3.5	0	0	7	1.8	17	1.7
Phy Science	10	2.8	17	7.4	0	0	4	1.0	31	3.0
Law	2	0.6	1	0.4	0	0	4	1.0	7	0.7
Nursing/Med	14	3.9	11	4.8	0	0	9	2.3	34	3.3
Other	97	27.1	57	24.8	9	22.5	128	32.7	291	28.5
N=510 x										
2 responses	(179x2)		(115x2)		(20x2)		(196x2)		(510x2)	

TABLE 24: STUDENT STATUS BY CITIZENSHIP AND LOCATION OF WORK

Std't Stat	I LDC/LDC		II DC/LDC		III LDC/DC		IV DC/DC		SUM I-IV	
	n	%	n	%	n	%	n	%	n	%
Yes	23	13.5	7	6.1	14	70.0	35	18.1	79	15.9
No	147	86.5	108	93.9	6	30.0	158	81.9	419	84.1
N=498	170	100.0	115	100.0	20	100.0	193	100.0	498	100.0

Chi-square(3df)=53.59;P<.0000

TABLE 25: STUDENT STATUS BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Std't Stat	V Low-Inc		VI Mid-Inc		VII Indust		SUM V-VII	
	n	%	n	%	n	%	n	%
Yes	10	10.0	20	10.8	49	23.1	79	15.9
No	90	90.0	166	89.2	163	76.9	419	84.1
N=498	100	100.0	186	100.0	212	100.0	498	100.0

Chi-square(2df)=14.56;P<.0007

in LDCs have come there for work in development.

When considering student status by work location according to basic development indicators, a progression is noted in Table 25 in the percentage of students by country income grouping: low-income countries, 10.0 percent (10); middle-income countries, 10.8 percent (20); industrialized countries, 23.1 percent (49).

A visual depiction of the percents of students and non-students for each of the seven groupings, together with their respective means, is presented in Figure 7. It can be readily seen that students in industrialized countries account for the cases exceeding the general student mean.

Language Facility. The composite profile, it may be recalled, indicated a mean of 3.05 languages spoken or read by the respondents. The more detailed analysis of development specialists reveals that 8.7 percent (44), of 504 responding, are monolingual while 60.9 percent (307) have facility in two of three languages and 30.4 percent (153) can speak or read four or more languages.

When considering the development personnel in comparative groupings by citizenship and work location, as detailed in Table 26, it is observed that DC rather than LDC

FIGURE 7. STUDENT STATUS BY CITIZENSHIP AND WORK LOCATION
AND BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

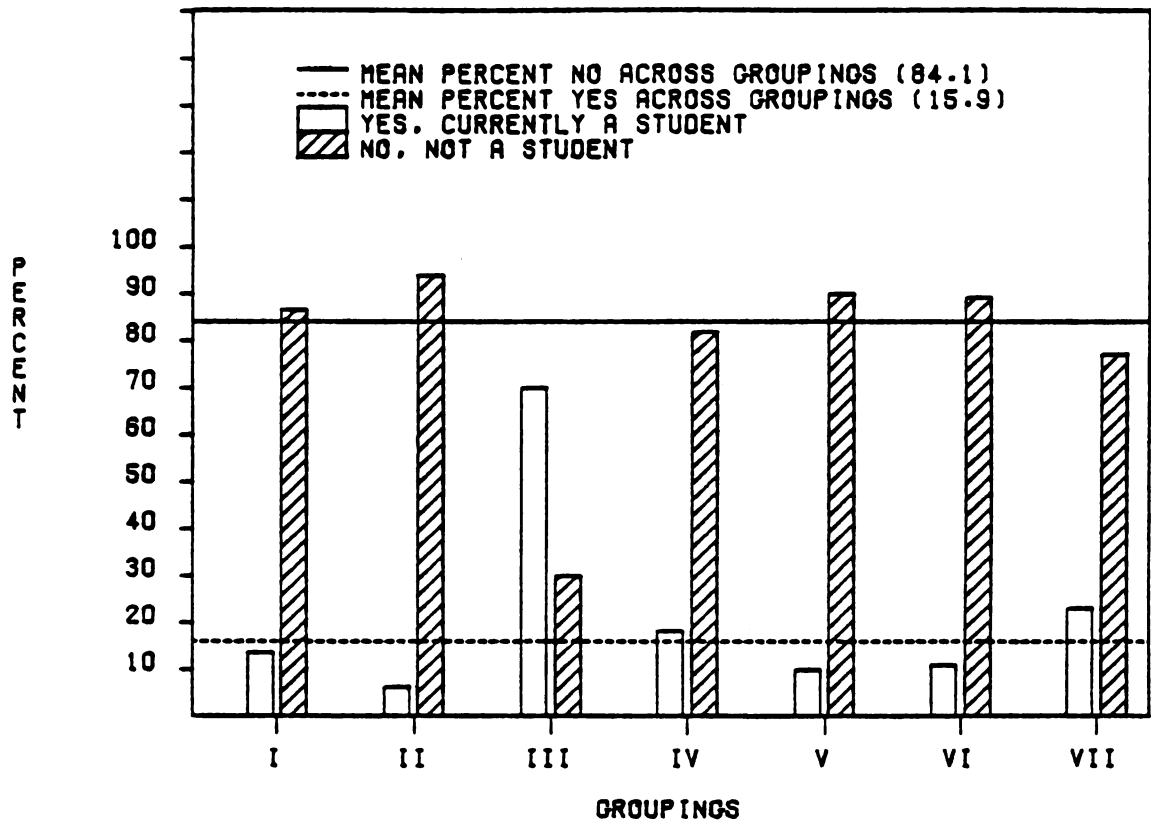


TABLE 26: LANGUAGE FACILITY BY CITIZENSHIP AND LOCATION OF WORK

Lang Fclty	I LDC/LDC	II DC/LDC	III LDC/DC	IV DC/DC	SUM I-IV
	n %	n %	n %	n %	n %
Monoling.	3 1.7	9 8.0	1 5.0	31 16.1	44 8.7
Bi/Triling	125 70.2	61 54.0	14 70.0	107 55.4	307 60.9
Four Plus	50 28.1	43 38.1	5 25.0	55 28.5	153 30.4
N=504	178 100.0	113 100.0	20 100.0	193 100.0	504 100.0

Chi-square(6df)=11.29;P<.10

TABLE 27: STUDENT STATUS BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Lang Facility	V Low-Inc	VI Mid-Inc	VII Indust	Sum V-VII
	n %	n %	n %	n %
Monolingual	2 2.0	10 5.3	32 15.1	44 8.7
Bi/Trilingual	65 63.7	122 64.2	120 56.6	307 60.9
Four Plus	35 34.3	58 30.5	60 28.4	153 30.4
N=504	102 100.0	190 100.0	212 100.0	504 100.0

Chi-square(4df)=19.74;P<.01

citizens account for the greatest frequency of monolingualism, that DC citizens are less often bi- or trilingual, but that they compete favorably with LDC citizens in incidence of facility with four or more languages. Whereas only 2.0 percent (4) of the 198 LDC citizens are monolingual, 13.1 percent (40) of the 306 DC citizens are.

Correspondingly, whereas 70.2 percent (139) of the LDC citizens are bi- or trilingual, the rate falls to 54.9 percent (168) for the DC citizens. When focusing on facility in four or more languages, however, 27.8 percent (55) of the LDC citizens are found with this capacity but so are a core of 32.0 percent (98) of the DC citizens. In fact, DC citizens in LDC locations show the highest incidence of any grouping in facility with four or more languages (38.1%, 43). The life histories of these multilingual DC citizens in LDCs invite speculation. It would be of interest to learn whether, for example, they learned languages as the offspring of parents who have worked in a variety of countries, and/or whether they learned languages in their development roles.

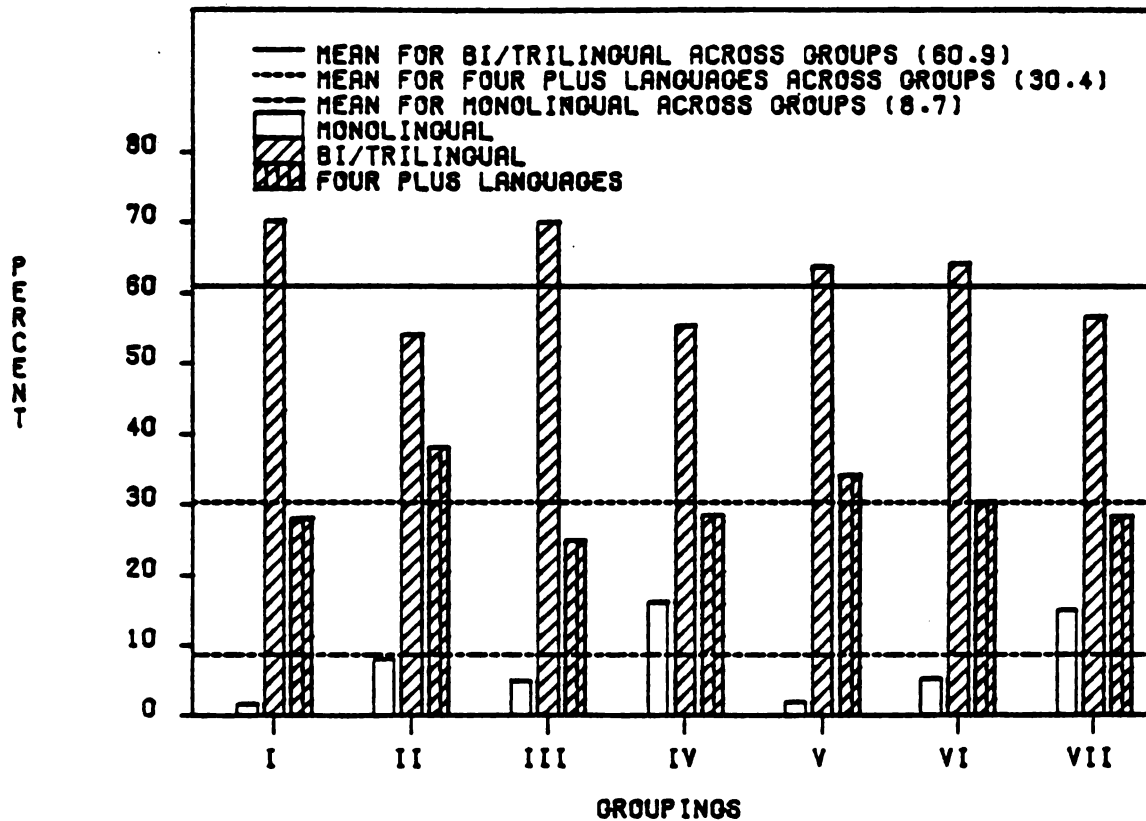
Considering the specialists' language facility by location according to basic development indicators, the data for which are presented in Table 27, a higher incidence of

monolingualism is evidenced with higher income levels of country groupings. For industrial country locations, 15.1 percent (32) of the development personnel are monolingual; for middle-income country locations, 5.3 percent (10); and for low-income country locations, 2.0 percent (2). A higher incidence of facility in four or more languages corresponds with lower income levels of country groupings. For low-income country locations, 34.3 percent (35) of the development specialists have capacity in four or more languages. In middle-income country locations this decreases to 30.5 percent (58), and in industrial country locations to 28.4 percent (60).

Figure 8 graphically illustrates this discussion by showing the percents of monolingualism, bi- or trilingualism, and facility in four or more languages for the seven groupings of development specialists. Overall means for the language levels are also drawn to indicate relative variations in means for the individual groupings.

Attention is next turned to comparative analysis of the development roles of the selected respondents.

**FIGURE 8. LANGUAGE FACILITY BY CITIZENSHIP AND WORK LOCATION
AND BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS**



CHAPTER 7

DEVELOPMENT ROLE CHARACTERISTICS -- PART I:

ROLE PERFORMANCE

This chapter comparatively examines two aspects of the development work roles of the 510 selected respondents: development role performance and non-formal education role performance. The following chapter completes consideration of development roles by focusing on role-related linkages and career history of the subjects.

Development Role Performance

The subjects' roles in development are analyzed in terms of the development fields in which they work, the single field in which they spend the most time, the development activities in which they are engaged, the single activity in which they spend the most time, their sources for getting information resources and ideas to learn about development, and the two sources they rely on the most. It is recalled that the subset of 510 development personnel was formed based, in part, on the criterion that the work or study of the individuals indeed concerns development.

In considering the fields of development work in which the personnel are engaged, two kinds of comparative data are noted for the groupings: order of frequency for mention of each field (Tables 29 and 30), and extent of association between work in a field and the various personnel groupings (Table 31).

Two principal observations can be made from an examination of the data. First, the development specialists are characterized by a breadth of involvement in diverse development fields. Second, they tend not to be greatly distinguished in their field involvements when compared by citizenship and work location, and by location according to basic development indicators.

In reference to the first observation, Table 31 indicates that over one-third of all respondents, in the purposive sample, report being simultaneously engaged in a diverse collection of development fields including education or training, integrated rural development, general non-formal education, literacy and basic education, health, nutrition, agriculture, extension, communication, and vocational skills training.

TABLE 29: INVOLVEMENT IN FIELDS OF DEVELOPMENT BY
CITIZENSHIP AND LOCATION OF WORK

I LDC/LDC(179)		II DC/LDC(115)		III LDC/DC(20)		IV DC/DC(196)	
fields	f	fields	f	fields	f	fields	f
Educ/Trng	135	Educ/Trng	78	Educ/Trng	13	Educ/Trng	133
Gen NFE	110	Int Rur Dev	68	Int Rur Dev	12	Int Rur Dv	99
Int Rur Dv	109	Health	62	Extension	11	Gen NFE	89
Lit Bas Ed	92	Nutrition	62	Gen NFE	10	Lit Bas Ed	89
Voc Skills	78	Lit Bas Ed	54	Lit Bas Ed	9	Health	73
Agriculture	74	Agriculture	52	Agriculture	8	Higher Ed	73
Nutrition	72	Gen NFE	47	Voc Skills	7	Comm Media	70
Extension	71	Extension	39	Comm Media	6	Extension	69
Health	71	Comm Media	36	Health	6	Voc Skills	59
Comm Media	65	Family Plan	35	Higher Ed	6	Agricult.	57
Family Plan	58	Voc Skills	33	Nutrition	6	Nutrition	55
Higher Ed	48	Higher Ed	29	Family Plan	5	Oth Fml Ed	43
Oth Fml Ed	48	Oth Fml Ed	13	Oth Fml Ed	5	Famly Plan	41
Mgmt Consul	28	Bus. Mfg.	10	Bus. Mfg.	1	Mgmt Cons.	33
Serv. Dev.	27	Serv. Dev.	10	Mgmt Consul	1	Serv. Dev.	22
Bus. Mfg.	20	Mgmt Consul	7	Serv. Dev.	0	Bus. Mfg.	21
Urban	20	Urban	5	Urban	0	Urban	21

TABLE 30: INVOLVEMENT IN FIELDS OF DEVELOPMENT BY
LOCATION ACCORDING TO BASIC DEVELOPMENT
INDICATORS

V Low-Inc (103)		VI Mid-Inc (192)		VII Indust (215)	
fields	f	fields	f	fields	f
Educ/Trng	81	Educ/Trng	132	Educ/Trng	146
Int Rur Dev	70	Int Rur Dev	107	Int Rur Dev	111
General NFE	69	General NFE	88	General NFE	99
Lit Bas Ed	60	Nutrition	87	Lit Bas Ed	98
Health	51	Lit Bas Ed	86	Extension	80
Agriculture	50	Health	82	Health	79
Voc Skills	48	Agriculture	76	Higher Educ	78
Nutrition	47	Extension	67	Comm Media	76
Extension	43	Comm Media	63	Voc Skills	68
Comm Media	38	Voc Skills	63	Agriculture	65
Family Plan	37	Family Plan	56	Nutrition	61
Higher Educ	27	Higher Educ	51	Oth Fml Ed	48
Oth Fml Ed	26	Oth Fml Ed	35	Family Plan	46
Business Mfg	16	Mgmt Consult	23	Mgmt Consult	34
Serv. Dev.	14	Serv. Dev.	23	Business Mfg	22
Mgmt Consult	12	Urban	18	Serv. Dev.	22
Urban	8	Business Mfg	14	Urban	20

TABLE 31: EXTENT OF ASSOCIATION BETWEEN WORK IN DEVELOPMENT FIELDS AND CITIZENSHIP WITH LOCATION OF WORK AND LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Field	Total f	Mean %	Groups I-IV		Groups V-VII	
			Chi- Square	p	Chi- Square	p
Educ/Trng	359	70.4	3.4	.33	4.2	.12
Int Rural Devt	288	56.5	4.7	.20	7.6	.02 s
General NFE	256	50.2	14.9	.00 s	14.6	.00 s
Literacy, Basic Ed	244	47.8	1.5	.69	5.6	.06
Health	212	41.6	10.1	.02 s	4.8	.09
Nutrition	195	38.2	21.4	.00 s	15.3	.00 s
Agriculture	191	37.5	10.0	.02 s	10.6	.01 s
Extension	190	37.3	4.0	.26	1.3	.51
Comm. & Media	177	34.7	1.1	.78	0.6	.76
Voc. Skills Progs	177	34.7	10.0	.02 s	8.3	.02 s
Higher Education	156	30.6	6.9	.08	5.7	.06
Family Planning	139	27.3	7.0	.07	8.0	.02 s
Other Formal Ed.	109	21.4	10.3	.02 s	2.2	.34
Mgmt Consultation	69	13.5	9.2	.03 s	1.7	.44
Servicing of Dev.	59	11.6	5.7	.13	0.8	.66
Business, Manufg	52	10.2	1.1	.77	5.0	.08
Urban Settlements	46	9.0	6.7	.08	0.2	.88

s = significant at least at .05 level, with 3 d.f. for Groups I-IV and 2 d.f. for Groups V-VII

Tables 29 and 30 illustrate the second observation by listing 17 fields of development work, in order of frequency, for each of the groupings by citizenship and location of work (Table 29), and by location according to basic development indicators (Table 30). Table 31 contains the chi-squares and significance levels for the involvement of Groupings I-IV and Groupings V-VII in each development field. Only the fields of general non-formal education, health, nutrition, agriculture, vocational skills training, formal education other than higher, and management consultation are significantly differentiated (at least at the .05 level with 3 degrees of freedom) when considering the development specialists by citizenship and work location. Concerning involvement in the other development fields -- education or training, integrated rural development, literacy or basic education, extension, communication and media, higher education, family planning, the servicing of development, business or manufacturing or commerce, and urban settlements -- there is less variation among the development specialists by citizenship and location of work.

Table 32 shows the relative participation in each of the fields significantly differentiated by citizenship and location of development work. For general non-formal

TABLE 32: INVOLVEMENT IN SELECTED DEVELOPMENT FIELDS BY CITIZENSHIP AND LOCATION OF WORK

Dev. Field	I LDC/LDC (n=179)		II DC/LDC (n=115)		III LDC/DC (n=20)		IV DC/DC (n=196)		SUM I-IV (n=510)	
	n	%	n	%	n	%	n	%	n	%
Gen. NFE	110	61.5	47	40.9	10	50.0	89	45.4	256	50.2
Health	71	39.7	62	53.9	6	30.0	73	37.2	212	41.6
Nutrition	72	40.2	62	53.9	6	30.0	55	28.1	195	38.2
Agriculture	74	41.3	52	45.2	8	40.0	57	29.1	191	37.5
Voc. Skills	78	43.6	33	28.7	7	35.0	59	30.1	177	34.7
Pre-U FE	48	26.8	13	11.3	5	25.0	43	21.9	109	21.4
Mgmt Conslt	28	15.6	7	6.1	1	5.0	33	16.8	69	13.5

TABLE 33: INVOLVEMENT IN SELECTED DEVELOPMENT FIELDS BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Dev. Field	V Low-Inc (n=103)		VI Mid-Inc (n=192)		VII Indust (n=215)		SUM V-VII (n=510)	
	n	%	n	%	n	%	n	%
Int Rural Dev	70	68.0	107	55.7	111	51.6	288	56.5
General NFE	69	67.0	88	45.8	99	46.0	256	50.2
Nutrition	47	45.6	87	45.3	61	28.4	195	38.2
Agriculture	50	48.5	76	39.6	65	30.2	191	37.5
Voc. Skills	48	46.6	63	32.8	66	30.7	177	34.7
Family Plan	37	35.9	56	29.2	46	21.4	139	27.3

education, with a total mean involvement of 50.2 percent, LDC citizens in LDC locations are involved considerably more (61.5%), and DC citizens in both LDC and DC locations, less (40.9% and 45.4%, respectively). For the field of health, with an overall mean involvement of 41.6 percent, DC citizens in LDC locations are much higher (53.9%) and DC citizens in DC locations somewhat lower (37.2%) with LDC citizens in LDC locations near the mean. For the field of nutrition with a mean involvement of 38.2 percent, the same pattern holds with higher DC/LDC involvement (53.9%) and lower DC/DC involvement (28.1%).

For agriculture with a mean involvement of 37.5 percent, both the DC/LDC and LDC/LDC groupings are higher (45.2% and 41.3%, respectively) and the DC/DC grouping lower (29.1%). For vocational skills training (mean 34.7%), the LDC/LDC grouping is much higher (43.6%) with the DC/LDC and DC/DC groupings lower (28.7% and 30.1%, respectively). Finally, for formal education other than higher (mean 21.4%), the LDC/LDC grouping shows higher involvement (26.8%) and the DC/LDC groupings much lower (11.3%).

These findings suggest that DC citizens in LDC locations are particularly characterized by their involvement with applied development fields such as health, nutrition, and agriculture, rather than in non-formal education

generally, or in formal education or skills training. LDC citizens in LDC locations are noted for their greater relative involvement in general non-formal education, agriculture (though not to the same extent as DC citizens in LDCs), vocational training, and in pre-university formal education. DC citizens in DC locations are most distinguished by their low relative involvement in all of the fields discussed.

Finally, it is worth noting that LDC citizens in LDCs demonstrate the greatest aggregate involvement in all of the selected development fields taken together. They have a mean involvement of 38.4 percent for the total of the selected fields, while for DC citizens in LDCs this is 34.3 percent and for DC citizens in DCs it is 29.8 percent. This suggests a somewhat greater tendency for development personnel in LDCs to be engaged in a broader range of fields in their development roles than are those in DCs, who may be more narrowly focused or specialized in the fields with which they are involved.

Again referring to Table 31, the reader will observe that only the fields of integrated rural development, general non-formal education, nutrition, agriculture, vocational skills training, and family planning are significantly differentiated (at least at the .05 level

with 2 degrees of freedom) when considering the development specialists by work location according to basic indicators. However, when focusing on these fields a clear pattern is evidenced, indicating increasingly greater involvement by lower income location. Table 33 shows this detail for the indicated fields.

These findings, suggesting greater concurrent involvement in multiple development fields as proximity increases to the actual points of practice, leads to speculation that development roles tend to be more complex as work relates to the actual lives of the intended beneficiaries of development efforts. In such cases, development workers must necessarily engage in a spectrum of fields since the needs of those whom they would try to benefit similarly cover a broad range of interrelated concerns.

When considering the field of development in which the specialists spend the most time, the four fields receiving the greatest mention parallel the multiple fields of involvement described previously: education or training, integrated rural development, general non-formal education, literacy and basic education. The next two fields receiving greatest mention -- higher education and communication -- do not follow the earlier sequence which lists them in eleventh

and ninth place, respectively.

Table 34, which provides data on development field of greatest time involvement by citizenship and location, shows a greater chi-square and significance level than does Table 35, which provides data by location according to basic development indicators. Examining the former table, it is noted that LDC citizens in LDC locations account for greater than mean primary involvement (by at least one percent) in the fields of education and training, integrated rural development, and general non-formal education -- with lesser than mean primary involvement (by at least one percent) in the fields of health and agriculture. DC citizens in LDC locations, on the other hand, account for greater than mean primary involvement in the fields of health and agriculture -- with lesser than the mean in education and training, integrated rural development, and literacy and basic education. This again suggests that it is DC rather than LDC specialists who tend to be more engaged in certain applied areas of development work, most notably health and agriculture.

Referring to Table 35, it is observed that the pattern of increasingly greater involvement by lower income location is evidenced only for the fields of integrated rural development and general non-formal education. In fact, when

**TABLE 34: DEVELOPMENT FIELD OF GREATEST TIME INVOLVEMENT
BY CITIZENSHIP AND LOCATION OF WORK**

Dev. Field	I LDC/LDC (n=150)		II DC/LDC (n=93)		III LDC/DC (n=11)		IV DC/DC (n=157)		SUM I-IV (n=411)	
	n	%	n	%	n	%	n	%	n	%
Educ/Trng	25	16.7	9	9.7	4	36.4	23	14.6	61	14.8
Int Rur Dev	28	18.7	10	10.8	0	0	14	8.9	52	12.7
General NFE	17	11.3	8	8.6	1	9.1	12	7.6	38	9.2
Lit, Bas Ed	13	8.7	4	4.3	1	9.1	15	9.6	33	8.0
Higher Educ	11	7.3	8	8.6	1	9.1	13	8.3	33	8.0
Communicatn	12	8.0	7	7.5	1	9.1	12	7.6	32	7.8
Health	5	3.3	11	11.8	0	0	10	6.4	26	6.3
Agriculture	4	2.7	8	8.6	0	0	5	3.2	17	4.1
> One Field	9	6.0	6	6.5	1	9.1	5	3.2	21	5.1
Other Flds	26	17.3	22	23.7	2	18.2	48	30.6	98	23.8

**TABLE 35: DEVELOPMENT FIELD OF GREATEST TIME INVOLVEMENT
BY LOCATION ACCORDING TO BASIC DEVELOPMENT
INDICATORS**

Dev. Field	V Low-Inc (n=87)		VI Mid-Inc (n=157)		VII Indust (n=167)		SUM V-VII (n=411)	
	n	%	n	%	n	%	n	%
Educ/Trng	11	12.6	23	14.6	27	16.2	61	14.8
Int Rural Dev	14	16.1	24	15.3	14	8.4	52	12.7
General NFE	10	11.5	15	9.6	13	7.8	38	9.2
Lit, Basic Ed	9	10.3	8	5.1	16	9.6	33	8.0
Higher Educ	9	10.3	10	6.4	14	8.4	33	8.0
Communication	4	4.6	15	9.6	13	7.8	32	7.8
Health	3	3.4	13	8.3	10	6.0	26	6.3
Agriculture	2	3.2	10	6.4	5	3.0	17	4.1
> One Field	7	8.0	8	5.1	6	3.6	21	5.1
Other Fields	18	20.7	31	19.7	49	29.3	98	23.8

Chi-square(34df)=46.17; $P \leq .08$

comparing specialists in low-income countries with those in middle-income countries, it is found that, for the latter, there is a greater primary involvement in the fields of education and training, communication, health, and agriculture. It may seem surprising that only three persons in the low-income countries spend their most time in health care before recalling that there are only four women in this grouping and that women development workers may provide what little health care exists in poor rural areas. Furthermore, it has been observed that DC citizens account for much of the development work in the fields of health and agriculture. It is thus reasonable to speculate that they are doing this to a greater extent in middle-income rather than in low-income country locations.

Also noteworthy is the fact that development specialists in low-income countries who spend the most time in higher education (10.3%) account for greater than the mean involvement for this field (8.0%). For those in middle-income countries, 6.4 percent spend the most time in higher education.

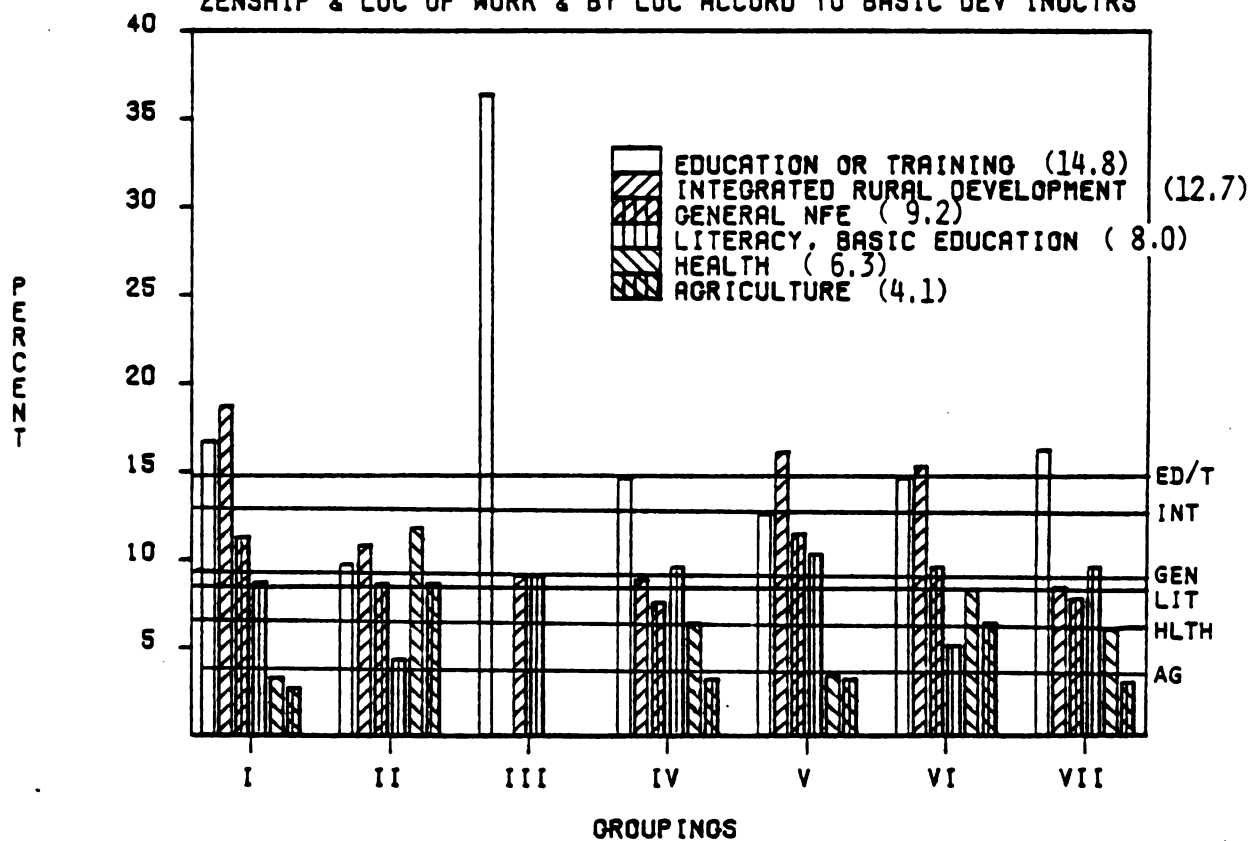
It might be questioned whether this variation is associated with differential personal reward systems -- social, economic, psychological -- regarding work in higher education vis-a-vis other development fields. A hypothesis

would be that rewards in low-income countries for indigenous citizens tend to be relatively greater in higher education and fewer in applied development fields. Whether government policies relate to such rewards, or can promote greater reward incentives for work in applied development fields, is still another question. While some may argue that the need for higher education skills is perhaps greatest in low-income countries, others may regard greater relative focus on higher education as dysfunctional in light of more immediate and pragmatic development needs.

Figure 9 uses a bar graph to visually depict relative primary involvement in selected development fields for each of the analytical groupings.

Following this discussion of the fields of development in which the NFE network participants work is a consideration of the particular kinds of activities in which they are involved in pursuing work in these fields. Two observations, similar to those made about the specialists' fields of development work, can be made about their activities within these fields. First, a broad spectrum of activities are engaged in by the specialists as part of their development roles. Second, the NFE network affiliates tend not to be distinguished to a very great extent when compared by citizenship and work location, and by location

FIGURE 9. DEVELOPMENT FIELD OF PRIMARY INVOLVEMENT BY CITIZENSHIP & LOC OF WORK & BY LOC ACCORD TO BASIC DEV INOCTRS



according to basic development indicators.

In support of the first observation, the reader's attention is referred to Table 36. Over one-third of the development specialists indicate that they are engaged in the following activities as part of their development roles: planning or program design, teaching or training, research or evaluation, administration, community-level field work, and policy-making.

Table 36 also shows the chi-square and significance levels for the participation of Groupings I-IV and Groupings V-VII in each activity. It is evident that only the activities of community-level field work and study are significantly differentiated (at least at the .05 level) when considering the development intermediaries by citizenship and work location.

Table 37 provides further detail on these two activities. Regarding community field work, with an overall mean participation of 39.6 percent, both LDC and DC citizens in LDC locations are engaged considerably more (46.4% and 46.1%, respectively) while both LDC and DC citizens in DC locations are engaged much less (25.0% and 31.1%, respectively). Considering study, with a total mean participation of 29.6 percent, both LDC and DC citizens in

TABLE 36: EXTENT OF ASSOCIATION BETWEEN INVOLVEMENT IN DEVELOPMENT ACTIVITIES BY CITIZENSHIP WITH LOCATION OF WORK, AND BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Dev Activity	Total f	Mean %	Groups I-IV		Groups V-VII	
			Chi-Square	p	Chi-Square	p
Plan/Prog Design	368	72.2	2.56	.46	6.92	.03 s
Teaching/Training	362	71.0	1.30	.73	2.17	.34
Resrch/Evaluation	328	64.3	4.42	.22	4.02	.13
Administration	252	49.4	4.30	.23	4.54	.10
Commty Field Work	202	39.6	13.12	.00 s	12.47	.00 s
Policy Making	193	37.8	1.48	.69	5.84	.05 s
Study	151	29.6	29.48	.00 s	17.49	.00 s
Doc/Info Services	145	28.4	1.79	.62	.03	.98
Other Suprt Servs	43	8.4	2.11	.55	.95	.62

s = significant at least at .05 level, with 3 d.f. for Groups I-IV and 2 d.f. for Groups V-VII

TABLE 37: INVOLVEMENT IN SELECTED DEVELOPMENT ACTIVITIES BY CITIZENSHIP AND LOCATION OF WORK

Development Activity	I LDC/LDC (n=179)		II DC/LDC (n=115)		III LDC/DC (n=20)		IV DC/DC (n=196)		SUM I-IV (n=510)	
	n	%	n	%	n	%	n	%	n	%
Community										
Field Work	83	46.4	53	46.1	5	25.0	61	31.1	202	39.6
Study	55	30.7	12	10.4	7	35.0	77	39.3	151	29.6

TABLE 38: INVOLVEMENT IN SELECTED DEVELOPMENT ACTIVITIES BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Development Activity	V Low-Inc (n=103)		VI Mid-Inc (n=192)		VII Indust (n=215)		SUM V-VII (n=510)	
	n	%	n	%	n	%	n	%
Plan/Prog Desn	85	82.5	134	69.8	149	69.3	368	72.2
Comty Fld Work	46	44.7	90	46.9	66	30.7	202	39.6
Policy Making	49	47.6	64	33.3	80	37.2	193	37.8
Study	28	27.2	39	20.3	84	39.1	151	29.6

DC locations are involved in this activity to a greater extent (35.0% and 39.3%, respectively), and DC citizens in LDC locations to a much lesser extent (10.4%). LDC citizens in LDC locations approach the mean at 30.7%.

When considering the subjects by work location according to basic development indicators, four activities are significantly differentiated (at least at the .05 level): planning or program design, community-level field work, policy-making, and study. Table 38 provides detail for the indicated fields. Regarding community field work, development personnel in both low-income and middle-income countries are represented to a greater extent in this activity, as might be expected, than are those in industrialized countries (44.7% and 46.9%, respectively, versus 30.7%).

Concerning program design, the reader will note a greater participation in this activity among the development personnel in low-income countries (82.5%) than among those in middle-income or industrialized countries (69.8% and 69.3%, respectively). A similar pattern holds for policy-making, with 47.6 percent of those in low-income countries engaged in this activity but only 33.3 percent in middle-income countries and 37.2 percent in industrialized countries. One hypothesis for this would be that

development specialists in low-income countries tend to be among a smaller pool of skilled personnel and, hence, expected to perform higher-level functions than their counterparts elsewhere. Another would be that, as 96 percent of the subjects in low-income countries are men, they may also be over-represented in higher status development activities.

Regarding the development activity in which the selected respondents spend the most time, two activities receive the most mention: teaching or training (22.4%), and planning or program design (20.0%). The remaining activities are distributed as follows: administration (14.9%), research or evaluation (14.3%), community-level field work (9.6%), documentation or information services (4.7%), study (2.7%), policy-making (2.5%), other support services (0.2%), other activities not mentioned (8.6%).

Table 39 provides data on development activity of greatest time involvement by citizenship and location of work. LDC citizens in LDC locations account for greater than mean primary involvement in both community field work and policy-making, but less than mean involvement in planning or program design. DC citizens in LDC locations are proportionately over-represented by primary involvement in the activities of planning or program design,

TABLE 39: DEVELOPMENT ACTIVITY OF GREATEST TIME INVOLVEMENT BY CITIZENSHIP AND LOCATION OF WORK

Development Activity	I LDC/LDC (n=179)		II DC/LDC (n=115)		III LDC/DC (n=20)		IV DC/DC (n=196)		SUM I-IV (n=510)	
	n	%	n	%	n	%	n	%	n	%
Tch/Training	38	21.2	24	20.9	5	25.0	47	24.0	114	22.4
Plan/Design	33	18.4	29	25.2	5	25.0	35	17.9	102	20.0
Administra.	25	14.0	20	17.4	1	5.0	30	15.3	76	14.9
Resrch/Eval	25	14.0	11	9.6	4	20.0	33	16.8	73	14.3
Com Fld Wrk	21	11.7	18	15.7	1	5.0	9	4.6	49	9.6
Doc/Inf Srv	10	5.6	3	2.6	0	0	11	5.6	24	4.7
Study	2	1.1	0	0	2	10.0	10	5.1	14	2.7
Pol. Making	8	4.5	1	0.9	2	10.0	2	1.0	13	2.5
Oth Sup Srvs	0	0	1	0.9	0	0	0	0	1	0.2
Other	17	9.5	8	7.0	0	0	19	9.7	44	8.6

TABLE 40: DEVELOPMENT ACTIVITY OF GREATEST TIME INVOLVEMENT BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Development Activity	V Low-Inc (n=103)		VI Mid-Inc (n=192)		VII Indust (n=215)		SUM V-VII (n=510)	
	n	%	n	%	n	%	n	%
Teach/Training	20	19.4	43	22.4	51	23.7	114	22.4
Plan/Prog Desn	25	24.3	37	19.3	40	18.6	102	20.0
Administration	19	18.4	26	13.5	31	14.4	76	14.9
Research/Eval	6	5.8	30	15.6	37	17.2	73	14.3
Com Field Work	14	13.6	25	13.0	10	4.7	49	9.6
Doc/Info Servs	4	3.9	9	4.7	11	5.1	24	4.7
Study	1	1.0	1	0.5	12	5.6	14	2.7
Policy Making	4	3.9	5	2.6	4	1.9	13	2.5
Other Sup Servs	0	0	1	0.5	0	0	1	0.2
Other	10	9.7	15	7.8	19	8.8	44	8.6

Chi-Square(18df)=33.36; $P \leq .015$

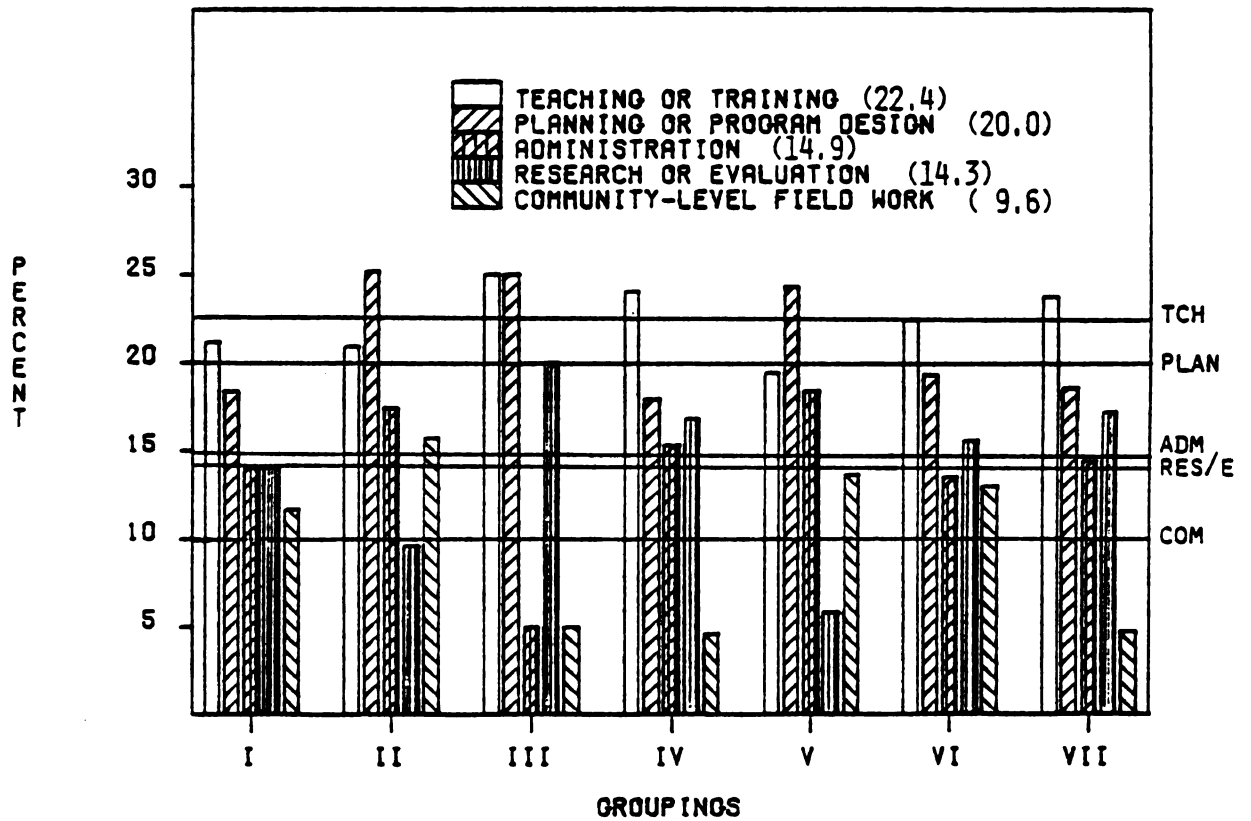
administration, and community field work, and under-represented in research or evaluation, and in policy-making. DC citizens in DC locations are particularly over-represented in teaching or training, and in research or evaluation.

When viewing Table 40 on primary development activity by location according to basic development indicators, two principal patterns emerge. First, increasing primary involvement by lower income location is associated with the activities of planning or program design, community field work, and policy-making. Second, decreasing primary involvement by lower income location is associated with the activities of teaching or training, research or evaluation, and documentation or information services.

A bar graph is provided in Figure 10 to depict relative primary involvement in selected development activities for each of the comparative groupings.

An effort was made to cluster the various development activities into three types -- administration, application, and research-evaluation -- to assess whether the groupings could be broadly distinguished by primary activity category. When the subjects are thus considered by citizenship and location of work, they are not significantly distinguished

FIGURE 10. DEVELOPMENT ACTIVITY OF PRIMARY INVOLVEMENT BY CITSHIP & LOC OF WORK & BY LOC ACCORD TO BASIC DEV INDOCTRS



(Chi-square = 5.30, $p \geq .51$).

Consideration of development activity clusters of greatest time involvement by location according to basic indicators proved a more useful distinction, however, as shown in Table 41. For the administration cluster of planning or program design/administration/policy making (with an overall participation mean of 44.7%), it is again observed that personnel in low-income countries greatly exceed this (54.5%). For the application cluster of teaching or training/community field work (with a mean involvement of 38.2%), development personnel in both low-income and middle-income countries slightly exceed this (38.6% and 41.0%, respectively). Of special note is the research-evaluation cluster (with a mean of 17.1%) for which persons in low-income countries are greatly under-represented (6.8%) and persons in industrialized countries over-represented (21.4%). This raises the question of whether research and evaluation are considered luxuries afforded primarily in wealthier countries, particularly in view of the scarcer resource base in the most impoverished countries. Or, it may be that the DC organizations furnishing financial support of development projects in LDCs are conducting their own research and evaluation related to such efforts.

TABLE 41: DEVELOPMENT ACTIVITY CLUSTER OF GREATEST TIME INVOLVEMENT BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Activity Cluster	V Low-Inc (n=88)		VI Mid-Inc (n=166)		VII Indust (n=173)		SUM V-VII (n=427)	
	n	%	n	%	n	%	n	%
Plan, prog des/ administra/ policy-making	48	54.5	68	41.0	75	43.4	191	44.7
Teach, train/ com fld work	34	38.6	68	41.0	61	35.3	163	38.2
Research, eval	6	6.8	30	18.1	37	21.4	73	17.1

Chi-square(4df)=10.62; $P \leq .03$

TABLE 42: EXTENT OF ASSOCIATION BETWEEN SOURCES OF INFORMATION ON DEVELOPMENT AND CITIZENSHIP WITH LOCATION OF WORK, AND LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Source of Dev Info	Total f	Mean %	Groups I-IV Chi-Square p		Groups V-VII Chi-Square p	
Publications	453	88.8	8.93	.03 s	5.48	.06 s
Work associates	387	75.9	20.45	.00 s	11.60	.00 s
Orgs, specialists w/ direct communi	378	74.1	1.32	.72	.93	.63
Projects with which pers familiar	361	70.8	7.84	.05 s	10.30	.01 s
People for whom projects intended	348	68.2	10.57	.01 s	3.88	.14
Orgs or persons w/ indirect communic	321	62.9	8.30	.04 s	1.79	.41
Instructors/course	142	27.8	21.50	.00 s	5.62	.06 s
Radio or other non- print media	76	14.9	21.46	.00 s	5.18	.07 s

s = significant at least at .07 level, with 3 d.f. for Groups I-IV and 2 d.f. for Groups V-VII

To complete discussion of the subjects' development role performance, an examination is made of the sources they use for information, resources and ideas to learn about development. A glance at Table 42 indicates that the specialists rely on a variety of development information sources, of both a personal and an impersonal nature. The table also reveals that the types of development information sources used by the respondents are distinguished more by citizenship crossed with location of development work, than by location according to basic development indicators.

Concerning the variety of development information sources relied upon, the majority of the individuals affirmed their use of the following six sources: publications (88.8%), work associates (75.9%), organizations and specialists with whom they have direct communication (74.1%), development projects with which they are personally familiar (70.8%), people for whom the projects are intended (68.2%), and organizations or persons with whom they have indirect communication such as via correspondence (62.9%).

To enable more detailed examination of the relative preferences for development information sources by citizenship and work location, attention is turned to Table 43. Looking first at publications (mean 88.8%), it is

TABLE 43: SOURCES OF DEVELOPMENT INFORMATION BY CITIZENSHIP AND LOCATION OF WORK

Source of Dev Info	I LDC/LDC (n=179)		II DC/LDC (n=115)		III LDC/DC (n=20)		IV DC/DC (n=196)		SUM I-IV (n=510)	
	n	%	n	%	n	%	n	%	n	%
Pubs	150	83.8	103	89.6	20	100.0	180	91.8	453	88.8
Work associates	118	65.9	89	77.4	13	65.0	167	85.2	387	75.9
Orgs, specs w/ dir cm	132	73.7	84	73.0	13	65.0	149	76.0	378	74.1
Prjs w/ wh pers fami	116	64.8	80	69.6	13	65.0	152	77.6	361	70.8
People for whom prjs intended	110	61.5	84	73.0	10	50.0	144	73.5	348	68.2
Orgs, pers indir com	100	55.9	82	71.3	11	55.0	128	65.3	321	62.9
Instrctrs & courses	69	38.5	22	19.1	9	45.0	42	21.4	142	27.8
Radio or non-print	40	22.3	4	3.5	5	25.0	27	13.8	76	14.9

TABLE 44: SOURCES OF DEVELOPMENT INFORMATION BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Source of Dev Info	V Low-Inc (n=103)		VI Mid-Inc (n=192)		VII Indust (n=215)		SUM V-VII (n=510)	
	n	%	n	%	n	%	n	%
Pubs	90	87.4	164	85.4	199	92.6	453	88.8
Work Associates	70	68.0	138	71.9	179	83.3	387	75.9
Orgs, specs w/ dir cm	79	76.7	138	71.9	161	74.9	378	74.1
Prjs w/ wh pers fami	77	74.8	120	62.5	164	76.3	361	70.8
People for whom prjs intended	74	71.8	121	63.0	153	71.2	348	68.2
Orgs, pers indir com	59	57.3	123	64.1	139	64.7	321	62.9
Instrctrs & courses	26	25.2	65	33.9	51	23.7	142	27.8
Radio or non-print	22	21.4	22	11.5	32	14.9	76	14.9

observed that 83.8 percent of the LDC citizens in LDC locations mention this source while all other groupings are above the mean. It can be speculated that this owes, in part, to the relative paucity of print materials in the LDCs compared with the DCs. (One notes, however, that DC citizens in LDC locations have a higher rate -- 89.6% -- of reliance on publications for development information.) Or, one might infer that publications are less adequate or relevant to the needs of the LDC/LDC grouping. Both LDC and DC citizens in DC locations are over-represented in their reliance on publications.

Concerning five development information sources -- work associates, projects with which personally familiar, people for whom the projects are intended, organizations with whom they have indirect communication, and radio or other non-print communication -- DC citizens whether in LDC or DC locations are more similar, as are LDC citizens whether in LDC or DC locations. DC citizens indicate higher use of the first three sources than do LDC citizens, and lesser use of the last two mentioned sources than their LDC counterparts. Interestingly, it is DC citizens in DC locations who report greatest reliance, among the groupings, on personal knowledge of projects (assumedly undertaken in LDCs). And, it is the DC citizens in LDC locations who appear most reliant on organizations with whom they have indirect

communication.

Next, Table 44 enables detailed examination of the relative preferences for development information sources by location according to basic development indicators. Of note is the greater tendency for work associates to be identified as a development information source as location income level increases. This may relate to a relative job isolation of development personnel in lower income countries from others with similar roles. Also of interest is the finding that personnel in middle-income countries are much below the mean in their mention of projects as a source of development information, and are above the mean in their mention of instructors and courses. A possible explanation for this may lie in the fact that this grouping has mean and median ages several years younger than either the low-income or the industrialized country groupings. This, coupled with the presence in the grouping of many DC citizens, could mean that the subjects have less field experience in development and more in the formal and fairly recent study of development.

- When asked what two sources of development information they rely on the most, 419 of the selected respondents named the following sources in order of greatest frequency: publications (42.5%), organizations or specialists in

development with whom direct, face-to-face communication (37.2%), people for whom the development projects are intended (34.6%), work associates (27.2%), development projects with which personally familiar (23.2%), organizations or persons with whom there is indirect communication (14.3%), instructors and courses (7.4%), radio or non-print materials (0.7%).

Table 45 provides detail on the relative preference for the development information sources by citizenship and location of work. Little variation among the groupings is found concerning publications, organizations with whom direct communication exists, and organizations with whom there is indirect communication. Regarding people for whom the projects are intended, DC citizens in LDCs show considerably more reliance on this information source than do their LDC counterparts (41.7% and 31.8%, respectively). It might be questioned whether LDC persons are more apt than DC persons to already know the thinking of intended project beneficiaries, or to believe that they do. Again, as seen in the previous tabulations of development information sources used, DC citizens in DC locations account for the greatest reliance on work associates as an information source, and persons in DC locations cite greater reliance on development projects with which personally familiar. In this instance, however, instructors and courses receive

TABLE 45: TWO DEVELOPMENT INFORMATION SOURCES MOST RELIED UPON, BY CITIZENSHIP AND LOCATION OF WORK

Source of Dev Info	I LDC/LDC (n=154X2)		II DC/LDC (n=96X2)		III LDC/DC (n=11X2)		IV DC/DC (n=158X2)		SUM I-IV (n=419X2)	
	n	%	n	%	n	%	n	%	n	%
Pubs	65	42.2	40	41.7	6	54.5	67	42.4	178	42.5
Orgs, specs w/ dir cm	58	37.7	35	36.5	3	27.3	60	38.0	156	37.2
People for whom prjs intended	49	31.8	40	41.7	6	54.5	50	31.6	145	34.6
Work associates	37	24.0	26	27.1	1	9.1	50	31.6	114	27.2
Prjs w/ wh pers fami	30	19.5	22	22.9	3	27.3	42	26.6	97	23.2
Orgs, pers indir com	23	14.9	13	13.5	0	0	24	15.2	60	14.3
Instrctrs & courses	16	10.4	5	5.2	1	9.1	9	5.7	31	7.4
Radio or non-print	2	1.6	0	0	0	0	1	0.7	3	0.3

TABLE 46: TWO DEVELOPMENT INFORMATION SOURCES MOST RELIED UPON, BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Source of Dev Info	V Low-Inc (n=85X2)		VI Mid-Inc (n=166X2)		VII Indust (n=168X2)		SUM V-VII (n=419x2)	
	n	%	n	%	n	%	n	%
Pubs	37	43.5	68	41.0	73	43.5	178	42.5
Orgs, specs w/ dir cm	28	32.9	65	39.2	63	37.5	156	37.2
People for whom prjs intended	35	41.2	54	32.5	56	33.3	145	34.6
Work associates	17	20.0	47	28.3	50	29.8	114	27.2
Prjs w/ wh pers fami	18	21.2	34	20.5	45	26.8	97	23.2
Orgs, pers indir com	13	15.3	23	13.9	24	14.3	60	14.3
Instrctrs & courses	5	5.9	16	9.6	10	6.0	31	7.4
Radio or non-print	0	0	2	1.4	1	0.6	0	0.3

greater mention by LDC rather than DC citizens as one of the two sources most relied upon. Since only 31 mention the source at all, instructors and courses appear not of primary importance in enabling the selected specialists to learn their development roles.

Table 46 gives detail on the relative preference for the development sources by location according to basic development indicators. Little variation among the groupings is found for publications, organizations with whom direct communication, and organizations with whom indirect communication. Regarding people for whom the projects are intended, the greatest reliance on this information source exists in the low-income countries, perhaps because other forms of data may be lacking. (It is recalled that DC rather than LDC citizens account for greater reliance on this source.) Regarding work associates as a development information source, the pattern again holds that greater reliance is associated with work in a higher income location. Again, considering development projects with which personally familiar, it is persons in industrialized countries who account for greater than mean reliance on this source.

An effort was made to cluster preferred development information sources into two types -- personal and

impersonal -- to assess whether the groupings could be broadly distinguished by quality of source. The information sources defined as "personal" include work associates, instructors and courses, people for whom the projects are intended, development projects with which personally familiar, and development organizations or specialists with whom there is direct face-to-face communication. Those defined as "impersonal" include publications, development organizations or specialists with whom indirect communication exists, and radio or non-print materials. Very little variation is found among the groupings, either by citizenship and location of work, or by location according to basic development indicators: LDC citizens in LDC locations are slightly less inclined to rely on "personal" information sources (61.7% versus a mean of 64.8%) as are personnel in low-income countries (60.6%).

Having completed discussion of the subjects' development roles, consideration is next given to their roles in non-formal education.

Non-Formal Education Role Performance

The subjects' roles in non-formal education are analyzed in terms of the extent to which their work or study involves non-formal education, the non-formal education

fields in which they work, the single field in which they spend the most time, the non-formal education activities in which they are engaged, the single activity in which they spend the most time, their sources for getting information resources and ideas to learn about non-formal education, the two sources they rely on the most, the extent to which they have participated in education or training programs in non-formal education, the extent to which they use non-formal education in their development roles, and their perceived obstacles in carrying out development programs involving non-formal education.

The vast majority (90.9%) of the selected development intermediaries indicate that their work or study involves non-formal education. As revealed in Tables 47 and 48, the percentage is even higher for both LDC citizens and DC citizens in LDC locations (93.2% and 95.4%, respectively), and for persons in low-income and middle-income countries (95.0% and 93.5%, respectively).

To enable consideration of the fields of non-formal education in which the development specialists are engaged, Table 49 provides data on the frequency of mention of each field and on the extent of association between work in a field and the various personnel groupings. Slightly over half (54.3%) of the selected respondents indicate work with

TABLE 47: INVOLVEMENT IN NON-FORMAL EDUCATION BY CITIZENSHIP AND LOCATION OF WORK

Involve- ment NFE	I LDC/LDC (n=176)	II DC/LDC (n=109)	III LDC/DC (n=19)	IV DC/DC (n=189)	SUM I-IV (n=493)
	n %	n %	n %	n %	n %
Yes	164 93.2	104 95.4	14 73.7	166 87.8	448 90.9
No	12 6.8	5 4.6	5 26.3	23 12.2	45 9.1

Chi-square(3df)=12.72; $P \leq .005$

TABLE 48: INVOLVEMENT IN NON-FORMAL EDUCATION BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Involvement NFE	V Low-Inc (n=101)	VI Mid-Inc (n=185)	VII Indust (n=207)	SUM V-VII (n=493)
	n %	n %	n %	n %
Yes	96 95.0	173 93.5	179 86.5	448 90.9
No	5 5.0	12 6.5	28 13.5	45 9.1

Chi-square(2df)=8.51; $P \leq .014$

TABLE 49: EXTENT OF ASSOCIATION BETWEEN WORK IN NFE FIELDS AND CITIZENSHIP WITH LOCATION OF WORK, AND LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

NFE Field	Total f	Mean %	Groups I-IV		Groups V-VII	
			Chi-Square	p	Chi-Square	p
Basic Needs Educ.	277	54.3	12.96	.00 s	13.71	.00 s
Voc Skills Train.	231	45.4	21.54	.00 s	20.52	.00 s
Prof. Skill Upgrd	218	42.7	4.84	.18	.92	.63
Enrichment Educ.	160	31.4	13.85	.00 s	4.32	.12

s = significant at least at .05 level, with 3 d.f. for Groups I-IV and 2 d.f. for Groups V-VII

TABLE 50: FIELDS OF NFE WORK BY CITIZENSHIP AND LOCATION OF WORK

NFE Field	I LDC/LDC (n=179)		II DC/LDC (n=115)		III LDC/DC (n=20)		IV DC/DC (n=196)		SUM I-IV (n=510)	
	n	%	n	%	n	%	n	%	n	%
Basic Needs Education	110	61.5	69	60.0	11	55.0	87	44.4	277	54.3
Voc. Skills Training	105	58.7	49	43.0	6	30.0	71	36.2	231	45.4
Prof. Skill Upgrading	85	47.5	45	39.1	5	25.0	83	42.3	218	42.7
Enrichment Education	72	40.2	23	20.0	5	25.0	60	30.6	160	31.4

TABLE 51: FIELDS OF NFE WORK BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

NFE Field	V Low-Inc (n=103)		VI Mid-Inc (n=192)		VII Indust (n=215)		SUM V-VII (n=510)	
	n	%	n	%	n	%	n	%
Basic Needs Educations	67	65.0	113	58.9	97	45.1	277	54.3
Voc. Skills Training	64	62.7	90	46.9	77	35.8	231	45.4
Prof. Skill Upgrading	48	46.6	82	42.7	88	40.9	218	42.7
Enrichment Education	41	39.8	55	28.6	64	29.8	160	31.4

basic needs non-formal education, followed by concern with vocational skills training (45.4%), professional skills upgrading (42.7%), and enrichment education (31.4%). Involvement in professional upgrading is not significantly differentiated among the groupings, nor is enrichment education when compared by work location according to basic development indicators.

In Table 50 data are presented to show relative involvement in fields of non-formal education by citizenship and location of work. Regarding basic needs education, only DC citizens in DC locations fall below the mean. On the other hand, only LDC citizens in LDC locations are above the means for the fields of vocational training, professional upgrading, and enrichment education.

When examining Table 51 for fields of non-formal education by location according to basic development indicators, it is further observed that for basic needs education, vocational training, and professional skill upgrading, there is a clear pattern of increasing involvement with decreasing income location. It might be speculated, therefore, that non-formal education, especially that oriented to basic needs and to vocational training, is seen as particularly suited to requirements of low-income countries.

Considering the field of non-formal education in which the development specialists spend the most time, basic needs education claims the primary involvement of at least 35.6% of 331 persons responding. (Fourteen respondents indicated more than one field and their multiple selections are not tabulated.) The field of professional skill upgrading represents the primary involvement of the next greatest number (19.9%), followed closely by vocational skill training (18.7%), and last by enrichment education (5.7%).

Table 52 provides data on the three fields receiving greatest mention by citizenship and location of work, while Table 53 does this for location according to basic development indicators. Table 52 reveals that while LDC citizens in LDC locations account for greater than mean involvement in basic needs education (39.9% versus 35.6%, respectively), DC citizens in LDC locations are noteworthy for their over-representation in the primary field of vocational training (26.9% versus 18.7%, respectively). Table 53 depicts two patterns: one associating primary involvement in vocational training with work in a lower income location, and the other associating primary work in professional skill upgrading with higher income location.

TABLE 52: NON-FORMAL EDUCATION FIELD OF GREATEST TIME INVOLVEMENT BY CITIZENSHIP AND LOCATION OF WORK

NFE Field	I LDC/LDC (n=138)		II DC/LDC (n=78)		III LDC/DC (n=10)		IV DC/DC (n=105)		SUM I-IV (n=331)	
	n	%	n	%	n	%	n	%	n	%
Bas. Needs										
Education	55	39.9	24	30.8	3	30.0	36	34.3	118	35.6
Prof Skill										
Upgrading	25	18.1	16	20.5	1	10.0	24	22.9	66	19.9
Voc Skills										
Training	26	18.8	21	26.9	2	20.0	13	12.4	62	18.7

TABLE 53: NON-FORMAL EDUCATION FIELD OF GREATEST TIME INVOLVEMENT BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

NFE Field	V Low-Inc (n=73)		VI Mid-Inc (n=143)		VII Indust (n=115)		SUM V-VII (n=331)	
	n	%	n	%	n	%	n	%
Basic Needs								
Education	24	32.9	55	38.5	39	33.9	118	35.6
Prof Skill								
Upgrading	12	16.4	29	20.3	25	21.7	66	19.9
Voc Skills								
Training	19	26.0	28	19.6	15	13.0	62	18.7

Following the review of the fields of non-formal education in which the selected development specialists are engaged, consideration is given to the particular kinds of activities in which they participate while pursuing work in these fields. Two observations are warranted on this subject. First, a wide array of activities are undertaken by the development intermediaries as part of their roles in non-formal education. Second, they tend not to be greatly distinguished when compared by citizenship and work location, and by location according to basic development indicators.

Further to the first observation, attention is called to Table 54 which demonstrates that over two-fifths of the development specialists are engaged in program design (65.3%), research and evaluation (55.7%), instruction (50.8%), curriculum development (47.1%), and administration (45.5%), as part of their roles in non-formal education.

The table also shows the chi-squares and significance levels for the participation of Groupings I - IV and Groupings V - VII in each activity. When considering the subjects by citizenship and location of work, it is apparent that only the activities of program design, and research and evaluation, are significantly differentiated, at a .07

TABLE 54: EXTENT OF ASSOCIATION BETWEEN INVOLVEMENT IN NFE ACTIVITIES AND CITIZENSHIP WITH LOCATION OF WORK, AND LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

NFE Activities	Total f	Mean %	Groups I-IV		Groups V-VII	
			Chi-Square	p	Chi-Square	p
Program Design	333	65.3	6.93	.07 s	6.29	.04 s
Research & Eval	284	55.7	6.95	.07 s	4.24	.12
Instruction	259	50.8	.54	.91	.22	.89
Curriculum Devmt	240	47.1	1.85	.60	6.30	.04 s
Administration	232	45.5	1.21	.75	2.50	.29
Support Services	105	20.6	5.45	.14	.25	.88

s = significant at least at .07 level, with 3 d.f. for Groups I-IV and 2 d.f. for Groups V-VII

TABLE 55: INVOLVEMENT IN SELECTED NFE ACTIVITIES BY CITIZENSHIP AND LOCATION OF WORK

NFE Activity	I LDC/LDC (n=179)		II DC/LDC (n=115)		III LDC/DC (n=20)		IV DC/DC (n=196)		SUM I-IV (n=510)	
	n	%	n	%	n	%	n	%	n	%
Prog Design	117	65.4	85	73.9	10	50.0	121	61.7	333	65.3
Resrch & Ev	101	56.4	54	47.0	9	45.0	120	61.2	284	55.7

TABLE 56: INVOLVEMENT IN SELECTED NFE ACTIVITIES BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

NFE Activity	V Low-Inc (n=103)		VI Mid-Inc (n=192)		VII Indust (n=215)		SUM V-VII (n=510)	
	n	%	n	%	n	%	n	%
Program Design	77	74.8	126	65.6	130	60.5	333	65.3
Curric. Devmt	57	55.3	78	40.6	105	48.8	240	47.1

level. Table 55 provides comparative data on these two fields, revealing higher than mean involvement in program design on the part of DC citizens in LDC locations, and higher than mean participation in research and evaluation on the part of DC citizens in DC locations.

When considering the subjects by location according to basic development indicators, only the activities of program design and curriculum development are significantly differentiated, at a .04 level. Table 56 presents the comparative data for these fields. In the case of program design, increasing involvement in this activity is associated with work in lower-income locations. In the low-income countries nearly three-fourths of the development specialists are engaged in this activity. In the case of curriculum development, this activity appears more predominant in the low-income countries (55.3%) while less evident in middle-income countries (40.6%).

Regarding the non-formal education activity in which the selected respondents spend the most time, two activities receive the most mention: program design (23.7%) and administration (20.7%). The remaining activities are distributed as follows: research and evaluation (17.2%), instruction (16.9%), curriculum development (6.1%), and support services (4.3%).

Table 57 provides data on non-formal education activity of greatest time involvement, by citizenship and location of work, for the four activities named most frequently. LDC citizens in LDC locations are distinguished by their under-representation in program design (17.0%) and their over-representation in administration (25.9%). On the other hand, DC citizens in LDC locations are found to be over-represented in program design (33.3%) and in instruction (21.5%), and under-represented in administration (15.1%) and in research and evaluation (9.7%). This suggests that DC development specialists working in LDCs are making particular contributions in the shaping of nascent non-formal education programs and in their implementation rather than in their management or assessment. The latter activities, it appears, tend to be assumed within LDCs by citizens indigenous to those countries, perhaps because those activities are often associated with high professional statuses.

Table 58 contains data on primary non-formal education activity by location according to basic development indicators. While there is relatively little differentiation of activities for each grouping, involvement in administration is above the mean in low-income countries, and greater involvement in research and evaluation is

TABLE 57: NON-FORMAL EDUCATION ACTIVITY OF GREATEST TIME INVOLVEMENT BY CITIZENSHIP LOCATION OF WORK

NFE Activity	I LDC/LDC (n=147)		II DC/LDC (n=93)		III LDC/DC (n=12)		IV DC/DC (n=144)		SUM I-IV (n=396)	
	n	%	n	%	n	%	n	%	n	%
Prog Design	25	17.0	31	33.3	4	33.3	34	23.6	94	23.7
Adminstrtn	38	25.9	14	15.1	0	0	30	20.8	82	20.7
Resrch & Ev	27	18.4	9	9.7	4	33.3	28	19.4	68	17.2
Instruction	21	14.3	20	21.5	3	25.0	23	16.0	67	16.9

TABLE 58: NON-FORMAL EDUCATION ACTIVITY OF GREATEST TIME INVOLVEMENT BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

NFE Activity	V Low-Inc (n=82)		VI Mid-Inc (n=159)		VII Indust (n=155)		SUM V-VII (n=396)	
	n	%	n	%	n	%	n	%
Program Design	19	23.2	38	23.9	37	23.9	94	23.7
Administration	21	25.6	31	19.5	30	19.4	82	20.7
Research & Eval	12	14.6	24	15.1	32	20.6	68	17.2
Instruction	10	12.2	31	19.5	26	16.8	67	16.9

associated with higher income locations.

A bar graph is provided in Figure 11 to illustrate relative primary involvement in selected non-formal education activities for each of the comparative groupings.

The subjects' activities of greatest time involvement are next examined in three activity clusters: an administrative cluster consisting of program design and administration (drawing 52.5% of the respondents), a practitioner cluster consisting of curriculum development and instruction (27.2%), and a research-evaluation cluster (20.3%). When considered for the specialists by citizenship and location of work, the chi-square is 4.59, significant only at the .33 level. When considered by location according to basic development indicators, the chi-square is 6.90, also significant only at the .33 level.

Examination is next made of the sources that the specialists use for information, resources and ideas to learn about non-formal education. A review of Table 59 reveals that the development intermediaries rely on a variety of information sources on non-formal education, both of a personal and an impersonal nature. The table also demonstrates that the information sources used by the specialists are not greatly distinguished by citizenship and

FIGURE 11. NFE ACTIVITY OF PRIMARY INVOLVEMENT BY CITSHIP & LOC OF WORK & BY LOC ACCORDING TO BASIC DEVELOPMENT INOCTRS

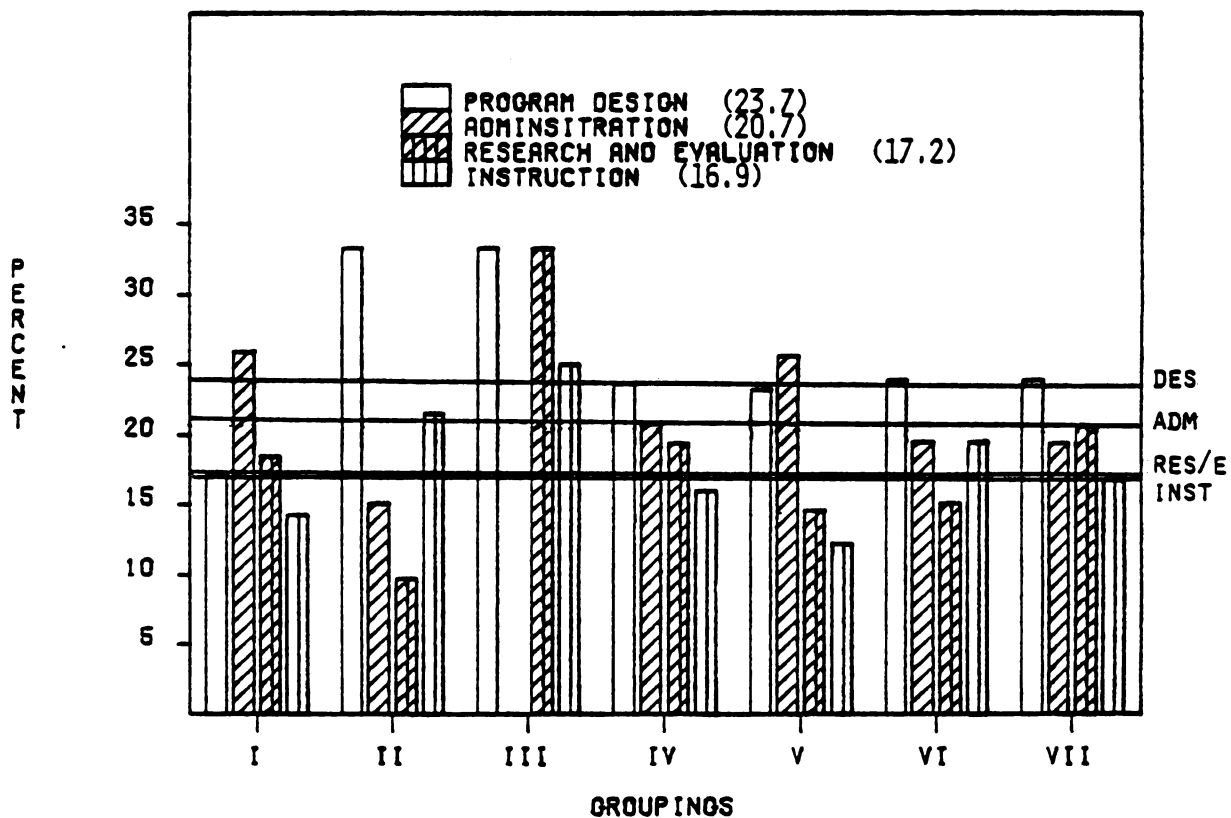


TABLE 59: EXTENT OF ASSOCIATION BETWEEN SOURCES OF INFORMATION ON NON-FORMAL EDUCATION AND CITIZENSHIP WITH LOCATION OF WORK, AND LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Source of NFE Info	Total f	Mean %	Groups I-IV		Groups V-VII	
			Chi-Square	p	Chi-Square	p
Publications	405	79.6	2.82	.42	.82	.66
Work associates	320	62.7	20.39	.00 s	5.68	.06 s
Orgs and specialists w/ direct commun.	285	55.9	1.74	.63	.60	.74
Orgs or persons w/ indir commun.	270	53.0	1.29	.73	.03	.99
People for whom NFE prog intended	264	51.8	1.08	.78	2.88	.24
NFE progs w/ which personally familr	258	50.6	5.08	.17	5.97	.05 s
Instructors and courses	148	29.0	16.77	.00 s	.27	.88
Radio & non-print	73	14.3	23.04	.00 s	3.47	.18

s = significant at least at .06 level, with 3 d.f. for Groups I-IV and 2 d.f. for Groups V-VII

location of work, nor by location according to basic development indicators.

Concerning the variety of information sources used to learn about non-formal education, the majority of the individuals affirm their use of the following six sources: publications (79.6%), work associates (62.7%), NFE organizations and specialists with whom they have direct communication (55.9%), organizations or persons with whom they have indirect communication (53.0%), people for whom the NFE programs are intended (51.8%), and NFE programs with which personally familiar (50.6%). It is interesting to note, however, that these percents are 10 to 20 integers lower than those given when the respondents identify information sources used to learn about development. It seems reasonable to suppose that this disparity may relate to the relative youth of non-formal education as an identifiable field of study and practice.

Table 60 enables closer inspection of the preferences for selected non-formal education information sources by citizenship and location of work. Work associates as an information source receives higher than mean mention for DC citizens in both DCs and LDCs. On the other hand, instructors and courses, and radio and non-print materials receive higher than mean mention for LDC citizens in both

TABLE 60: SOURCES OF INFORMATION ON NON-FORMAL EDUCATION
BY CITIZENSHIP AND LOCATION OF WORK

Source of NFE Info	I LDC/LDC (n=179)	II DC/LDC (n=115)	III LDC/DC (n=20)	IV DC/DC (n=196)	SUM I-IV (n=510)
	n %	n %	n %	n %	n %
Work					
associates	92 51.4	81 70.4	9 45.0	138 70.4	320 62.7
Instructors/ courses	67 37.4	20 17.4	9 45.0	52 26.5	148 29.0
Radio and non-print	39 21.8	3 2.6	5 25.0	26 13.3	73 14.3

TABLE 61: SOURCES OF INFORMATION ON NON-FORMAL EDUCATION
BY LOCATION ACCORDING TO BASIC DEVELOPMENT
INDICATORS

Source of NFE Info	V Low-Inc (n=103)	VI Mid-Inc (n=192)	VII Indust (n=215)	SUM V-VII (n=510)
	n %	n %	n %	n %
Work				
associates	56 54.4	118 61.5	146 67.9	320 62.7
NFE progs w/ wh pers familr	62 60.2	98 51.0	98 45.6	258 50.6

LDCs and DCs. A similar pattern holds, in the case of work associates and radio, for sources of development information.

In Table 61 data are presented on selected NFE information sources by location according to basic development indicators. As with sources of development information, association is found between greater reliance on work associates and higher income location. Concerning reliance on NFE programs with which personally familiar, greater dependence on this source is associated with lower income location. This may owe, in part, to the greater prevalence of identified non-formal education projects in LDCs, and to the relative newness of such projects as planned interventions for social change.

When asked what two sources of information on non-formal education they rely on the most, 378 of the selected respondents identify the following sources in order of greatest frequency: publications (46.3%), work associates (29.9%), NFE organizations or specialists with whom they have direct, face-to-face communication (29.4%), people for whom the NFE programs are intended (28.0%), NFE programs with which they are personally familiar (18.8%), organizations or persons with whom they have indirect communication (18.5%), instructors and courses (10.6%),

radio and non-print materials (1.1%).

Table 62 details relative preference for two information sources on non-formal education, by citizenship and location of work. Little variation exists among the groupings for publications, organizations with whom direct communication, people for whom the NFE programs are intended, and radio and non-print materials. Work associates figure as a more important information source for DC citizens than for LDC citizens, regardless of location, as do organizations with whom indirect communication. The opposite holds in the case of instructors and courses, relied upon more by LDC citizens regardless of location. NFE programs with which they are personally familiar constitutes a more important information source for persons in LDCs, of LDC or DC citizenship. The findings regarding work associates parallel those reported on development information sources. However, those regarding projects with which they are personally familiar are opposite to those reported for development information sources. As earlier conjectured, the greater reliance on non-formal projects as an information source by persons in LDC rather than DC countries, may relate to the relatively recent attention (i.e., since the early 1970s) given such projects in development schemes.

**TABLE 62: TWO NON-FORMAL EDUCATION INFORMATION SOURCES
MOST RELIED UPON, BY CITIZENSHIP AND LOCATION
OF WORK**

Sources of NFE Info	I LDC/LDC (n=144x2)		II DC/LDC (n=90x2)		III LDC/DC (n=10x2)		IV DC/DC (n=134x2)		SUM I-IV (n=378x2)	
	n	%	n	%	n	%	n	%	n	%
Publications	71	49.3	41	45.6	5	50.0	58	43.3	175	46.3
Work										
associates	32	22.2	32	35.6	1	10.0	48	35.8	113	29.9
Orgs & specs										
w/ dir comm	46	31.9	23	25.6	4	40.0	38	28.4	111	29.4
People for wh										
projs inten	38	26.4	25	27.8	3	30.0	40	29.9	106	28.0
NFE progs w/										
wh pers fam	29	20.1	21	23.3	1	10.0	20	14.9	71	18.8
Orgs w/ indir										
communic.	21	14.6	19	21.1	1	10.0	29	21.6	70	18.5
Instructors										
& courses	19	13.2	6	6.7	3	30.0	12	9.0	40	10.6
Radio & non-										
print	3	2.1	0	0	0	0	1	.7	4	1.1

**TABLE 63: TWO NON-FORMAL EDUCATION INFORMATION SOURCES
MOST RELIED UPON, BY LOCATION ACCORDING TO
BASIC DEVELOPMENT INDICATORS**

Sources of NFE Info	V Low-Inc (n=79x2)		VI Mid-Inc (n=156x2)		VII Indust (n=143x2)		SUM V-VII (n=378x2)	
	n	%	n	%	n	%	n	%
Publications	37	46.8	76	48.7	62	43.4	175	46.3
Work								
associates	19	24.1	45	28.8	49	34.3	113	29.9
Orgs & specs								
w/ dir commun	24	30.4	45	28.8	42	29.4	111	29.4
People for wh								
projs intended	25	31.6	38	24.4	43	30.1	106	28.0
NFE progs w/								
wh pers fam	15	19.0	35	22.4	21	14.7	71	18.8
Orgs w/ indir								
communication	17	21.5	23	14.7	30	21.0	70	18.5
Instructors								
& courses	7	8.9	18	11.5	15	10.5	40	10.6
Radio & non-								
print	1	1.3	2	1.3	1	.7	4	1.1

Table 63 provides data on the relative preference for NFE information sources by location according to basic development indicators. Slight variation is found among the groupings for publications, organizations with whom they have direct communication, instructors and courses, and radio and non-print materials. Regarding work associates, the pattern earlier mentioned holds; namely, greater reliance on this information source is associated with work in a higher income location. Concerning organizations with whom there is indirect communication, and people for whom the projects are intended, persons in low-income countries are slightly above the mean and those in middle-income countries somewhat below the mean. In the case of NFE programs with which personally familiar, a pattern earlier noted prevails in which greater reliance on this information source is associated with lower income location.

Non-formal education information sources were clustered into two types -- personal and impersonal -- to assess whether the groupings could be broadly distinguished by nature of information source reliance. "Personal" information sources are defined as work associates, instructors and courses, people for whom the projects are intended, NFE programs with which personally familiar, and NFE organizations and specialists with whom direct

face-to-face communication. "Impersonal" sources include publications, NFE organizations with whom indirect communication, and radio or non-print materials. As with development information sources, virtually no variation is found among the groupings, either by citizenship and location of work, or by location according to basic development indicators.

Concerning the extent to which the 510 selected respondents have participated in education or training programs on non-formal education, 178 (34.9%) indicate that they have not participated in such programs. Non-participation is significantly differentiated ($p=.00$) when considering the respondents by citizenship and location of work but not significantly differentiated ($p=.41$) when considering them by location according to basic development indicators.

Table 64 shows the extent of non-participation by citizenship and work location. DC citizens, generally, report a higher rate of non-participation in training programs on non-formal education than do LDC citizens. DC citizens in LDC locations have the greatest extent of non-participation (49.6%) while LDC citizens in LDC locations have the least (27.9%).

TABLE 64: NON-PARTICIPATION IN NFE TRAINING BY
CITIZENSHIP AND LOCATION OF WORK

Partic. in I LDC/LDC II DC/LDC III LDC/DC IV DC/DC SUM I-IV NFE Train. (n=179) (n=115) (n=20) (n=196) (n=510)										
	n	%	n	%	n	%	n	%	n	%
No NR (infer	50	27.9	57	49.6	6	30.0	65	33.2	178	34.9
yes)	129	72.1	58	50.4	14	70.0	131	66.8	332	65.1

Chi-square(3df)=15.18; $P \leq .002$

TABLE 65: EXTENT OF ASSOCIATION BETWEEN PARTICIPATION IN
TYPES OF NFE TRAINING AND CITIZENSHIP WITH
LOCATION OF WORK, AND LOCATION ACCORDING TO
BASIC DEVELOPMENT INDICATORS

Type of Partic. in NFE Training	Total f	Mean %	Groups I-IV Chi- Square	p	Groups V-VII Chi- Square	p
Internat'l Work- shop or Conf.	195	38.2	21.42	.00 s	4.12	.13 s
Local-Lev Work- shop or Conf.	190	37.3	11.90	.01 s	1.02	.60
Nat'l-Lev Work- shop or Conf.	184	36.1	14.09	.00 s	5.12	.08 s
Formal Degree Program	87	17.1	2.99	.39	1.81	.40
Academic Courses	78	15.3	7.50	.06 s	.88	.64

s = significant at least at .13 level, with 3 d.f. for
Groups I-IV and 2 d.f. for Groups V-VII

To consider the type of participation in education or training programs on NFE, Table 65 provides data on the frequency of mention of each type of training and on the extent of association between participation in a particular type and the various personnel groupings. Of note is the fact that 195 (38.2%) of the development specialists report participation in an international workshop, training session or conference, while 190 (44.7%) indicate participation at a local level, and 184 (36.1%) at a national level. Fewer specify participation in a formal degree program on non-formal education (87, 17.1%), or the taking of one or more academic courses on NFE (78, 15.3%).

Table 66 gives further detail on the four types of NFE training differentiated by citizenship and location of work, at least at a .06 level. With reference to international, national, and local workshops and conferences on NFE, and to academic courses on NFE, LDC citizens in developing country locations are found to have participated to a greater extent than any other grouping. DC citizens in developing countries, on the other hand, report the lowest participation of any grouping.

Table 67 details the two types of NFE training having the greatest differentiation by location according to basic

**TABLE 66: PARTICIPATION IN SELECTED TYPES OF NFE TRAINING
BY CITIZENSHIP AND LOCATION OF WORK**

Type of NFE Train.	I LDC/LDC (n=179)		II DC/LDC (n=115)		III LDC/DC (n=20)		IV DC/DC (n=196)		SUM I-IV (n=510)	
	n	%	n	%	n	%	n	%	n	%
Intnt'l wk- shop/conf	91	50.8	29	25.2	7	35.0	68	34.7	195	38.2
Local work shop/conf	80	44.7	29	25.2	6	30.0	75	38.3	190	37.3
Nat'l work- shop/conf	82	45.8	29	25.2	8	40.0	65	33.2	184	36.1
Academic courses	35	19.6	9	7.8	3	15.0	31	15.8	78	15.3

**TABLE 67: PARTICIPATION IN SELECTED TYPES OF NFE TRAINING
BY LOCATION ACCORDING TO BASIC DEVELOPMENT
INDICATORS**

Type of NFE Train.	V Low-Inc (n=103)		VI Mid-Inc (n=192)		VII Indust (n=215)		SUM V-VII (n=510)	
	n	%	n	%	n	%	n	%
Intnt'l work- shop/conf	48	46.6	72	37.5	75	34.9	195	38.2
Nat'l work- shop/conf	47	45.6	64	33.3	73	34.0	184	36.1

development indicators: national and international workshops and conferences. With regard to international training sessions, a pattern of association is found between greater tendency to participate and lower income location. With regard to national training sessions, location in a low-income country is associated with much greater than mean participation.

In sum, concerning training in non-formal education, respondents who are LDC citizens are found to have participated more extensively than DC citizens in a range of training types. Furthermore, location in a low-income country is associated with much higher than mean participation in international and national workshops and conferences on NFE, while location in a middle-income or an industrialized country is associated with less than mean participation. These findings suggest that LDC citizens involved in development work in lower income locations either are afforded greater opportunities to participate in NFE training, possibly as a perquisite of their position, or deem their participation in those training opportunities that are available as more important to their development work in non-formal education.

Among the 510 selected respondents, 389 (76.3%) report that they use non-formal education as a method to carry out

development programs or goals. Table 68, which provides comparative data on this item by citizenship and location of work, reveals that both LDC and DC citizens working in LDC locations have much higher than mean use of NFE in their development activities. DC and LDC citizens in DC locations, on the other hand, indicate much lower than mean use of NFE in their development roles.

Table 69 gives corresponding data by location according to basic development indicators. A clear pattern emerges from this table showing greater use of NFE in development programs by lower income location. Development specialists in both low-income and middle-income countries report greater than mean use of NFE, while those in industrialized countries report much less than mean use.

These tables demonstrate that the roles actually being assumed in non-formal education for development tend to be evidenced among the respondents to a greater extent in LDC rather than in DC locations, and carried out there by both LDC and DC citizens. They further suggest that the utility of non-formal education for development is, perhaps, more appreciated and better realized by those whose work is closer to the persons for whom the development programs are intended.

TABLE 68: USE OF NFE IN DEVELOPMENT PROGRAMS BY CITIZENSHIP AND LOCATION OF WORK

Use NFE in Develpmnt	I LDC/LDC (n=179)	II DC/LDC (n=115)	III LDC/DC (n=20)	IV DC/DC (n=196)	SUM I-IV (n=510)
	n %	n %	n %	n %	n %
Yes	152 84.9	95 82.6	13 65.0	129 65.8	389 76.3
No	27 15.1	20 17.4	7 35.0	67 34.2	121 23.7

Chi-square(3df)=23.19; $P \leq .00$

TABLE 69: USE OF NFE IN DEVELOPMENT PROGRAMS BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Use NFE in Development	V Low-Inc (n=103)	VI Mid-Inc (n=192)	VII Indust (n=215)	SUM V-VII (n=510)
	n %	n %	n %	n %
Yes	89 86.4	159 82.8	141 65.6	389 76.3
No	14 13.6	33 17.2	74 34.4	121 23.7

Chi-square(2df)=23.96; $P \leq .00$

Figure 12 provides a graphic illustration of the relative use of non-formal education in development programs for each of the seven comparative groupings.

To conclude examination of the subjects' roles in non-formal education, consideration is given to their perceived greatest obstacles in carrying out development programs involving NFE. As Table 70 documents, three obstacles are indicated by approximately half of the selected respondents: lack of integration and coordination among ministries or local service agencies (262, 51.4%); development workers or specialists not adequately trained for the task (248, 48.6%); and, local resources (people and organizations) not sufficiently involved in the program (240, 47.1%). Three additional obstacles receive mention by at least a third of the subjects: insufficient numbers of trained local people to provide needed services (216, 42.4%); lack of adequate financial resources (214, 42.0%); and, participants not sufficiently involved in the design and management of the NFE program (186, 36.5%). The remaining obstacles, in frequency of selection, are: lack of supplies or other resources when needed (168, 32.9%); program conflicts with certain cultural values and norms (158, 31.0%); and, lack of interest or support among the local people (111, 21.8%).

FIGURE 12. USE OF NFE IN DEVNMT PROGRAMS BY CITSHIP & LOC OF WORK & BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

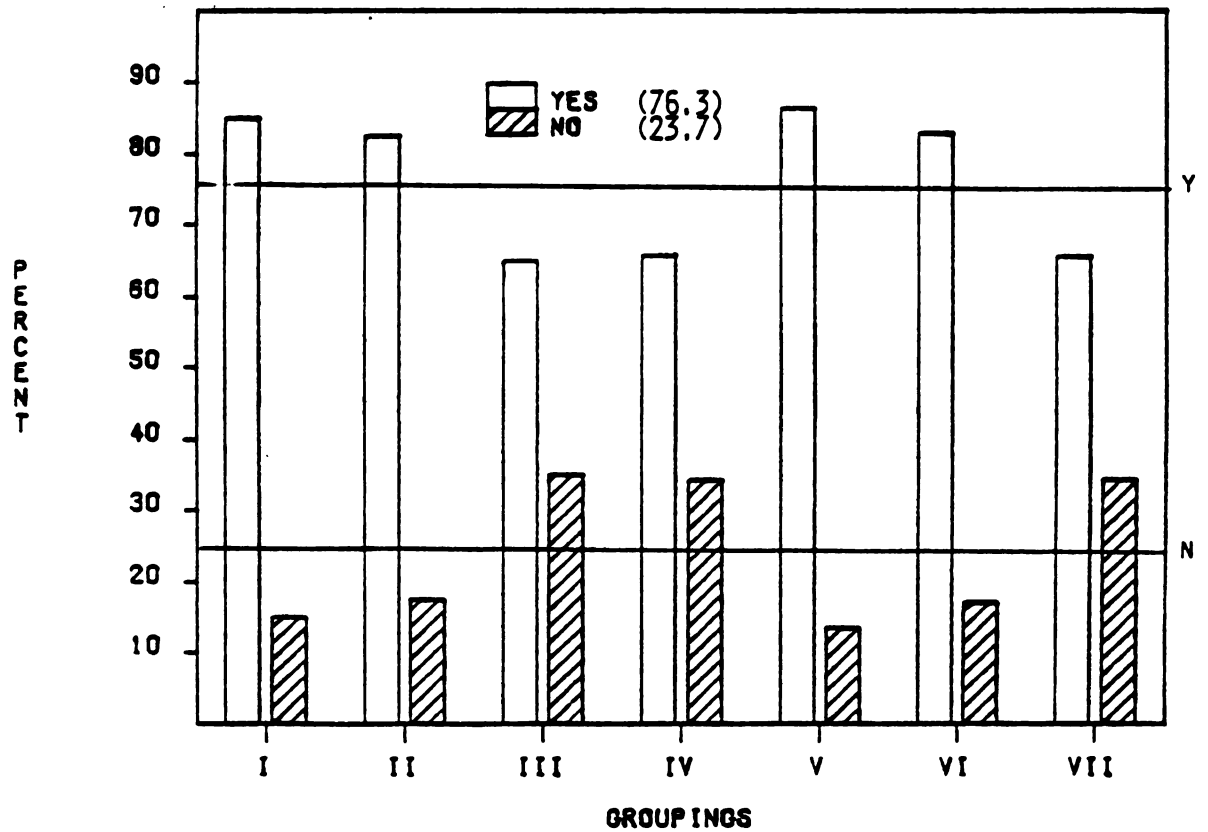


TABLE 70: EXTENT OF ASSOCIATION BETWEEN PERCEIVED OBSTACLES IN CARRYING OUT DEVELOPMENT PROGRAMS WITH NFE, AND CITIZENSHIP WITH LOCATION OF WORK, AND LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Obstacle	Total f	Mean %	Groups I-IV Chi-Square p		Groups V-VII Chi-Square p	
Lack integr & coord amg ministries or local agencies	262	51.4	16.31	.00 s	18.26	.00 s
Devt workers not adequate trained	248	48.6	13.78	.00 s	12.84	.00 s
Local resources not suf involved	240	47.1	5.68	.13 s	5.11	.08 s
Insuf nos trained local people	216	42.4	34.18	.00 s	23.36	.00 s
Inadequate finan- cial resources	214	42.0	47.25	.00 s	6.18	.05 s
Participants not suf inv in design	186	36.5	1.82	.61	.66	.72
Lack supplies or supports	168	32.9	12.13	.01 s	12.56	.00 s
Prog conflicts w/ cult vals & norms	158	31.0	.59	.90	.49	.78
Lack interest amg local people	111	21.8	16.81	.00 s	11.86	.00 s

s = significant at least at .13 level, with 3 d.f. for Groups I-IV and 2 d.f. for Groups V-VII

Table 70 also indicates the extent of association between each of the perceived obstacles and the groupings by citizenship and location of work, and those by location according to basic development indicators. All but two obstacles (participants not sufficiently involved in the project design, and program conflicts with culture) are significant at least at the .13 level, with most significant at the .00 level.

Table 71 enables detailed examination of the relative identification of obstacles significantly associated with citizenship by location of work. Of special note is the fact that LDC citizens in LDC locations have the highest frequency of identification of all the selected obstacles except for two (local resources not sufficiently involved, and lack of interest among the local people). DC citizens in DC locations have the lowest frequency of obstacle identification in all cases except one (inadequate financial resources). Of particular interest is the finding that DC citizens in LDCs are greatly under-represented in the identification of inadequate financial resources as an obstacle in carrying out development programs. It raises the question of whether they have adequate financial support for their efforts, and whether this is related to their assumption of development roles in developing countries.

TABLE 71: SELECTED OBSTACLES IN CARRYING OUT DEVELOPMENT PROGRAMS WITH NFE BY CITIZENSHIP AND LOCATION OF WORK

Obstacle	I LDC/LDC (n=179)		II DC/LDC (n=115)		III LDC/DC (n=20)		IV DC/DC (n=196)		SUM I-IV (n=510)	
	n	%	n	%	n	%	n	%	n	%
Lack intgr & coord amg mins or loc agencies	108	60.3	64	55.7	11	55.0	79	40.3	262	51.4
Dev wrkrs not adequately trained	103	57.5	58	50.4	11	55.5	76	38.8	248	48.6
Loc resrces not suf involved	90	50.3	58	50.4	12	60.0	80	40.8	240	47.1
Insuf nos trained loc people	105	58.7	45	39.1	9	45.0	57	29.1	216	42.4
Inadeq finan resources	109	60.9	26	22.6	9	45.0	70	35.7	214	42.0
Lack supplies or supports	72	40.2	42	36.5	7	35.0	47	24.0	168	32.9
Lack interest among local people	53	29.6	27	23.5	6	30.0	25	12.8	111	21.8

Table 72 provides data on identification of the same obstacles by location according to basic development indicators. Two key patterns emerge. First, greater frequency of identification of obstacles is associated with lower income location. Those development specialists in low-income countries have the highest rates of identification of all obstacles except one (lack of interest among the local people), while those in industrialized countries have the lowest obstacle identification rates. Second, the frequency of mention of the obstacles by persons in industrialized countries is considerably below the mean, as those in both low-income and middle-income countries have obstacle identification rates above the mean in all instances except one.

The data from Tables 71 and 72 suggest that the obstacles to carrying out development programs using NFE may indeed be greater or more numerous in low-income versus middle-income countries. At a minimum, the indicated obstacles are perceived as greater or more numerous by the development intermediaries actually working in the lowest income locations.

The subjects were also queried as to which obstacles they think are most important based on their personal

TABLE 72: SELECTED OBSTACLES IN CARRYING OUT DEVELOPMENT PROGRAMS WITH NFE BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Obstacle	V Low-Inc (n=103)		VI Mid-Inc (n=192)		VII Indust (n=215)		SUM V-VII (n=510)	
	n	%	n	%	n	%	n	%
Lack intgr & coord amg mins or local agencies	68	66.0	105	54.7	89	41.4	262	51.4
Dev wrkrs not adequately trained	62	60.2	100	52.1	86	40.0	248	48.6
Loc resources not suf involved	58	56.3	90	46.9	92	42.8	240	47.1
Insuf nos trained loc people	59	57.3	91	47.4	66	30.7	216	42.2
Inadeq finan resources	52	50.5	84	43.8	78	36.3	214	42.0
Lack supplies or supports	44	42.7	71	37.0	53	24.7	168	32.9
Lack interest among local people	27	26.2	53	27.6	31	14.4	111	21.8

experience. Up to three responses were accepted and selected obstacles combined into two classifications: obstacles that are value-oriented and those that are structure-oriented. Value-oriented obstacles are considered to be those that posit the problem directly in the attitudes, behaviors, or values of people which are thought to be in need of change. These include the following obstacles:

- participants not sufficiently involved in the design and management of the NFE program
- program conflicts with certain cultural values and norms
- insufficient numbers of trained local people to provide needed services
- lack of interest or support among the local people

Structure-oriented obstacles are considered to be those that posit the source of the problem in institutional and societal structures that impede desired goals. These here include:

- lack of integration and coordination among ministries and local service agencies
- lack of supplies or other resources when needed
- lack of adequate financial resources

Table 73 displays data, by citizenship and location of work, on value-oriented versus structure-oriented obstacles judged most important in carrying out development projects

TABLE 73: MOST IMPORTANT OBSTACLES, VALUES VERSUS STRUCTURE, IN CARRYING OUT DEVELOPMENT PROGRAMS WITH NFE, BY CITIZENSHIP AND LOCATION OF WORK

Obstacles	I LDC/LDC (n=83x3)		II DC/LDC (n=26x3)		III LDC/DC (n=7x3)		IV DC/DC (n=52x3)		SUM I-IV (n=168x3)	
	n	%	n	%	n	%	n	%	n	%
Value-Oriented	58	30.7	29	37.2	4	19.0	36	23.1	127	25.5
Structure-Oriented	77	40.7	28	35.9	6	28.6	45	28.8	156	31.0

TABLE 74: MOST IMPORTANT OBSTACLES, VALUES VERSUS STRUCTURE, IN CARRYING OUT DEVELOPMENT PROGRAMS WITH NFE, BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Obstacles	V Low-Inc (n=40x3)		VI Mid-Inc (n=70x3)		VII Indust (n=58x3)		SUM V-VII (n=168x3)	
	n	%	n	%	n	%	n	%
Value-Oriented	22	18.3	65	31.0	40	23.0	127	25.2
Structure-Oriented	41	34.2	65	31.0	50	28.7	156	31.0

involving non-formal education. Little variation is found among the four groupings. DC citizens in LDC locations are, however, somewhat over-represented in their identification of value-oriented obstacles, and under-represented in their identification of structure-oriented obstacles.

Table 74 provides corresponding data by location according to basic development indicators. Here, development specialists in low-income countries are characterized by much lower than mean identification of value-oriented obstacles and much higher than mean identification of structure-oriented obstacles.

By way of explanation, it might be speculated that those performing roles in non-formal education and development in the most impoverished settings come to focus more on confining structures and institutions as sources of problems, than on the values and behaviors of intended project beneficiaries. In countries which are less economically disadvantaged the dominance of oppressive structures may be less keenly felt. Noting the greater than mean identification of value-oriented obstacles by those in middle-income countries, it might be further speculated that this somewhat relates to the lower mean age of this grouping and a correspondingly greater optimism in the power of individual change.

To complete this comparative analysis of the development roles of the selected respondents, consideration is next given in Chapter 8 to their roles as development intermediaries and to their career histories.



RETURNING MATERIALS:
Place in book drop to
remove this checkout from
your record. FINES will
be charged if book is
returned after the date
stamped below.

--	--	--

cha

aff

bro

inc

whi

spe

the

usu

WCS

dev

res.

edu

by

from

CHAPTER 8
DEVELOPMENT ROLE CHARACTERISTICS -- PART II:
LINKAGES AND CAREER HISTORY

This chapter continues examination of development role characteristics of the purposive sample of 510 NFEIC network affiliates by comparatively analyzing their development broker linkages and their career histories.

Development Broker Linkages

The subjects' roles as development brokers or intermediaries are analyzed in terms of the locations in which they usually work, the single location in which they spend the most time, the parts of the population to which their work is primarily directed, the people with whom they usually work directly, and those with whom they spend the most time in their work in non-formal education and development.

Concerning the locations in which the selected respondents usually carry on their activities in non-formal education and/or development, the subjects are characterized by considerable mobility in their work, as can be observed from Table 75. Over half of the specialists mention rural

TAB

Loc

Rur
Cap
Tow
Oth
(t
Cou

S =

TAB

Loc

Rur
vi
Tow
Oth
(t
Cou

TAB

Loca

Rur
Cap
Oth
Cou

TABLE 75: EXTENT OF ASSOCIATION BETWEEN LOCATION OF NFE AND DEVELOPMENT ACTIVITIES AND CITIZENSHIP WITH LOCATION OF WORK, AND LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Location	Total f	Mean %	Groups I-IV		Groups V-VII	
			Chi-Square	p	Chi-Square	p
Rural villages	304	59.6	30.96	.00 s	33.67	.00 s
Capital city	266	52.2	4.51	.21	6.08	.05 s
Towns	196	38.4	10.03	.02 s	.51	.78
Other cities (than capital)	192	37.6	23.51	.00 s	21.66	.00 s
Countryside	175	34.4	8.95	.03 s	6.02	.05 s

s = significant at least at .05 level

TABLE 76: SELECTED LOCATIONS OF NFE AND DEVELOPMENT ACTIVITIES BY CITIZENSHIP AND LOCATION OF WORK

Location	I LDC/LDC (n=179)		II DC/LDC (n=115)		III LDC/DC (n=20)		IV DC/DC (n=196)		SUM I-IV (n=510)	
	n	%	n	%	n	%	n	%	n	%
Rural villages	126	70.4	78	67.8	13	65.0	87	44.4	304	59.6
Towns	77	43.0	33	28.7	4	20.0	82	41.8	196	38.4
Other cities (than cap.)	56	31.3	30	26.1	7	35.0	99	50.5	192	37.6
Countryside	74	41.3	38	33.3	9	45.0	54	27.6	175	34.4

TABLE 77: SELECTED LOCATIONS OF NFE AND DEVELOPMENT ACTIVITIES BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Location	V Low-Inc (n=103)		VI Mid-Inc (n=192)		VII Indust (n=215)		SUM V-VII (n=510)	
	n	%	n	%	n	%	n	%
Rural villages	82	79.6	122	63.5	100	46.5	304	59.6
Capital city	45	43.7	112	58.3	109	50.7	266	52.2
Other cities	25	24.3	62	32.3	105	48.8	192	37.6
Countryside	44	43.1	68	35.4	63	29.3	175	34.4

vill

rena

(196

and

leve

and

Group

sign

citi

vill

much

respe

than

for c

in

respe

over-

diffe

india

count

assoc

than t

villages (304, 59.6%) and capital city (266, 52.2%). The remaining distribution of work locales is as follows: towns (196, 38.4%), cities other than the capital (192, 37.6%), and countryside (175, 34.4%).

Table 75 also provides chi-squares and significance levels for the extent of association between locale of NFE and development activities for Groupings I-IV and for Groupings V-VII. Table 76 offers detail for those locales significantly differentiated (at least at a .05 level) by citizenship and location of work. Considering rural villages, as might be expected persons in LDC locations show much higher than mean representation (70.4% and 67.8%, respectively) and DC citizens in DC locations much lower than mean representation (44.4%). The opposite holds true for cities other than the capital in which case specialists in LDCs are under-represented (31.3% and 26.1%, respectively) and DC citizens in DC locations over-represented (50.5%).

When examining, in Table 77, the locales significantly differentiated by location according to basic development indicators, a pattern emerges. For rural villages and countryside, work in these settings tends to be increasingly associated with lower income location. For cities other than the capital, the reverse is true. Interestingly, those

in a

in a

be

citi

loca

deve

clas

rura

citi

coun

data

Tabl

that

thei

rathe

loca

with

loca

respe

loca

in middle-income countries show the greatest representation in capital cities. In some countries, the capital city may be the only city of note, or the only place where DC citizens in LDCs are expected to obtain housing.

The subjects were also asked to indicate the single location in which they spend the most time in NFE and development activities. Their selected responses were classified into one of two categories, either urban or rural. Urban locales consist of capital city and other cities, while rural locales consist of rural villages and countryside. Data for towns are not included, neither are data deriving from multiple responses.

When urban versus rural locale of work is considered in Table 78 by citizenship and location of work, it is found that DC citizens in LDC locations are much more likely than their LDC counterparts, also in LDCs, to work in urban rather than rural areas. 63.2% of the DC citizens in LDC locations indicate spending the most time in urban settings, with 36.8% in rural settings. For LDC citizens in LDC locations, the corresponding figures are 46.8% and 53.2%, respectively.

Table 79, which provides data on urban versus rural locale of work by location according to basic development

722

Loca

Urba

Rura

Chi-

722

Loca

Urba

Rura

Chi-

TABLE 78: LOCATION, URBAN VERSUS RURAL, WHERE MOST TIME SPENT IN NFE AND DEVELOPMENT ACTIVITIES BY CITIZENSHIP AND LOCATION OF WORK

Location	I LDC/LDC (n=124)		II DC/LDC (n=68)		III LDC/DC (n=14)		IV DC/DC (n=71)		SUM I-IV (n=277)	
	n	%	n	%	n	%	n	%	n	%
Urban	58	46.8	43	63.2	7	50.0	52	73.2	160	57.8
Rural	66	53.2	25	36.8	7	50.0	19	26.8	117	42.2

Chi-square(3df)=14.29; $P \leq .00$

TABLE 79: LOCATION, URBAN VERSUS RURAL, WHERE MOST TIME SPENT IN NFE AND DEVELOPMENT ACTIVITIES BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Location	V Low-Inc (n=64)		VI Mid-Inc (n=129)		VII Indust (n=84)		SUM V-VII (n=277)	
	n	%	n	%	n	%	n	%
Urban	29	45.3	73	56.6	58	69.0	160	57.8
Rural	35	54.7	56	43.4	26	31.0	117	42.2

Chi-square(2df)=8.52; $P \leq .01$

indi

work

incr

incr

expe

wiel

coun

spee

deve

work

kind

grou

ment

exte

pers

char

whom

are

their

ident

indicators, shows strong patterns of increasing tendency to work in a rural setting by lower income location, and increasing tendency to work in an urban setting by higher income location. This finding corresponds to what might be expected since greater urbanization tends to be associated with higher national income levels, and the lowest income countries tend to be most predominantly rural.

In order to ascertain the intended beneficiaries of the specialists' efforts in non-formal education and development, those parts of the population toward whom their work is primarily directed are comparatively examined. Two kinds of comparative data are noted in this regard for the groupings of selected respondents: order of frequency for mention of each part of the population (Table 80), and extent of association between parts of the population and personnel groupings I-IV and V-VII (Table 81).

The data reveal that the development intermediaries are characterized by the breadth of the population segments to whom their work is primarily directed. Furthermore, they are distinguished by the intended beneficiaries for whom their work is intended in cases of approximately half of the identified population parts.

TABLE 80: PARTS OF POPULATION TOWARD WHOM NFE AND DEVELOPMENT WORK IS PRIMARILY DIRECTED, BY CITIZENSHIP AND LOCATION OF WORK, AND BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

I LDC/LDC(179)		II DC/LDC(115)		III LDC/DC(20)		IV DC/DC(196)	
-----		-----		-----		-----	
population	f	popluation	f	population	f	population	f
-----	-----	-----	-----	-----	-----	-----	-----
Adults	134	Poor	93	Poor	15	Adults	120
Rural Peop	130	Rural Peop	93	Adults	14	Women	115
Youth	122	Women	85	Men	13	Poor	114
Poor	119	Men	77	Rural Peop	12	Train/Tch	108
Women	111	Adults	73	Women	12	Men	103
Dev Wrkrs	110	Youth	69	Train/Tch	12	Rural Ppl	101
Men	106	Train/Tch	61	Dev Wrkrs	12	Pol Makrs	95
Train/Tch	98	Families	55	Families	12	Loc Leadrs	89
Loc Leadrs	91	Loc Leadrs	52	Youth	11	Dev Wrkrs	84
Families	80	Dev Wrkrs	51	Planners	11	Planners	82
Planners	73	Children	44	Loc Leadrs	10	Youth	76
Students	69	Students	43	Pol Makrs	9	Families	75
Pol Makrs	67	Pol Makrs	32	Students	9	Mid Offcls	74
Mid Offcls	65	Planners	32	Children	9	Students	67
Children	61	Mid Offcls	29	Mid Offcls	5	High Ofcls	63
High Ofcls	53	Urban Peop	28	Foreigners	5	Urban Peop	57
Urban Peop	53	High Ofcls	26	High Ofcls	4	Old	47
Old	34	Old	25	Urban People	4	Foreigners	46
Mid Classes	34	Mid Classes	15	Whole Popn	4	Mid Class	45
Whole Popn	34	Whole Popn	13	Old	4	Children	42
Foreigners	22	Foreigners	10	Mid Classes	2	Whole Popn	35
Wealthy	8	Wealthy	4	Wealthy	2	Wealthy	14

TAB

V I

pp

RUN

POO

WON

ADU

YOU

MEN

DEV

TRA

LOC

FAM

STU

CHI

PLA

MID

POL

HIG

OLD

URB

WHO

MID

FOR

WEA

TABLE 80: (Cont'd) PARTS OF POPULATION TOWARD WHOM NFE AND DEVELOPMENT WORK IS PRIMARILY DIRECTED, BY CITIZENSHIP AND LOCATION OF WORK, AND BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

V Low-Inc (103)		VI Mid-Inc (192)		VII Indust (215)	
-----		-----		-----	
population	f	population	f	population	f
-----		-----		-----	
Rural People	86	Rural People	137	Adults	134
Poor	81	Adults	134	Poor	129
Women	75	Poor	131	Women	127
Adults	73	Women	121	Trainers/Tch	120
Youth	70	Youth	121	Men	116
Men	65	Men	118	Rural People	113
Dev Workers	59	Trainers/Tch	103	Policy Makrs	104
Trainers/Tch	56	Dev Workers	102	Local Leaders	99
Loc Leaders	54	Loc Leaders	89	Dev Workers	96
Families	46	Families	89	Planners	93
Students	42	Planners	72	Youth	87
Children	41	Students	70	Families	87
Planners	33	Policy Makrs	69	Mid Officials	79
Mid Offcls	32	Children	64	Students	76
Policy Makrs	30	Mid Officials	62	High Offcls	67
High Offcls	28	Urban People	56	Urban People	61
Old	26	High Offcls	51	Children	51
Urban People	25	Mid Classes	35	Old	51
Whole Popn	22	Old	33	Foreigners	51
Mid Classes	14	Foreigners	26	Mid Classes	47
Foreigners	6	Whole Popn	25	Whole Popn	39
Wealthy	4	Wealthy	8	Wealthy	16

TAE

Pa

Pos

Ad

Ru

Wor

Me

Tr

Yo

Dev

Loc

Fam

Pol

Pla

Sta

Mid

Chi

Hig

Urb

Old

Mid

Who

For

Wea

S =

TABLE 81: EXTENT OF ASSOCIATION BETWEEN POPULATION TO WHOM WORK PRIMARILY DIRECTED AND CITIZENSHIP WITH LOCATION OF WORK, AND LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Part of Population	Total f	Mean %	Groups I-IV		Groups V-VII	
			Chi-Square	p	Chi-Square	p
Poor People	341	66.9	17.49	.00 s	11.18	.00 s
Adults	341	66.9	8.66	.03 s	3.49	.17
Rural People	336	65.9	33.38	.00 s	33.75	.00 s
Women	323	63.3	7.61	.05 s	5.68	.06 s
Men	299	58.6	6.63	.08 s	3.42	.18
Trainers/Teachers	279	54.7	.37	.95	.20	.91
Youth	278	54.5	34.41	.00 s	30.23	.00 s
Development Wrkrs	257	50.4	15.63	.00 s	5.37	.07 s
Local Leaders	242	47.5	1.43	.70	1.29	.53
Families	222	43.5	5.38	.15 s	1.50	.47
Policy Makers	203	39.8	13.67	.00 s	12.69	.00 s
Planners	198	38.8	9.10	.03 s	3.92	.14 s
Students	188	36.9	1.41	.70	.90	.64
Mid-Lev Officials	173	33.9	6.34	.10 s	1.37	.51
Children	156	30.6	13.92	.00 s	9.58	.01 s
High-Lev Officials	146	28.6	4.04	.26	1.18	.55
Urban People	142	27.8	1.74	.63	.85	.65
Old People	110	21.6	1.41	.70	3.59	.17
Middle Classes	96	18.8	5.73	.13 s	3.19	.20
Whole Population	86	16.9	3.39	.33	3.76	.15 s
Foreigners	83	16.3	15.50	.00 s	18.06	.00 s
Wealthy	28	5.5	3.07	.38	2.74	.25

s = significant at least at .15 level, with 3 d.f. for Groups I-IV and 2 d.f. for Groups V-VII

den

div

ben

wom

wor

com

eff

fema

loca

22

iden

seve

sign

I-IV

citi

popu

poor

deve

mid-1

forei

In reference to the first observation, Table 81 demonstrates that over one-half of the respondents report a diverse though integrated collection of intended beneficiaries including poor people, adults, rural people, women, men, trainers or teachers, youth, and development workers. In fact, these population segments suggest a composite beneficiary of the respondents' development efforts: rural poor adults and youth, both males and females, who are themselves development intermediaries in local contexts.

Table 80 illustrates the second observation by listing 22 parts of the population, in order of frequency of identification as intended beneficiaries, for each of the seven groupings. Table 81 contains the chi-squares and significance levels for the work orientations of Groupings I-IV and Groupings V-VII for each population segment.

When considering the development intermediaries by citizenship and location of work, the following parts of the population are differentiated at least at the .15 level: poor people, adults, rural people, women, men, youth, development workers, families, policy makers, planners, mid-level officials, children, middle-classes, and foreigners.

each

and

could

are

women

development

on

for

and

four

side

part

direction

men

the

for

self

middle

rural

families

country

in

in

Table 82 shows the relative work orientation toward each of these selected population segments by citizenship and location of work. Persons working in developing countries; in contrast with those in developed countries, are distinguished by their greater mention of rural people, women, men, and youth as intended beneficiaries of their development efforts. Those working in developed countries, on the other hand, mention policy makers, planners, and foreigners to a greater extent than do their counterparts. LDC citizens in LDC locations are the highest of any of the four groupings by citizenship and location of work in their identification of adults, youth, and development workers as parts of the population to whom their work is primarily directed. DC citizens in LDC locations have the greatest mention of poor people, rural people, women, and men, and the least mention of policy makers, planners, and foreigners. DC citizens in DC locations have the highest selection of policy makers, mid-level officials, and the middle-classes, with the lowest selection of poor, adults, rural people, women, men, youth, development workers, families, and children.

These findings lead to the observation that developed country-based personnel, in contrast to their counterparts in developing countries, tend to target their efforts to a

TAB32

Part
Popu

Poor
Adult
Rural
Women
Men
Youth
Dev
Fami
Poli
Plan
Mid
Child
Mid
Fore

**TABLE 82: SELECTED PARTS OF POPULATION TO WHOM WORK
DIRECTED BY CITIZENSHIP AND LOCATION OF WORK**

Part of Population	I LDC/LDC (n=179)	II DC/LDC (n=115)	III LDC/DC (n=20)	IV DC/DC (n=196)	SUM I-IV (n=510)
	n %	n %	n %	n %	n %
Poor People	119 66.5	93 80.9	15 75.0	114 58.2	341 66.9
Adults	134 74.9	73 63.5	14 70.0	120 61.2	341 66.9
Rural Peop	130 72.6	93 80.9	12 60.0	101 51.5	336 65.9
Women	111 62.0	85 73.9	12 60.0	115 58.7	323 63.3
Men	106 59.2	77 67.0	13 65.0	103 52.6	299 58.6
Youth	122 68.2	69 60.0	11 55.5	76 38.8	278 54.5
Dev Workers	110 61.5	51 44.3	12 60.0	84 42.9	257 50.4
Families	80 44.7	55 47.8	12 60.0	75 38.3	222 43.5
Policy Makrs	67 37.4	32 27.8	9 45.0	95 48.5	203 39.8
Planners	73 40.8	32 27.8	11 55.0	82 41.8	198 38.8
Mid Offcls	65 36.3	29 25.2	5 25.0	74 37.8	173 33.9
Children	61 34.1	44 38.3	9 45.0	42 21.4	156 30.6
Mid Classes	34 19.0	15 13.0	2 10.0	45 23.0	96 18.8
Foreigners	22 12.3	10 8.7	5 25.0	46 23.5	83 16.3

gr

an

po

fo

yo

po

re

gr

tr

th

ro

fo

lea

loc

pec

pol

for

towa

of t

mark

greater extent toward higher-level (e.g., in terms of status and skills) population segments rather than to the rural poor directly. Development intermediaries in LDCs appear to focus their efforts to a greater extent on rural adults and youth.

It is also instructive to consider those parts of the population, identified by at least one-third of the respondents, which are not greatly differentiated by the groupings by citizenship and location of work. These are trainers or teachers, local leaders, and students. Each of these segments is the target of development efforts to roughly similar extent for each of the four groupings.

Again referring to Table 81, it will be noted that the following parts of the population are differentiated at least at the .15 level for Groupings V-VII, formed from location according to basic development indicators: poor people, rural people, women, youth, development workers, policy makers, planners, children, whole population, foreigners.

Table 83 presents data on the relative work orientation toward each of these selected population segments for each of the three groupings. Inspection of this table reveals a marked tendency for the development intermediaries to be

CA

Pa
p

Por
R
W
Y
De
Po
Pl
Ch
Wh
For

**TABLE 83: SELECTED PARTS OF POPULATION TO WHOM WORK
DIRECTED BY LOCATION ACCORDING TO BASIC
DEVELOPMENT INDICATORS**

Part of Population	V Low-Inc (n=103)		VI Mid-Inc (n=192)		VII Indust (n=215)		SUM V-VII (n=510)	
	n	%	n	%	n	%	n	%
Poor People	81	78.6	131	68.2	129	60.0	341	66.9
Rural People	86	83.5	137	71.4	113	52.6	336	65.9
Women	75	72.8	121	63.0	127	59.1	323	63.3
Youth	70	68.0	121	63.0	87	40.5	278	54.5
Dev Workers	59	57.3	102	53.1	96	44.7	257	50.4
Policy Makers	30	29.1	69	35.9	104	48.4	203	39.8
Planners	33	32.0	72	37.5	93	43.3	198	38.8
Children	41	39.8	64	33.3	51	23.7	156	30.6
Whole Popn	22	21.4	25	13.0	39	18.1	86	16.9
Foreigners	6	5.8	26	13.5	51	23.7	83	16.3

inc
peo
wor
hol
for
eff
dec
13

the
soc
ind
woul
such
to c
As
soci
incr
targ

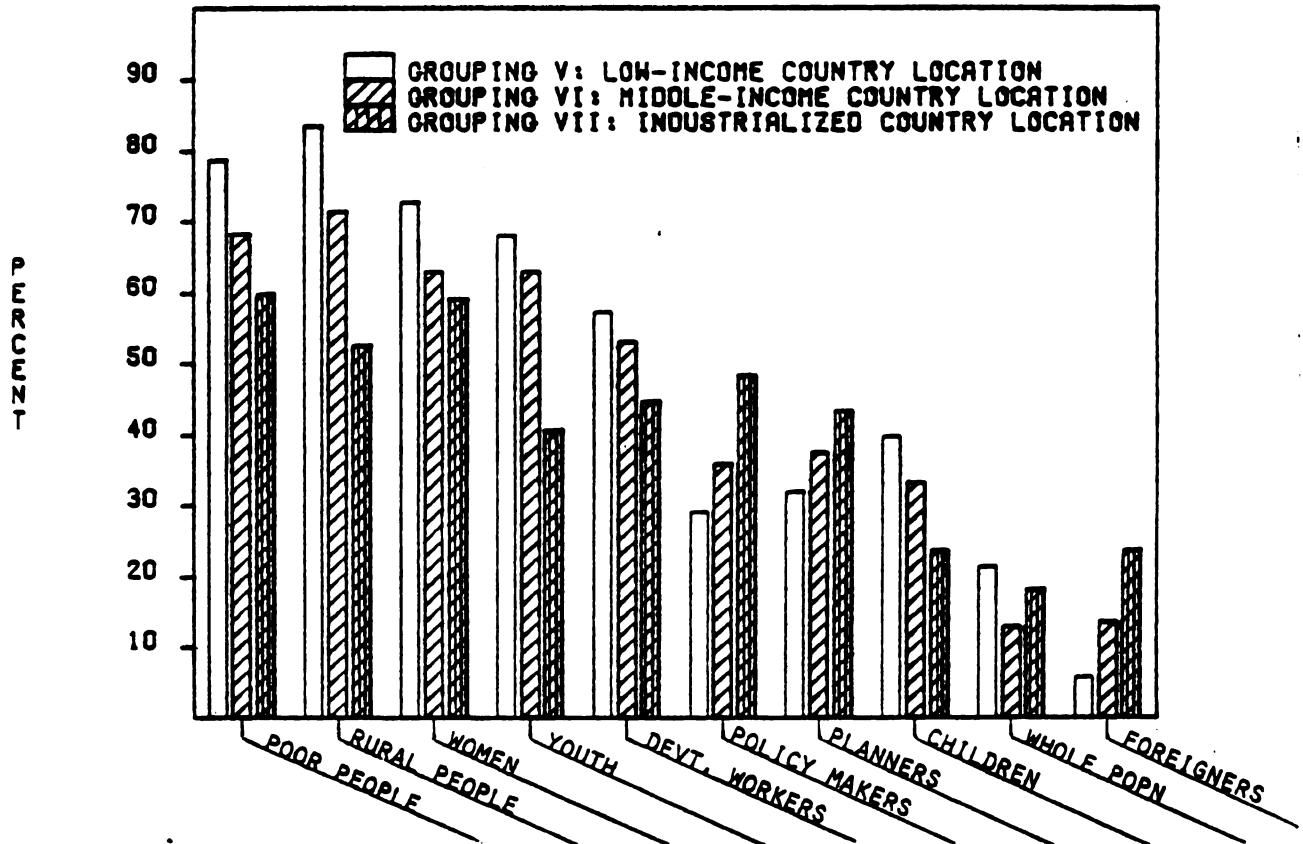
need
grea
are
socie

increasingly directed in their work to poor people, rural people, women, youth, development workers, and children as work is in lower income locations. The opposite pattern holds in the case of policy makers, planners, and foreigners, who are increasingly the target of development efforts for the specialists in higher income locations, and decreasingly the target in lower income locations. Figure 13 graphically illustrates these patterns.

A couple of hypotheses suggest themselves as to why these tendencies are manifest. First, it may be that as societies achieve greater realization of basic development indicators they also become more complex. Complex societies would tend to harbor greater numbers of skilled specialists such as policy makers and planners. They would also be apt to contain more foreigners seeking education or employment. As high-level specialized personnel are present in a society, it is reasonable to think that they would increasingly be used as development brokers and, hence, the target of the development efforts of others.

A second hypothesis would be that the basic development needs of the majority in the lowest income locations are so great that they, rather than higher-level intermediaries, are the direct target of development activities in those societies.

FIGURE 13. SELECTED POPULATION SEGMENTS TOWARD WHOM WORK DIRECTED BY LOCATION ACCORDING TO BASIC DEVELOPMENT INOCTRS



Because the intended beneficiaries of the specialists' work in development may not be those with whom they have immediate, interpersonal linkages, it is necessary to next ascertain the kinds of people with whom the selected respondents work directly. Again, two kinds of data are provided: order of frequency for mention of each part of the population with whom worked directly (Table 84), and extent of association between parts of the population and personnel groupings I-IV and V-VII (Table 85).

The subjects are once more characterized by the breadth of the population segments with whom they have direct linkages. The respondents are also distinguished within their comparative groupings by approximately half of the population parts identified.

In support of the former observation, Table 85 shows that over forty percent of the respondents identify direct linkages with the following population segments: adults, men, trainers or teachers, women, planners, policy makers, development workers, mid-level officials, local leaders, and rural people.

Table 84 illustrates the latter observation by listing 21 parts of the population, in order of frequency of

TABLE 84: KINDS OF PEOPLE WORKED WITH DIRECTLY, BY
CITIZENSHIP AND LOCATION OF WORK, AND BY
LOCATION ACCORDING TO BASIC DEVELOPMENT
INDICATORS

I LDC/LDC(179)		II DC/LDC(115)		III LDC/DC(20)		IV DC/DC(196)	
people	f	people	f	people	f	people	f
Adults	123	Men	69	Adults	15	Train/Tch	115
Women	104	Women	68	Men	14	Adults	111
Men	101	Adults	62	Women	14	Men	99
Train/Tch	95	Train/Tch	62	Planners	12	Pol Makers	96
Planners	95	Rural Peop	58	Train/Tch	11	Women	94
Dev Workers	92	Dev Workers	56	Dev Workers	11	Planners	89
Rural Peop	91	Mid Offcls	52	Pol Makers	10	Mid Offcls	87
Loc Leaders	89	Planners	48	Loc Leaders	10	Dev Wrkrs	79
Youth	89	Pol Makers	48	Adults	9	Loc Leadrs	68
Pol Makers	85	Poor People	48	Mid Offcls	9	High Ofcls	67
Poor People	77	Loc Leaders	44	High Offcls	9	Students	65
Mid Offcls	71	High Offcls	43	Poor People	9	Mid Class	59
High Offcls	70	Youth	39	Students	9	Rural Peop	54
Students	68	Students	27	Rural People	8	Poor	53
Families	47	Mid Classes	27	Mid Classes	6	Foreigners	43
Mid Classes	44	Children	20	Foreigners	4	Youth	32
Foreigners	34	Foreigners	19	Families	4	Urban Peop	31
Children	27	Families	16	Children	4	Families	19
Urban Peop	26	Urban Peop	13	Old	3	Wealthy	19
Old	23	Old	12	Wealthy	3	Children	18
Wealthy	14	Wealthy	10	Urban Peop	2	Old	23

TABLE 84: (CONT'D) KINDS OF PEOPLE WORKED WITH DIRECTLY,
BY CITIZENSHIP AND LOCATION OF WORK, AND BY
LOCATION ACCORDING TO BASIC DEVELOPMENT
INDICATORS

V Low-Inc (103)		VI Mid-Inc (192)		VII Indust (215)	
-----		-----		-----	
people	f	people	f	people	f
-----		-----		-----	
Adults	68	Adults	117	Adults	126
Men	62	Women	110	Train/Tch	126
Women	62	Men	108	Men	113
Dev Workers	60	Train/Tch	98	Women	108
Train/Tch	59	Planners	94	Pol Makers	105
Rural People	58	Rural People	91	Planners	100
Planners	50	Pol Makers	89	Mid Officials	96
Youth	49	Dev Workers	88	Dev Workers	90
Loc Leaders	47	Loc Leaders	86	Loc Leaders	78
Pol Makers	45	Mid Officials	83	High Offcls	76
High Offcls	45	Poor People	82	Students	73
Poor People	43	Youth	79	Mid Classes	65
Mid Offcls	40	High Offcls	68	Rural People	62
Students	36	Students	60	Poor People	62
Families	23	Mid Classes	50	Foreigners	47
Mid Classes	21	Families	40	Youth	41
Children	21	Foreigners	33	Urban People	32
Foreigners	20	Urban People	26	Old	26
Old	15	Children	26	Families	23
Urban People	14	Old	20	Children	22
Wealthy	9	Wealthy	15	Wealthy	22

TABLE 85: EXTENT OF ASSOCIATION BETWEEN TYPES OF PEOPLE WORKED WITH DIRECTLY, AND CITIZENSHIP WITH LOCATION OF WORK, AND LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Types of People	Total f	Mean %	Groups I-IV		Groups V-VII	
			Chi- Square	p	Chi- Square	p
Adults	311	61.0	10.12	.02 s	1.61	.45
Men	283	55.5	4.68	.20	1.72	.42
Trainers/Teachers	283	55.5	1.35	.72	2.52	.28
Women	280	54.9	7.23	.07 s	3.50	.17 s
Planners	244	47.8	5.33	.15 s	.27	.87
Policy Makers	239	46.9	1.67	.64	.77	.68
Development Wrkrs	238	46.7	5.54	.14 s	7.60	.02 s
Mid-Lev Officials	219	42.9	1.23	.75	.97	.62
Local Leaders	211	41.4	9.82	.02 s	4.00	.14 s
Rural People	211	41.4	25.96	.00 s	26.28	.00 s
High-Lev Officials	189	37.1	1.56	.67	2.43	.30
Poor	187	36.7	12.80	.01 s	9.84	.01 s
Youth	169	33.1	48.52	.00 s	34.45	.00 s
Students	169	33.1	8.01	.05 s	.53	.77
Middle Classes	136	26.7	2.29	.51	3.51	.17 s
Foreigners	100	19.6	1.42	.70	1.41	.49
Families	86	16.9	19.31	.00 s	10.18	.01 s
Urban	72	14.1	1.52	.68	.18	.91
Children	69	13.5	5.72	.13 s	6.14	.05 s
Old	61	12.0	.57	.90	1.10	.58
Wealthy	46	9.0	1.31	.73	.74	.69

s = significant at least to .17 level, with 3 d.f. for Groups I-IV and 2 d.f. for Groups V-VII

identi

seven

signi

and (

follow

.17 l

citize

devel

youth

these

locat

devel

zentic

counte

have t

youth

lowest

planne

lowest

worker

famili

T.

contac

identification as direct work contacts, for each of the seven groupings. Table 85 provides chi-squares and significance levels for the work contacts of Groupings I-IV and Groupings V-VII for each population segment. The following types of people are differentiated at least at the .17 level when considering the development specialists by citizenship and location of work: adults, women, planners, development workers, local leaders, rural people, poor, youth, students, families, and children.

Table 86 depicts the relative work contact with each of these selected population segments, by citizenship and location of work. As might be expected, LDC-based development workers are characterized by their greater mention of direct links with rural people than are their counterparts in DC locations. LDC citizens in LDC locations have the greatest contact of any of the four groupings with youth and families. DC citizens in LDC locations have the lowest contact of the groupings with adults and with planners. DC citizens in DC locations fare relatively lowest in their direct linkages with women, development workers, local leaders, rural people, poor people, youth, families, and children.

Those parts of the population, identified as direct contacts by at least one-third of the respondents, which are

TABLE

Type of
People

Adults
Women
Planned
Dev Wo
Loc Le
Rural
Poor
Youth
Student
Family
Children

**TABLE 86: SELECTED TYPES OF PEOPLE WORKED WITH DIRECTLY,
BY CITIZENSHIP AND LOCATION OF WORK**

Type of People	I LDC/LDC (n=179)		II DC/LDC (n=115)		III LDC/DC (n=20)		IV DC/DC (n=196)		SUM I-IV (n=510)	
	n	%	n	%	n	%	n	%	n	%
Adults	123	68.7	62	53.9	15	75.0	111	56.6	311	61.0
Women	104	58.1	68	59.1	14	70.0	94	48.0	280	54.9
Planners	95	53.1	48	41.7	12	60.0	89	45.4	244	47.8
Dev Workers	92	51.4	56	48.7	11	55.0	79	40.3	238	46.7
Loc Leaders	89	49.7	44	38.3	10	50.0	68	34.7	211	41.4
Rural People	91	50.8	58	50.4	8	40.0	54	27.6	211	41.4
Poor	77	43.0	48	41.7	9	45.0	53	27.0	187	36.7
Youth	89	49.7	39	33.9	9	45.0	32	16.3	169	33.1
Students	68	38.0	27	23.5	9	45.0	65	33.2	169	33.1
Families	47	26.3	16	13.9	4	20.0	19	9.7	86	16.9
Children	27	15.1	20	17.4	4	20.0	18	9.2	69	13.5

not

and

make

The

rel.

fol

con

bas

wom

poc

wit

thr

be

fol

loc

pec

the

inc

loc

to

not greatly differentiated by the groupings by citizenship and location of work, are: men, trainers or teachers, policy makers, mid-level officials, and high-level officials. There is little distinction among the four groupings in the relative percentage of work contact with these segments.

Referring again to Table 85, it can be seen that the following types of people are differentiated as direct contacts for Groupings V-VII, at least at the .17 level, based on location according to basic development indicators: women, development workers, local leaders, rural people, poor people, youth, middle classes, families, and children.

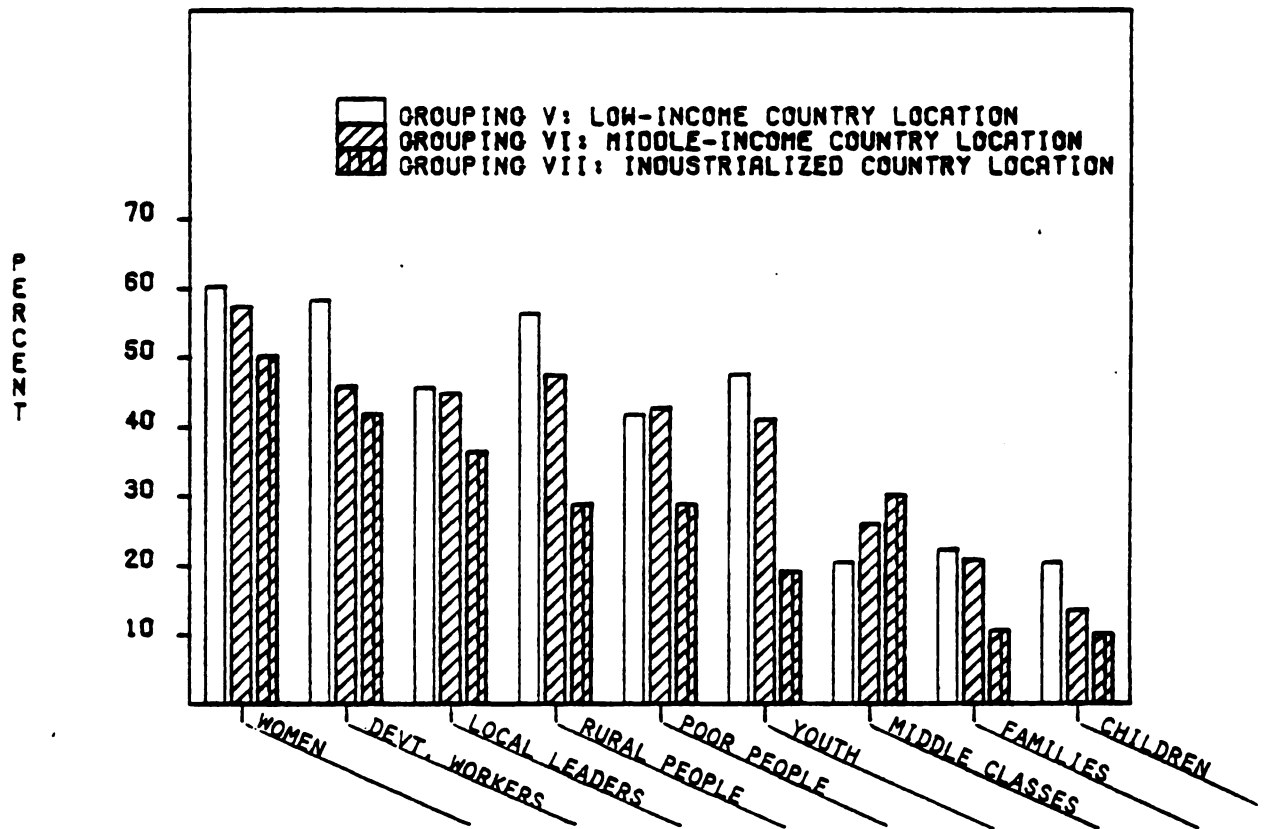
Table 87 provides data on the relative work contact with these selected population segments for each of the three groupings. The development specialists are shown to be increasingly in direct personal contact with the following types of people as their work is in lower income locations: women, development workers, local leaders, rural people, youth, families, and children. The reverse holds in the case of people in the middle classes who are increasingly the contacts of specialists in higher income locations. Figure 14 portrays these patterns visually.

It is recalled that policy makers and planners did tend to be intended beneficiaries of the development efforts of

TABLE 87: SELECTED TYPES OF PEOPLE WORKED WITH DIRECTLY,
BY LOCATION ACCORDING TO BASIC DEVELOPMENT
INDICATORS

Type of People	V Low-Inc (n=103)		VI Mid-Inc (n=192)		VII Indust (n=215)		SUM V-VII (n=510)	
	n	%	n	%	n	%	n	%
Women	62	60.2	110	57.3	108	50.2	280	54.9
Dev Workers	60	58.3	88	45.8	90	41.9	238	46.7
Local Leaders	47	45.6	86	44.8	78	36.3	211	41.4
Rural People	58	56.3	91	47.4	62	28.8	211	41.4
Poor	43	41.7	82	42.7	62	28.8	187	36.7
Youth	49	47.6	79	41.1	41	19.1	169	33.1
Middle Classes	21	20.4	50	26.0	65	30.2	136	26.7
Families	23	22.3	40	20.8	23	10.7	86	16.9
Children	21	20.4	26	13.5	22	10.2	69	13.5

FIGURE 14. SELECTED POPULATION SEGMENTS WITH WHOM WORK DIRECTLY, BY LOC ACCORDING TO BASIC DEVELOPMENT INDOCTRS



those in higher income locations to a greater extent than those in lower income locations. This is not true in the case of direct work linkages. For all three income locations, direct contact with policy makers and planners occurs at roughly similar rates even though the policy makers and planners tend less to be the intended beneficiaries of the development specialists in lower income locations. This suggests a pragmatic need to interact with such key individuals even though development activities may not be primarily directed to them.

It may be of interest at this juncture to show how the population segments to whom development work is directed line up with the population segments with whom the respondents have direct work linkages. This is provided in Table 88 for the aggregate totals for the selected respondents. While poor people are the intended beneficiaries of the development efforts of 66.9 percent of the selected respondents, only 36.7 percent actually have direct work contact with this population segment. A similar difference exists in the case of rural people: they are the intended beneficiaries of 65.9 percent of the respondents' work, but they participate in direct linkages with only 41.4 percent of the respondents.

**TABLE 88: POPULATION SEGMENTS TO WHOM WORK DIRECTED AND
POPULATION SEGMENTS WITH WHOM DIRECT WORK
LINKAGES, FOR AGGREGATE OF SELECTED RESPONDENTS**

Popn Segments: Work Directed	total f	mean %	Popn Segments: Direct Links	total f	mean %
-----	-----	-----	-----	-----	-----
Poor People	341	66.9	Adults	311	61.0
Adults	341	66.9	Men	283	55.5
Rural People	336	65.9	Trainers/Tch	283	55.5
Women	323	63.3	Women	280	54.9
Men	299	58.6	Planners	244	47.8
Trainers/Tch	279	54.7	Policy Makers	239	46.9
Youth	278	54.5	Devt Workers	238	46.7
Devt Workers	257	50.4	Mid-Lev Officials	219	42.9
Local Leaders	242	47.5	Local Leaders	211	41.4
Families	222	43.5	Rural People	211	41.4
Policy Makers	203	39.8	High-Lev Offcls	189	37.1
Planners	198	38.8	Poor People	187	36.7
Students	188	36.9	Youth	169	33.1
Mid-Lev Officials	173	33.9	Students	169	33.1
Children	156	30.6	Middle Classes	136	26.7
High-Lev Offcls	146	28.6	Foreigners	100	19.6
Urban	142	27.8	Families	86	16.9
Old	110	21.6	Urban	72	14.1
Middle Classes	96	18.8	Children	69	13.5
Whole Popn	86	16.9	Old	61	12.0
Foreigners	83	16.3	Wealthy	46	9.0
Wealthy	28	5.5			

Trainers or teachers, however, are the beneficiaries for 54.7 percent of the respondents but are even more represented (55.5%) in direct work links with them. A similar, but even stronger, pattern holds for policy makers (39.8% and 46.9%, respectively), planners (38.8% and 47.8%, respectively), mid-level officials (33.9% and 42.9%, respectively), and high-level officials (28.6% and 37.1%, respectively).

To conclude examination of the respondents' development broker linkages, consideration is given to the two or three types of groups with whom they spend the most time in their development and non-formal education work. Table 89 provides this data for the groupings by citizenship and location of work. Trainers or teachers emerges as the population segment with whom the respondents, nearly a third of them, spend the most time. Those in DC locations are above the mean in identification of this segment, and those in LDCs below it.

Population segments identified by about a fifth of the respondents are: development workers, adults, policy makers, planners, and students. Those in DC locations identify policy makers and students to a greater extent than do those in LDC locations, while LDC-based personnel give greater

TABLE 89: THREE TYPES OF GROUPS WITH WHOM MOST TIME SPENT, BY CITIZENSHIP AND LOCATION OF WORK

Type of Group	I LDC/LDC (n=141x3)	II DC/LDC (n=89x3)	III LDC/DC (n=14x3)	IV DC/DC (n=130x3)	SUM I-IV (n=374x3)
	n %	n %	n %	n %	n %
Train/Tch	35 24.8	27 30.3	6 42.9	49 37.7	117 31.3
Dev Wrkrs	29 20.6	26 29.2	2 14.3	22 16.9	79 21.1
Adults	33 23.4	13 14.6	2 14.3	29 22.3	77 20.6
Pol Makers	29 20.6	12 13.5	4 28.6	29 22.3	74 19.8
Planners	29 20.6	14 15.7	3 21.4	26 20.0	72 19.3
Students	23 16.3	12 13.5	4 28.6	32 24.6	71 19.0
Rural Peop	36 25.5	23 25.8	2 14.3	7 5.4	68 18.2
Mid Offcls	15 10.6	18 20.2	1 7.1	33 25.4	67 17.9
High Offcls	22 15.6	15 16.9	4 28.6	16 12.3	57 15.2
Loc Leaders	26 18.4	9 10.1	2 14.3	10 7.7	47 12.6
Poor	18 12.8	10 11.2	1 7.1	7 5.4	36 9.6
Youth	22 15.6	6 6.7	1 7.1	6 4.6	35 9.4
Women	13 9.2	13 14.6	0 0	8 6.2	34 9.1
Men	4 2.8	10 11.2	1 7.1	6 4.6	21 5.6
Foreigners	2 1.4	4 4.5	0 0	9 6.9	15 4.0
Mid Classes	4 2.8	3 3.4	0 0	7 5.4	14 3.7
Children	6 4.3	4 4.5	1 7.1	3 2.3	14 3.7
Families	2 1.4	3 3.4	0 0	0 0	5 1.3
Old	1 0.7	0 0	0 0	2 1.5	3 0.8
Urban	1 0.7	0 0	0 0	1 0.8	2 0.5
Wealthy	0 0	0 0	0 0	0 0	0 0

mention to development workers.

Table 90 provides corresponding data on population segments with whom the most time is spent, for the groupings by location according to basic development indicators. While subjects in industrialized countries are above the mean (by at least one percent) in identification of trainers or teachers, adults, policy makers, students, and mid-level officials, they are below the mean with reference to development workers, rural people, high-level officials, local leaders, and poor people. Respondents in middle-income countries are above the mean (by at least one percent) in identification of development workers, rural people, and local leaders, while below the mean with reference to teachers or trainers, adults, students, mid-level and high-level officials. Specialists in low-income countries exhibit higher than mean identification of adults, rural people, high-level officials, local leaders, and the poor, with less than mean identification of trainers or teachers, development workers, policy makers, planners, students, and mid-level officials.

With two exceptions, no strong over-all pattern emerges to associate increasing time spent with a population segment and lower or higher income locations. The two exceptions are the cases of rural people and poor people, with whom

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

TABLE 90: THREE TYPES OF GROUPS WITH WHOM MOST TIME SPENT, BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Type of Group	V Low-Inc (n=85x3)		VI Mid-Inc (n=146x3)		VII Indust (n=143x3)		SUM V-VII (n=374x3)	
	n	%	n	%	n	%	n	%
Trainers/Tch	25	29.4	37	25.3	55	38.5	117	31.3
Dev Workers	17	20.0	38	26.0	24	16.8	79	21.1
Adults	20	23.5	26	17.8	31	21.7	77	20.6
Policy Makers	13	15.3	28	19.2	33	23.1	74	19.8
Planners	15	17.6	29	19.9	28	19.6	72	19.3
Students	13	15.3	22	15.1	36	25.2	71	19.0
Rural People	25	29.4	34	23.3	9	6.3	68	18.2
Mid Officials	12	14.1	21	14.4	34	23.8	67	17.9
High Officials	17	20.0	20	13.7	20	14.0	57	15.2
Local Leaders	13	15.3	22	15.1	12	8.4	47	12.6
Poor	14	16.5	14	9.6	8	5.6	36	9.6
Youth	13	15.3	15	10.3	7	4.9	35	9.4
Women	7	8.2	19	13.0	8	5.6	34	9.1
Men	2	2.4	12	8.2	7	4.9	21	5.6
Foreigners	2	2.4	4	2.7	9	6.3	15	4.0
Middle Classes	1	1.2	6	4.1	7	4.9	14	3.7
Children	5	5.9	5	3.4	4	2.8	14	3.7
Families	1	1.2	4	2.7	0	0	5	1.3
Old	0	0	1	0.7	2	1.4	3	0.8
Urban	0	0	1	0.7	1	0.7	2	0.5
Wealthy	0	0	0	0	0	0	0	0

i

l

c

t

r

i

e

w

d

c

f

e

c

i

a

i

d

y

increasingly greater time is spent by lower income location.

This comparative analysis of the development broker linkages of the selected respondents is now followed by consideration of their career histories.

Career History

The subjects' career histories are analyzed in terms of the length of their experience in development and in non-formal education, the ways in which they became involved in non-formal education and development, whether they are employed for wages or salary by one or more organizations, whether they are involved with non-formal education or development through these organizations, the kind of organizations employing them, whether the respondents perform volunteer work for an organization in non-formal education or development and, if so, what kind of organizations these are, whether the subjects are involved independently in other non-formal education or development activities, and whether their most previous position involved non-formal education or development.

Concerning the length of the subjects' experience in development work, Table 91 provides data on the average years of experience by citizenship and location of work. DC

TABLE 9

Years i
Devt.

Mean
Median
Mode
Range
S.D.

TABLE

Years
Devt.

Mean
Median
Mode
Range
S.D.

**TABLE 91: YEARS OF DEVELOPMENT EXPERIENCE BY CITIZENSHIP
AND LOCATION OF WORK**

Years in Devt.	I LDC/LDC (n=175)	II DC/LDC (n=113)	III LDC/DC (n=17)	IV DC/DC (n=190)
Mean	9.1	8.0	9.9	11.4
Median	7.3	6.2	9.0	10.1
Mode	5.0	1.0	4.0	10.0
Range	31.0	30.0	19.0	35.0
S.D.	6.6	6.7	6.6	7.4

**TABLE 92: YEARS OF DEVELOPMENT EXPERIENCE BY LOCATION
ACCORDING TO BASIC DEVELOPMENT INDICATORS**

Years in Devt.	V Low-Inc (n=102)	VI Mid-Inc (n=187)	VII Indust (n=206)
Mean	9.8	8.1	11.3
Median	8.7	6.1	10.0
Mode	10.0	5.0	10.0
Range	31.0	32.0	35.0
S.D.	6.9	6.5	7.3

citizens in DC locations are found to have the highest mean and median experience (11.4 and 10.1 years, respectively), while DC citizens in LDC locations have the lowest (8.0 and 6.2 years, respectively). Table 92 offers corresponding detail by location according to basic development indicators. Middle-income countries are found to have respondents with the lowest mean and median years of experience (8.1 and 6.1, respectively). This situation likely relates to the earlier finding that this grouping is also the youngest in age.

To obtain a sense of the respondents' career involvement in development, their reported length of experience is clustered into three categories. Those with 0-4 years of experience are considered to be at the pre-professional level of involvement in development activities. Those with 5-14 years of experience are considered to be at a junior development career level, while those with 15 or more years of experience are regarded as at a senior development career level.

Table 93 presents data on clustered development experience by citizenship and location of work. These data reveal that DC citizens in DC locations account for the greatest representation in the senior development career category, while DC citizens in LDC locations and LDC

TABLE 93: DEVELOPMENT EXPERIENCE CLUSTERS BY CITIZENSHIP
AND LOCATION OF WORK

Clusters, Dev Exper	I LDC/LDC (n=179)	II DC/LDC (n=115)	III LDC/DC (n=20)	IV DC/DC (n=196)	SUM I-IV (n=510)
	n %	n %	n %	n %	n %
0-4 years	49 27.4	49 42.6	9 45.0	39 19.9	146 28.6
5-14 years	93 52.0	46 40.0	6 30.0	99 50.5	244 47.8
15 years +	37 20.7	20 17.4	5 25.0	58 29.6	120 23.5

TABLE 94: DEVELOPMENT EXPERIENCE CLUSTERS BY LOCATION
ACCORDING TO BASIC DEVELOPMENT INDICATORS

Clusters, Dev Exper	V Low-Inc (n=103)	VI Mid-Inc (n=192)	VII Indust (n=215)	SUM V-VII (n=510)
	n %	n %	n %	n %
0-4 years	28 27.2	70 36.5	48 22.3	146 28.6
5-14 years	49 47.6	90 46.9	105 48.8	244 47.8
15 years +	26 25.2	32 16.7	62 28.8	120 23.5

Chi-square(4df)=13.80; $P \leq .01$

citizens in DC locations account for the greatest portions of the pre-professional development activities level.

In Table 94, containing the clustered development experience data by location according to basic development indicators, the least variation among the three income groupings is observed at the junior development career level. At the pre-professional development activities level, however, personnel in middle-income countries are considerably over-represented, while at the senior development career level they are under-represented.

Next considered is the respondents' length of experience in non-formal education. Table 95 provides data on this item by citizenship and location of work while Table 96 presents corresponding data by location according to basic development indicators. It is noted that experience in non-formal education is approximately two years less for each grouping when compared with respondents' length of experience in development.

As found regarding development experience, DC citizens in DC locations have the highest mean and median experience in NFE (9.9 and 8.1 years, respectively); DC citizens in LDC locations have the lowest (6.0 and 3.6 years, respectively). Respondents in middle-income countries report the shortest

TABLE

Year
NFE

Mea.
Me.
Me.
Ran.
S.D.

TABLE

Year
NFE
--
Me
Me
Me
Ran
S.

TABLE 95: YEARS OF NON-FORMAL EDUCATION EXPERIENCE BY CITIZENSHIP AND LOCATION OF WORK

Years in NFE	I LDC/LDC (n=157)	II DC/LDC (n=102)	III LDC/DC (n=14)	IV DC/DC (n=165)
Mean	7.3	6.0	6.1	9.9
Median	5.3	3.6	4.2	8.1
Mode	3.0	2.0	4.0	10.0
Range	30.0	40.0	20.0	32.0
S.D.	6.0	7.2	5.7	7.5

TABLE 96: YEARS OF NON-FORMAL EDUCATION EXPERIENCE BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Years in NFE	V Low-Inc (n=91)	VI Mid-Inc (n=169)	VII Indust (n=178)
Mean	7.4	6.5	9.6
Median	5.1	4.4	7.9
Mode	4.0	2.0	10.0
Range	39.0	30.0	32.0
S.D.	7.2	6.1	7.4

average period of NFE experience (6.5 and 4.4 years, respectively).

Clustering the data on NFE experience into the three categories previously described, by citizenship and location of work, Table 97 reveals that DC citizens in DC locations again account for the greatest portion of the senior NFE career category. DC citizens in LDC locations and LDC citizens in DC locations are greatly over-represented in the pre-professional NFE activities category, also similar to the pattern regarding clustered development experience.

Table 98, focusing on NFE experience clusters by location according to basic development indicators, shows that personnel in middle-income countries are considerably over-represented in the pre-professional NFE activities category, with persons in low-income countries slightly over-represented and those in industrialized countries under-represented.

Comparing Table 98 with Table 94, it is noted that for the respondents in aggregate, pluralities are found at the pre-professional activities level in non-formal education (48.6%) and at the junior career level in development (47.8%). This would seem to relate to the fairly recent (since the early 1970s) attention given to non-formal

TABLE

Clus
NFE

0-4 y
5-14
15 y

TABLE

Clus
NFE

0-4 y
5-14
15 y

Chi-

TABLE 97: NON-FORMAL EDUCATION EXPERIENCE CLUSTERS BY CITIZENSHIP AND LOCATION OF WORK

Clusters, NFE Exper	I LDC/LDC (n=179)	II DC/LDC (n=115)	III LDC/DC (n=20)	IV DC/DC (n=196)	SUM I-IV (n=510)
	n %	n %	n %	n %	n %
0-4 years	87 48.6	75 65.2	14 70.0	72 36.7	248 48.6
5-14 years	70 39.1	29 25.2	5 25.0	88 44.9	192 37.6
15 years +	22 12.3	11 9.6	1 5.0	36 18.4	70 13.7

TABLE 98: NON-FORMAL EDUCATION EXPERIENCE CLUSTERS BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Clusters, NFE Exper	V Low-Inc (n=103)	VI Mid-Inc (n=192)	VII Indust (n=215)	SUM V-VII (n=510)
	n %	n %	n %	n %
0-4 years	53 51.5	109 56.8	86 40.0	248 48.6
5-14 years	39 37.9	61 31.8	92 42.8	192 37.6
15 years +	11 10.7	22 11.5	37 17.2	70 13.7

Chi-square(4df)=12.67; $P \leq .01$

educ

inv

and

near

(23)

whic

deve

prov

dis

exp

year

comm

the

to

are

rece

orga

repo

non-f

education as a development strategy.

To enable examination of how the respondents became involved in their present activities in non-formal education and development, Table 99 presents frequencies for several means of involvement. The greatest number of respondents (239, 46.9%) indicate that they had experiences in the past which made them want to work in non-formal education and/or development. The chi-squares and significance levels also provided in Table 99 point to the relatively little differentiation among the groupings on this item.

The next greatest number of respondents (221, 43.3%) explain that they had been working in this field for several years. Slightly over a third (190, 37.3%) express a commitment to working with poor people which led them to their work. Exactly a third (170, 33.3%) report being asked to work in this field because they have certain skills that are needed.

Nearly a quarter (119, 23.3%) indicate that they received an assignment in NFE or development from the organization employing them, and almost a fifth (95, 18.6%) report purposively looking for a job in the field of non-formal education and/or development.

TABLL

Mean

Past

led

wor

Work

sev

Comm

pod

Aske

fie

of

Rece

men

wor

Look

in

s =

TABLE 99: EXTENT OF ASSOCIATION BETWEEN MEANS OF INVOLVEMENT IN NFE-DEVELOPMENT ACTIVITIES, AND CITIZENSHIP WITH LOCATION OF WORK, AND LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Means of Invlvment	Total f	Mean %	Groups I-IV		Groups V-VII	
			Chi- Square	p	Chi- Square	p
Past experiences led to NFE-Dev work desire	239	46.9	1.29	.73	1.81	.40
Working in field several years	221	43.3	4.39	.22	4.96	.08 s
Committed to help poor	190	37.3	16.01	.00 s	13.92	.00 s
Asked to work in field because of skills	170	33.3	1.42	.70	.94	.63
Received sssignment from org working for	119	23.3	10.54	.01 s	7.27	.03 s
Looked for job in field	95	18.6	11.40	.01 s	.42	.81

s = significant at least at .08 level, with 3 d.f. for Groups I-IV and 2 d.f. for Groups V-VII

cu

di

ci

co

sp

ci

le

ti

f

b

m

d

r

Table 100 permits closer examination of the means to current work involvement that are significantly differentiated when considering the respondents by citizenship and location of work. Reference to a personal commitment to helping the poor is much more frequent among specialists in developing countries, both LDC and DC citizens, and much less frequent among DC citizens in DC locations. LDC citizens in LDC locations are much more apt to indicate receiving an assignment in NFE or development from the organization which employs them. DC citizens in both LDC and DC locations are above the mean in their mention of actually looking for a job in the field of NFE or development, while LDC citizens are below the mean in this regard.

Table 101 presents data on the means of involvement significantly differentiated by location according to basic development indicators. Here, those in industrialized countries are over-represented in their explanation that they have been working in the field several years. This does correspond with this grouping's highest mean and median length of experience in the fields of both development and non-formal education. Concerning the explanations of commitment to helping the poor, and assignment from the employing organization, a pattern is detected of greater

TABLE

Means
Inv.

Comm
hel
Assi
from
org
Look
job
fie

TABLE

Mean
Inv

Work
Sev
Comm
hel
Assi
emp

TABLE 100: SELECTED MEANS OF INVOLVEMENT IN
NFE-DEVELOPMENT ACTIVITIES BY CITIZENSHIP AND
LOCATION OF WORK

Means of Invlvment	I LDC/LDC (n=179)		II DC/LDC (n=115)		III LDC/DC (n=20)		IV DC/DC (n=196)		SUM I-IV (n=510)	
	n	%	n	%	n	%	n	%	n	%
Committed to help poor	81	45.3	49	42.6	8	40.0	52	26.5	190	37.3
Assignment from employg org	56	31.3	25	21.7	4	20.0	34	17.3	119	23.3
Looked for job in field	22	12.3	31	27.0	2	10.0	40	20.4	95	18.6

TABLE 101: SELECTED MEANS OF INVOLVEMENT IN
NFE-DEVELOPMENT ACTIVITIES BY LOCATION
ACCORDING TO BASIC DEVELOPMENT INDICATORS

Means of Involvement	V Low-Inc (n=103)		VI Mid-Inc (n=192)		VII Indust (n=215)		SUM V-VII (n=510)	
	n	%	n	%	n	%	n	%
Working in field								
Several years	43	41.7	73	38.0	105	48.8	221	43.3
Committed to help poor	46	44.7	84	43.8	60	27.9	190	37.3
Assignment from employing org	31	30.1	50	26.0	38	17.7	119	23.3

tendency to mention these factors by lower income locations. This seems reasonable in view of the greater preponderance of poor by lesser national income level and the likelihood that employing organizations would be increasingly involved in the work of non-formal education and development in lower income areas.

Regarding their present employment situation, 437 (87.8%) of those responding indicated being employed for wages or salary with an organization. This item was significantly differentiated ($p=.00$) by citizenship and location of work but not by location according to basic development indicators ($p=.56$).

Table 102, which presents data on salaried employment by citizenship and location of work, reveals considerable under-representation for DC citizens in LDC locations (78.8%) and for LDC citizens in DC locations (78.9%). The latter grouping was previously noted to have many students among its members, and the former grouping may be found to contain a fair number of development volunteers in its ranks.

Tables 103 and 104 detail the kinds of organizations through which the respondents are employed for wages or salary, the former table by citizenship and location of

TABLE 102: EMPLOYMENT FOR WAGES OR SALARY WITH AN ORGANIZATION, BY CITIZENSHIP AND LOCATION OF WORK

Salaried Employment	I LDC/LDC (n=174)		II DC/LDC (n=113)		III LDC/DC (n=19)		IV DC/DC (n=192)		SUM I-IV (n=498)	
	n	%	n	%	n	%	n	%	n	%
Yes	161	92.5	89	78.8	15	78.9	172	89.6	437	87.8
No	13	7.5	24	21.2	4	21.1	20	10.4	61	12.2
Chi-square(3df)=14.16;P<.00										

TABLE 103: KIND OF EMPLOYING ORGANIZATION BY CITIZENSHIP AND LOCATION OF WORK

Kind Orgzn	I LDC/LDC (n=167)		II DC/LDC (n=94)		III LDC/DC (n=16)		IV DC/DC (n=179)		SUM I-IV (n=456)	
	n	%	n	%	n	%	n	%	n	%
Academic/ Training	24	14.4	13	13.8	3	18.8	70	39.1	110	24.1
Government: National	48	28.7	30	31.9	7	43.8	22	12.3	107	23.5
PVO	26	15.6	14	14.9	0	0	15	8.4	55	12.1
Government: Internat'l	16	9.6	15	16.0	4	25.0	5	2.8	40	8.8
Religious	9	5.4	9	9.6	0	0	6	3.4	24	5.3
Government: Local	11	6.6	0	0	0	0	10	5.6	21	4.6
Other Public Organiztn	1	0.6	0	0	0	0	13	7.3	14	3.1
Foundation	5	3.0	4	4.3	0	0	3	1.7	12	2.6
Business, In- dus, Com	0	0	2	2.1	0	0	2	1.1	4	0.9
Other	27	16.2	7	7.4	2	12.5	33	18.4	69	15.1

**TABLE 104: KIND OF EMPLOYING ORGANIZATION BY LOCATION
ACCORDING TO BASIC DEVELOPMENT INDICATORS**

Kind Orgzn	V Low-Inc (n=91)		VI Mid-Inc (n=170)		VII Indust (n=195)		SUM V-VII (n=456)	
	n	%	n	%	n	%	n	%
Academic/ Training	11	12.1	26	15.3	73	37.4	110	24.1
Government: National	28	30.8	50	29.4	29	14.9	107	23.5
PVO	20	22.0	20	11.8	15	7.7	55	12.1
Government: International	9	9.9	22	12.9	9	4.6	40	8.8
Religious	8	8.8	10	5.9	6	3.1	24	5.3
Government: Local	2	2.2	9	5.3	10	5.1	21	4.6
Other Public Organization	1	1.1	0	0	13	6.7	14	3.1
Foundation	6	6.6	3	1.8	3	1.5	12	2.6
Business, Indus- try, Com	1	1.1	1	0.6	2	1.0	4	0.9
Other	5	5.5	29	17.1	35	17.9	69	15.1

Chi-square(18df)=88.06;P<.0000

work, and the latter by location according to basic development indicators. Academic or training institutions, and national government organizations or agencies, are found to account for nearly half of the employing sponsors (110, 24.1% and 107, 23.5%, respectively). These are followed by private, voluntary organizations (55, 12.1%); international government organizations (40, 8.8%); religious organizations (24, 5.3%); local government organizations (21, 4.6%); other public organizations (14, 3.1%); foundations (12, 2.6%); and business, industry, or commerce (4, 0.9%).

With reference to Table 103, DC citizens in DC locations are noteworthy in their over-representation in academic or training institutions, and their under-representation in national and international governmental organizations and in private, voluntary organizations. Both LDC and DC citizens in LDC locations are found to be under-represented in academic or training institutions, and over-represented in national government organizations and in private voluntary organizations. DC citizens in LDC locations and LDC citizens in DC locations show above-mean representation in international governmental organizations.

With reference to Table 104, depicting kind of employing organization by location according to basic

development indicators, further detail emerges. Higher income location is increasingly associated with affiliation with academic or training institutions. At the same time, lower income location is increasingly associated with affiliation with national governmental organizations, private voluntary organizations, and religious organizations.

Figure 15 graphically illustrates these patterns of affiliation, for each of the seven groupings, for the principal kinds of employing organizations.

Asked whether it is through the above described employing organizations that they are involved in non-formal education and/or development, 93.6 percent (422) of those responding reply affirmatively. Replies to this item are not significantly differentiated by citizenship with location of work ($p=.76$), nor by location according to basic development indicators ($p=.29$).

Fifty-seven (12.8%) of those responding indicate that they also have a second paid employment. Table 105, which provides data on this item by citizenship and location of work, shows below-mean representation by DC citizens in LDC locations and above-mean representation by DC citizens in DC locations. Considering second paid employment by location

FIGURE 15. SELECTED KINDS OF EMPLOYING ORGS BY CITSHIP
& LOC OF WORK, & BY LOC ACCORD TO BASIC DEV INDICATORS

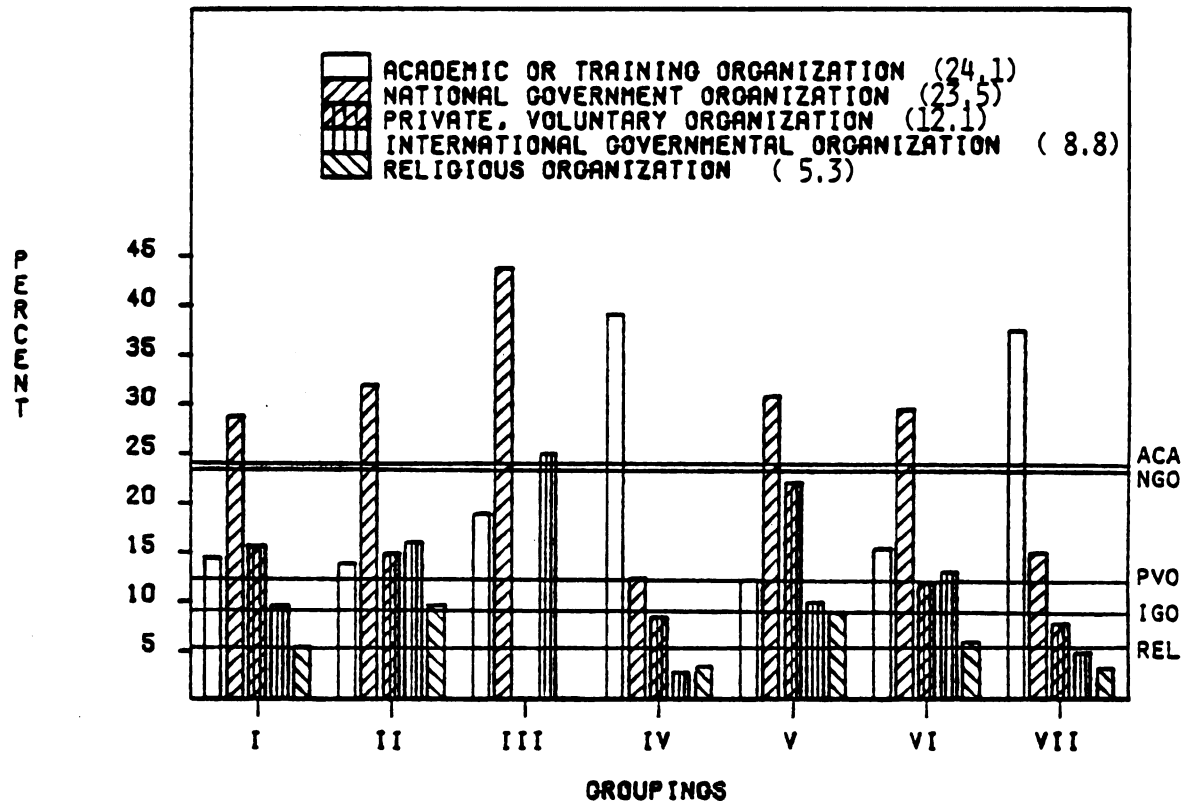


TABLE 105: SECOND PAID EMPLOYMENT BY CITIZENSHIP AND LOCATION OF WORK

Second Pd Employment	I LDC/LDC (n=160)	II DC/LDC (n=94)	III LDC/DC (n=16)	IV DC/DC (n=175)	SUM I-IV (n=445)
	n %	n %	n %	n %	n %
Yes	19 11.9	4 4.3	2 12.5	34 18.3	57 12.8
No	141 88.1	90 95.7	14 87.5	143 81.7	388 87.2

Chi-square(3df)=10.98;P<.01

TABLE 106: SECOND PAID EMPLOYMENT BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Second Paid Employment	V Low-Inc (n=89)	VI Mid-Inc (n=165)	VII Indust (n=191)	SUM V-VII (n=445)
	n %	n %	n %	n %
Yes	7 7.9	16 9.7	34 17.8	57 12.8
No	82 92.1	149 90.3	157 82.2	388 87.2

Chi-square(2df)=7.64;P<.02

according to basic development indicators, Table 106 reveals increasing tendency toward second paid employment by higher income location.

Academic or training institutions and national government organizations constitute 50 percent of the kinds of organizations through which the respondents have a second paid employment, as they do concerning primary paid employment. Because only 62 individuals provide detail for this item, expanded discussion and comparative analysis of the groupings is not warranted. Furthermore, just 45 individuals indicate that it is in connection with this second organization that they are involved in non-formal education and/or development.

When queried, however, whether they are working as a volunteer for an organization involved in non-formal education and/or development, 24.3 percent (116) of those responding reply positively. Replies to this item are not significantly distinguished by citizenship with location of work ($p=.44$), nor by location according to basic development indicators ($p=.77$), meaning that development volunteerism is similarly common among all seven groupings.

The kinds of organizations through which the subjects engage in volunteer work in NFE or development are most

often academic or training institutions (34.8%), followed by national government organizations (20.9%) and religious organizations (12.2%). Table 107 enables detail on kind of organizational affiliation by citizenship and location of work. Most noteworthy in this regard is the great over-representation (64.5%) of DC citizens in LDC locations as volunteers affiliated with national government organizations. The United States Peace Corps accounts for most of these organizational affiliations. DC citizens in LDC locations are under-represented as volunteers affiliated with private voluntary organizations. Correspondingly, LDC citizens in LDC locations and DC citizens in DC locations are over-represented as volunteers with private voluntary organizations, and under-represented as volunteers with national governmental organizations.

Table 108 provides detail on organizational affiliation for voluntary work, by location according to basic development indicators. Observed here is a clear pattern of greater association with private voluntary organizations by higher income location. Concerning national governmental organizations, development intermediaries in middle-income countries are found to comprise most of this type (41.3%) and persons in low-income countries the remainder. This suggests that most of the U.S. Peace Corps volunteers in contact with the Non-Formal Education Information Center and

**TABLE 107: KIND OF ORGANIZATION FOR WHICH VOLUNTEER WORK
PERFORMED, BY CITIZENSHIP AND LOCATION OF WORK**

Kind of Organiztn	I LDC/LDC (n=35)		II DC/LDC (n=31)		III LDC/DC (n=5)		IV DC/DC (n=44)		SUM I-IV (n=115)	
	n	%	n	%	n	%	n	%	n	%
PVO	15	42.9	3	9.7	2	40.0	20	45.5	40	34.8
Government:										
National	4	11.4	20	64.5	0	0	0	0	24	20.9
Religious	3	8.6	4	12.9	1	20.0	6	13.6	14	12.2
Government:										
Local	2	5.7	0	0	0	0	1	2.3	3	2.6
Academic/ Training	1	2.9	0	0	0	0	2	4.5	3	2.6
Government:										
Internat'l	0	0	0	0	0	0	2	4.5	2	1.7
Other Public										
Organiztn	1	2.9	0	0	0	0	1	2.3	2	1.7
Foundation	1	2.9	0	0	1	20.0	0	0	2	1.7
Business, In-										
dustry, Com	0	0	0	0	0	0	0	0	0	0
Other	8	22.9	4	12.9	1	20.0	12	27.3	25	21.7

TABLE 108: KIND OF ORGANIZATION FOR WHICH VOLUNTEER WORK
PERFORMED BY LOCATION ACCORDING TO BASIC
DEVELOPMENT INDICATORS

Kind of Or- ganization	V Low-Inc (n=20)		VI Mid-Inc (n=46)		VII Indust (n=49)		SUM V-VII (n=115)	
	n	%	n	%	n	%	n	%
PVO	10	5.0	8	17.4	22	44.9	40	34.8
Government:								
National	5	25.0	19	41.3	0	0	24	20.9
Religious	0	0	7	15.2	7	14.3	14	12.2
Government:								
Local	0	0	2	4.3	1	2.0	3	2.6
Academic/ Training	0	0	1	2.2	2	4.1	3	2.6
Government:								
Internat'l	0	0	0	0	2	4.1	2	1.7
Other Public								
Organization	1	5.0	0	0	1	2.0	2	1.7
Foundation	0	0	1	2.2	1	2.0	2	1.7
Business, Indus- try, Com	0	0	0	0	0	0	0	0
Other	4	20.0	8	17.4	13	26.5	25	21.7

responding to this survey may be located in the middle-income countries rather than in the low-income countries. Finally, none of the selected respondents in low-income countries indicates affiliation, in their volunteer development work, with religious organizations.

In addition to their organizational affiliations, 141 respondents (29.9%) report being involved in other activities in non-formal education and/or development independently or outside of the organizations already indicated. Table 109, which displays independent development involvement by citizenship and location of work, indicates substantial below-mean representation by DC citizens in LDC locations. This might be expected, however, considering the large over-representation of this grouping in voluntary, and perhaps full-time, work through national government organizations. Table 110, which provides corresponding data by location according to basic development indicators, points to below-mean representation by personnel in middle-income countries. It was earlier hypothesized that more U.S. Peace Corps volunteers among the selected respondents are located in middle-income rather than in low-income countries. Additional, independent involvement in development activities would not be expected to be labeled as such among these participants since all of the volunteers' development work through Peace Corps, or

TABLE 109: INDEPENDENT INVOLVEMENT IN NFE OR DEVELOPMENT
BY CITIZENSHIP AND LOCATION OF WORK

Indep Dev Activities	I LDC/LDC (n=160)		II DC/LDC (n=110)		III LDC/DC (n=19)		IV DC/DC (n=183)		SUM I-IV (n=472)	
	n	%	n	%	n	%	n	%	n	%
Yes	55	34.4	14	12.7	5	26.3	67	36.6	141	29.9
No	105	65.6	96	87.3	14	73.7	116	63.4	331	70.1

Chi-square(3df)=21.07; $P \leq .00$

TABLE 110: INDEPENDENT INVOLVEMENT IN NFE OR DEVELOPMENT
BY LOCATION ACCORDING TO BASIC DEVELOPMENT
INDICATORS

Indep Dev Activities	V Low-Inc (n=92)		VI Mid-Inc (n=179)		VII Indust (n=201)		SUM V-VII (n=472)	
	n	%	n	%	n	%	n	%
Yes	30	32.6	40	22.3	71	35.3	141	29.9
No	62	67.4	139	77.7	130	64.7	331	70.1

Chi-square(2df)=8.02; $P \leq .02$

similar organizations, would be considered related to their organization-affiliated roles.

Table 111 details the voluntary versus paid nature of the respondents' independent development work by citizenship and location. DC citizens in DC locations show a higher incidence of being paid for their independent development work, while DC citizens in LDC locations have the highest incidence of performing the independent work on a voluntary basis. When considering, in Table 112, corresponding data by location according to basic development indicators, it is apparent that personnel in industrialized countries exhibit greater tendency to be paid for their independent efforts than do those in lower income countries.

To conclude examination of the respondents' development careers, inquiry is made into the position which was held previous to the position(s) currently held. Concerning the kind of organization that previously employed them, most respondents mention academic or training institutions (134, 29.7%), followed by national government organizations (81, 18.0%), thus approximating the pattern of their current employment. Other responses, in order of frequency, are as follows: private voluntary organizations (38, 8.4%), religious organizations (32, 7.1%), local government organizations (31, 6.9%), international government

TABLE 111: WHETHER INDEPENDENT NFE OR DEVELOPMENT WORK ON VOLUNTARY OR PAID BASIS, BY CITIZENSHIP AND LOCATION OF WORK

Paid or Voluntary	I LDC/LDC (n=55)		II DC/LDC (n=15)		III LDC/DC (n=5)		IV DC/DC (n=61)		SUM I-IV (n=136)	
	n	%	n	%	n	%	n	%	n	%
Voluntary	42	76.4	14	93.3	4	80.0	35	57.4	95	69.9
Paid	4	7.3	1	6.7	1	20.0	17	27.9	23	16.9
Vol & Paid	9	16.4	0	0	0	0	9	14.8	18	13.2

TABLE 112: WHETHER INDEPENDENT NFE OR DEVELOPMENT WORK ON VOLUNTARY OR PAID BASIS, BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Paid or Voluntary	V Low-Inc (n=29)		VI Mid-Inc (n=42)		VII Indust (n=65)		SUM V-VII (n=136)	
	n	%	n	%	n	%	n	%
Voluntary	23	79.3	33	78.6	39	60.0	95	69.9
Paid	3	10.3	3	7.1	17	26.2	23	16.9
Vol & Paid	3	10.3	6	14.3	9	13.8	18	13.2

Chi-square(4df)=8.36; $P \leq .08$

organizations (22, 4.9%); business, industry, or commerce (16, 3.5%), other public organizations (8, 1.8%), and foundations (7, 1.6%).

Table 113 offers further detail by citizenship and location of work. Here, LDC citizens in LDC locations are under-represented in previous affiliation with academic or training institutions, while the other groupings are over-represented. LDC citizens are over-represented in national governmental organizations while their DC counterparts are under-represented. Relatively little differentiation is found among the groupings for the other kinds of organizations.

Comparing Tables 103 and 113, the former table showing type of current employing organization, one can observe several patterns. First, about half of the organizational types show a decline in representation among current employing organizations. Academic or training institutions are most notable in this regard (from 29.7% to 24.1%), followed by business, industry, or commerce (3.5% to 0.9%), religious organizations (7.1% to 5.3%), and local government organizations (6.9% to 4.6%). Second, about half of the organizational types show an increase in representation among current employing organizations. National government organizations experienced the greatest increase (from 18.0%

TABLE 113: KIND OF PREVIOUS EMPLOYING ORGANIZATION BY
CITIZENSHIP AND LOCATION OF WORK

Kind Or- ganization	I LDC/LDC (n=160)		II DC/LDC (n=106)		III LDC/DC (n=18)		IV DC/DC (n=167)		SUM I-IV (n=451)	
	n	%	n	%	n	%	n	%	n	%
Academic/ Training	28	18.1	39	36.8	6	33.3	60	35.9	134	29.7
Government:										
National	50	31.3	15	14.2	5	27.8	11	6.6	81	18.0
PVO	13	8.1	8	7.5	1	5.6	16	9.6	38	8.4
Religious	11	6.9	9	8.5	1	5.6	11	6.6	32	7.1
Government:										
Local	15	9.4	5	4.7	1	5.6	10	6.0	31	6.9
Government:										
Internat'l	6	3.7	7	6.6	1	5.6	8	4.8	22	4.9
Business, In- dustry, Com	6	3.7	6	5.7	0	0	4	2.4	16	3.5
Other Public										
Organizatn	2	1.2	2	1.9	0	0	4	2.4	8	1.8
Foundation	3	1.9	1	0.9	0	0	3	1.8	7	1.6
Other	25	15.6	14	13.2	3	16.7	40	24.0	82	18.2

to 23.5%), closely followed by international governmental organizations (4.9% to 8.8%) and private voluntary organizations (8.4% to 12.1%). Other public organizations also experienced a gain (1.8% to 3.1%) as did foundations (1.6% to 2.6%).

The greatest shifts are detected in the grouping of DC citizens in LDC locations among academic or training institutions (from 36.8% to 13.8%), national government organizations (14.2% to 31.9%), and international governmental organizations (6.6% to 16.0%). Given that this grouping has the youngest mean age, this may reflect recent shift from academic study or teaching to professional or volunteer work in developing countries through the subjects' own national governments, through host country governments, or through various international organizations.

Table 114 next presents detail on kind of previous employing organization, by location according to basic development indicators. Industrialized country location tends to be associated with greater affiliation with academic training institutions. On the other hand, developing country location (not greatly distinguished between low-income and middle-income countries) tends to correlate with greater affiliation with national government organizations.

TABLE 114: KIND OF PREVIOUS EMPLOYING ORGANIZATION BY
LOCATION ACCORDING TO BASIC DEVELOPMENT
INDICATORS

Kind of Or- ganization	V Low-Inc (n=96)		VI Mid-Inc (n=171)		VII Indust (n=184)		SUM V-VII (n=451)	
	n	%	n	%	n	%	n	%
Academic/ Training	25	26.0	44	25.7	65	35.3	134	29.7
Government:								
National	24	25.0	41	24.0	16	8.7	81	18.0
PVO	7	7.3	14	8.2	17	9.2	38	8.4
Religious	8	8.3	12	7.0	12	6.5	32	7.1
Government:								
Local	7	7.3	13	7.6	11	6.0	31	6.9
Government:								
Internat'l	5	5.2	8	4.7	9	4.9	22	4.9
Business, Indus-								
try, Com	4	4.2	8	4.7	4	2.2	16	3.5
Other Public								
Organization	1	1.0	3	1.8	4	2.2	8	1.8
Foundation	1	1.0	3	1.8	3	1.6	7	1.6
Other	14	14.6	25	14.6	43	23.4	82	18.2

Comparing Table 104 and 114, the former table showing type of current employing organization, one notes that the greatest shifts are found in the low-income and the middle-income location groupings, particularly among academic or training institutions (from 26.0% and 25.7%, respectively, to 12.1% and 15.3%, respectively) and private voluntary organizations (from 7.3% to 22.0% in low-income countries). National government organizations also experienced about a five percent increase in current organizational affiliation among the subjects in low-income and in middle-income countries.

Asked whether the position previously held involved non-formal education or development, 67.8 percent (299) of the respondents reply affirmatively, suggesting a pattern of continued career involvement in these areas. Responses to this item are not significantly differentiated by citizenship with location of work ($p=.25$), nor by location according to basic development indicators ($p=.55$).

Having completed discussion of the subjects' roles in development, consideration is next given to their use and valuation of affiliation with the Non-Formal Education Information Center and network.

CHAPTER 9

CHARACTERISTICS REGARDING USE AND VALUATION OF THE NFEIC AND NETWORK

This chapter comparatively re-examines seven aspects of the respondents' use and valuation of the Non-Formal Education Information Center and network. These aspects include: nature of contact with the Center, evaluation of Center publications and services vis-a-vis the subjects' development roles, nature of change stimulated by the information received from the Center, nature of the respondents' information interests, extent of information outreach and brokering, intra-network contact, and sense of network collegiality.

Nature of Contact with the NFEIC

The respondents' contact with the Non-Formal Education Information Center is assessed in terms of their means of initial discovery of the Center and network, the extent of their contact with the Center, and the purposes for which communications are directed by the development specialists to the Center.

To consider how the subjects first learned about the NFE Information Center, the specified means of contact are collapsed into two categories labeled "personal" and "impersonal." Personal means of learning about the NFE Information Center are considered to include the following responses:

- from a group or person already in contact with the Center
- personal contact with someone from the NFE Information Center or Michigan State University
- correspondence from the NFE Information Center
- learned about the Center at a national or local conference
- learned about the Center at an international conference

Impersonal means of learning about the NFE Information Center include the following responses:

- read about the publications or services
- saw one of the NFE publications or The NFE Exchange newsletter
- my organization was on the mailing list

When clustered in this fashion, it is found that respondents rely on both types of contacts in nearly equal numbers. When personal versus impersonal means of learning about the Center are examined by citizenship with location

of work, there is little variation among the groupings, except for DC citizens in LDC locations who are under-represented in the category of personal means, and DC citizens in DC locations who are under-represented in the category of impersonal means. There is also relatively little variation among the groupings by location according to basic development indicators. Development specialists in industrialized countries are slightly over-represented in the personal means category while under-represented in the impersonal category.

It is perhaps not surprising that development specialists in DCs would have somewhat greater occasion to learn about the U.S.-based NFE Information Center through personal means, than would their more geographically and professionally isolated counterparts in LDCs.

In order to assess the extent of initiation of communication with the NFE Information Center, the respondents were queried as to whether they have ever written or called the the Center. Most of the subjects (321, 63.9%) reply affirmatively.

Table 115, which provides the disaggregation of responses by citizenship and location of work, reveals much higher than mean communication with the Center on the part

TABLE 115: WHETHER COMMUNICATION DIRECTED TO THE NFEIC BY
CITIZENSHIP AND LOCATION OF WORK

Communic. to NFEIC	I LDC/LDC (n=176)	II DC/LDC (n=112)	III LDC/DC (n=19)	IV DC/DC (n=195)	SUM I-IV (n=502)
	n %	n %	n %	n %	n %
Yes	133 75.6	61 54.5	11 57.9	116 59.5	321 63.9
No	43 24.4	51 45.5	8 42.1	79 40.5	181 36.1

Chi-square(3df)=16.66; $P \leq .00$

TABLE 116: WHETHER COMMUNICATION DIRECTED TO THE NFEIC BY
LOCATION ACCORDING TO BASIC DEVELOPMENT
INDICATORS

Communication to NFEIC	V Low-Inc (n=100)	VI Mid-Inc (n=189)	VII Indust (n=213)	Sum V-VII (n=502)
	n %	n %	n %	n %
Yes	71 71.0	124 65.6	126 59.2	321 63.9
No	29 29.0	65 34.4	87 40.8	181 36.1

Chi-square(2df)=4.51; $P \leq .11$

of LDC citizens in LDC locations. Table 116, presenting responses by location according to basic development indicators, shows the interesting pattern of increasing initiation of communication with the Center by lower income location. The higher activity rate of personnel in developing countries, especially those in low-income countries, tentatively suggests their greater reliance on the services and supports of development information exchange networks in performance of their development roles.

Considering the frequency of communications to the NFE Information Center, it is found that about half of the selected respondents report writing or calling seldom -- one or two times (132, 52.2%), while a large number communicate often -- from three to eight times (101, 39.9%), and a few communicate very often -- nine or more times (20, 7.9%).

Table 117 provides data on frequency of communications by citizenship and location of work. It is noted that DC citizens in LDC locations have the greatest incidence of communicating with the Center one or two times. LDC citizens in LDC locations are most numerous among the groupings communicating with the Center often (three to eight times). DC citizens in DC locations are over-represented among those communicating nine or more times.

TABLE 117: FREQUENCY OF COMMUNICATION WITH THE NFEIC BY CITIZENSHIP AND LOCATION OF WORK

Frequency of Commun.	I LDC/LDC (n=100)	II DC/LDC (n=55)	III LDC/DC (n=7)	IV DC/DC (n=91)	SUM I-IV (n=253)
	n %	n %	n %	n %	n %
Seldom	54 54.0	34 61.8	4 57.1	40 44.0	132 52.2
Often	44 44.0	17 30.9	2 28.6	38 41.8	101 39.9
Very Often	2 2.0	4 7.3	1 14.3	13 14.3	20 7.9

TABLE 118: FREQUENCY OF COMMUNICATION WITH THE NFEIC BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Frequency of Commun.	V Low-Inc (n=53)	VI Mid-Inc (n=103)	VII Indust (n=97)	SUM V-VII (n=253)
	n %	n %	n %	n %
Seldom	24 45.3	65 63.1	43 44.3	132 52.2
Often	27 50.9	34 33.0	40 41.2	101 39.9
Very Often	2 3.8	4 3.9	14 14.1	20 7.9

Chi-square (4df)=15.35; $P \leq .004$

Table 118 shows corresponding data by location according to basic development indicators. Here it can be seen that development personnel working in low-income countries are over-represented in the "often" category of three to eight contacts with the Center, while personnel in middle-income countries are over-represented in the "seldom" category of one or two contacts. Given the over-representation of DC citizens in LDC locations in the "seldom" category, it is hypothesized that DC citizens in middle-income countries (for example, Peace Corps volunteers) account for an influential share of those contacting the Center only once or twice.

Consideration is next given to the reasons for which the selected development personnel have communicated with the NFE Information Center. As revealed in Table 119, the largest pluralities of respondents indicate contacting the Center in order to ask for Center publications, most particularly The NFE Exchange periodical (41.8%). More than a quarter (28.8%) report asking for a document listed in the Center newsletter, with 20.0 percent sending information about their own organization or program, and 19.8 percent asking for materials on a particular topic. About one in ten responding mention asking about training in non-formal education, seeking professional encouragement in their work,

TABLE 119: EXTENT OF ASSOCIATION BETWEEN REASONS FOR COMMUNICATING WITH THE NFEIC, AND CITIZENSHIP WITH LOCATION OF WORK, AND LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Reasons for Communicating	Total f	Mean %	Groups I-IV		Groups V-VII	
			Chi-Square	p	Chi-Square	p
To ask for NFE Exchange newsletter	213	41.8	2.22	.53	7.27	.03 s
To ask for other MSU NFE pubs	209	41.1	9.02	.02 s	6.34	.04 s
To ask for doc listed in Center news	147	28.8	13.19	.00 s	2.62	.27
To send info about own org or prog	102	20.0	7.92	.05 s	6.32	.04 s
To ask for material on partic topic	101	19.8	3.45	.33	.65	.72
To ask about MSU training in NFE	52	10.2	13.29	.00 s	15.25	.00 s
To get professional encouragement	49	9.6	22.63	.00 s	11.49	.00 s
To request Center pubs for others	49	9.6	14.16	.00 s	12.56	.00 s
To ask about groups in field of intrst	28	5.5	.03	.998	.06	.97
To ask for inclusion of item of newslet	25	4.9	10.32	.02 s	4.16	.12

s = significant at least at .05 level, with 3 d.f. for Groups I-IV and 2 d.f. for Groups V-VII

and requesting Center publications for someone else. Other reasons indicated are to ask about other groups working in one's field of interest (5.5%), and to ask that something be included in The NFE Exchange newsletter (4.9%).

Table 119 also contains chi-square values and significance levels for each of the reasons cited. Most of the indicated reasons for communicating with the Center are significantly differentiated for Groupings I-IV, based on citizenship and location of work, and for Groupings V-VII, based on location according to basic development indicators.

Table 120 enables closer examination of the reasons significantly distinguished by citizenship and location of work. Concerning the requesting of NFE publications other than The NFE Exchange, LDC citizens in LDC locations are notably over-represented, while DC citizens in LDC locations are found to be comparatively under-represented in both the requesting of particular documents and in sending information about their own development programs. LDC citizens in LDC locations are also over-represented among communications to ask about training in NFE, and to get professional encouragement in their work. Finally, DC citizens in DC locations show the greatest incidence of making contacts on behalf of others.

TABLE 120: SELECTED REASONS FOR COMMUNICATING WITH THE
NFEIC, BY CITIZENSHIP AND LOCATION OF WORK

Reasons for Commun	I LDC/LDC (n=179)		II DC/LDC (n=115)		III LDC/DC (n=20)		IV DC/DC (n=196)		SUM I-IV (n=510)	
	n	%	n	%	n	%	n	%	n	%
To ask for other MSU NFE pubs	88	49.4	39	33.9	6	30.0	76	38.8	209	41.1
To ask for doc listed in newslet	59	33.0	18	15.7	8	40.0	62	31.6	147	28.8
To send info about own org, prog	43	24.0	14	12.2	2	10.0	43	21.9	102	20.0
To ask about MSU train- ing in NFE	30	16.8	8	7.0	2	10.0	12	6.1	52	10.2
To get pro- fessional encourgmt	32	17.9	7	6.1	2	10.0	8	4.1	49	9.6
To request Center pubs for others	10	5.6	7	6.1	1	5.0	31	15.8	49	9.6
To ask for incl of item in newslet	10	5.6	0	0	0	0	15	7.7	25	4.9

Examining, in Table 121, reasons significantly differentiated by location according to basic development indicators, one detects a pattern. Lower income location is increasingly associated with tendency to communicate with the NFE Information Center for the following reasons: to ask for The NFE Exchange, to ask for other NFE publications, to ask about training in NFE, and to get professional encouragement. Personnel in low-income countries are greatly over-represented in identifying the reasons just mentioned. The variation between those in middle-income and in industrialized countries tends to be less strong than that between persons in low-income and in middle-income countries. The table also reveals that specialists in low-income countries demonstrate much higher than mean contribution of information about their own NFE programs or organizations. Lastly, it is seen that higher income location is increasingly associated with the requesting of Center publications on behalf of others.

In sum, concerning the nature of the development specialists' contact with the NFE information exchange network, most (63.9%) do initiate communication with the Center, many quite often (47.8% of these making contact three or more times). LDC citizens in LDC locations initiate the most contacts, and the development specialists

TABLE 121: SELECTED REASONS FOR COMMUNICATING WITH THE NFEIC, BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Reasons for Communicating	V Low-Inc (n=103)		VI Mid-Inc (n=192)		VII Indust (n=215)		SUM V-VII (n=510)	
	n	%	n	%	n	%	n	%
To ask for NFE Exch newslet	55	53.4	76	39.6	82	38.1	213	41.8
To ask for other MSU NFE pubs	53	52.0	75	39.1	81	37.7	209	41.1
To send info about own org or program	28	27.2	29	15.1	45	20.9	102	20.0
To ask about MSU traing in NFE	21	20.4	17	8.9	14	6.5	52	10.2
To get profes-sional encour-agement	16	15.5	23	12.0	10	4.7	49	9.6
To request Center pubs for others	4	3.9	13	6.8	32	14.9	49	9.6

are increasingly likely to make contact as their work is in lower income locations. Personnel in middle-income countries are most inclined to have contacted the NFEIC once or twice (mostly owing to the influence of DC citizens), and those in low-income countries three to eight times. While a plurality of those in industrialized countries have made contacts once or twice, this grouping is most over-represented in the category of nine or more times.

The selected respondents are most inclined to initiate contact to solicit Center publications, particularly LDC citizens in LDC locations and personnel in low-income countries. In fact, the development specialists in low-income countries are most inclined to name multiple reasons, and in greater frequency, for communicating with the NFE Information Center. Those in industrialized countries, on the other hand, tend to identify fewer reasons and in less frequency. Three reasons for contacting the Center sharply differentiate the groupings. Regarding two of these, to ask about NFE training and to get professional encouragement, LDC citizens in LDC locations and personnel in low-income countries are the most over-represented. Regarding the third reason, to request Center publications for others, DC citizens in DC locations and personnel in industrialized countries prove the greatest intermediaries.

The greater incidence and frequency of contacting the NFEIC on the part of LDC citizens in LDC locations, together with their greater tendency to do so to seek professional encouragement in their development work, points to a unique dependency on the Center and exchange network. It appears that this grouping is in greatest need of frequent and multiple supports, perhaps because of their relative isolation from other such resource networks. Since incidence, frequency, and range of reasons for contacting the Center rises as income location lowers, this notion is bolstered. Meanwhile, DC citizens in DC locations, who appear least directly dependent on the NFEIC, are most active in extending the services of the information exchange network to others.

Evaluation of Center Publications and Services vis-a-vis Respondents' Development Roles

Assessments of the selected development specialists are comparatively examined with regard to perceived relevance of NFEIC responses, overall usefulness of Center services to the subjects' work in non-formal education and development, usefulness of The NFE Exchange, and importance of the NFEIC as a source for ideas, contacts, and resources about both development and non-formal education.

To enable assessment of differential judgments of relevance of NFEIC responses, Table 122 presents respondent evaluations by citizenship and location of work. While 69.0 percent of those replying judge the Center's responses as "very satisfactory," DC citizens in both LDC and DC locations are above the mean. Of the 29.5 percent judging Center responses to be "satisfactory," LDC citizens in both LDC and DC locations are above the mean, while below the mean in judging Center responses to be "very satisfactory."

Table 123 shows corresponding data on this item by location according to basic development indicators. Detected here is an increasing tendency to judge Center responses "very satisfactory" by higher income location, with increasing tendency to evaluate responses as "satisfactory" by lower income locations.

Several explanations might be put forth for this pattern. Central, perhaps, would be those pointing to the complex, inter-related, and situation-specific nature of development information needs of specialists in low-income countries, especially of those who may primarily be educators and know little, for example, about agriculture or planning rural development, and the less than optimal ability of the NFE Information Center to meet all of these.

TABLE 122: RELEVANCE OF NFEIC RESPONSES BY CITIZENSHIP AND LOCATION OF WORK

Relevance of Responses	I LDC/LDC (n=134)	II DC/LDC (n=64)	III LDC/DC (n=13)	IV DC/DC (n=118)	SUM I-IV (n=329)
	n %	n %	n %	n %	n %
Very satis- factory	81 60.4	45 70.3	8 61.5	93 78.8	227 69.0
Satisfactory	48 35.8	19 29.7	5 38.5	25 21.2	97 29.5
Not satis- factory	5 3.7	0 0	0 0	0 0	5 1.5

TABLE 123: RELEVANCE OF NFEIC RESPONSES BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Relevance of Responses	V Low-Inc (n=71)	VI Mid-Inc (n=128)	VII Indust (n=130)	SUM V-VII (n=329)
	n %	n %	n %	n %
Very satis- factory	41 57.7	86 67.2	100 76.9	227 69.0
Satisfactory	30 42.3	37 28.9	30 23.1	97 29.5
Not satis- factory	0 0	5 3.9	0 0	5 1.5

Chi-square(4df)=16.15; $P \leq .003$

On the other hand, one might have expected development professionals in industrialized countries to be more critical of responses, given the array of information sources to tap in more affluent countries.

Those affiliated with the NFE Information Center and network were further queried as to how useful, overall, the varied Center services have been to them in their work in non-formal education and development. Two-fifths (39.3%) of the selected respondents indicate "very useful," 58.9 percent "useful," 1.8 percent "not useful," and 9.2 percent "no basis for response."

Table 124 enables examination of the assessments of those respondents, by citizenship and location of work, indicating other than "no basis for response." It demonstrates that LDC citizens in both LDCs and DCs are greatly over-represented in the "very useful" category. At the same time, DC citizens in both LDCs and DCs are comparatively under-represented. In fact, 48.8 percent of the LDC citizens in LDC locations judge the Center's services "very useful" to their work in development, while only 29.0 percent of DC citizens in LDC locations concur. The reverse holds for the "useful" category, with DC citizens over-represented and LDC citizens under-represented.

TABLE 124: USEFULNESS OF NFEIC TO RESPONDENTS' WORK BY CITIZENSHIP AND LOCATION OF WORK

Usefulness of NFEIC	I LDC/LDC (n=170)	II DC/LDC (n=93)	III LDC/DC (n=18)	IV DC/DC (n=164)	SUM I-IV (n=445)
	n %	n %	n %	n %	n %
Very Useful	83 48.8	27 29.0	11 61.1	54 32.9	175 39.3
Useful	86 50.6	64 68.8	6 33.3	106 64.6	262 58.9
Not Useful	1 0.6	2 2.2	1 5.6	4 2.4	8 1.8

TABLE 125: USEFULNESS OF THE NFE EXCHANGE TO RESPONDENTS BY CITIZENSHIP AND LOCATION OF WORK

Usefulness of NFE Exc.	I LDC/LDC (n=172)	II DC/LDC (n=105)	III LDC/DC (n=19)	IV DC/DC (n=189)	SUM I-IV (n=485)
	n %	n %	n %	n %	n %
Very Useful	100 58.1	32 30.5	13 68.4	68 36.0	213 43.9
Useful	70 40.7	67 63.8	6 31.6	112 59.3	255 52.6
Not Useful	2 1.2	6 5.7	0 0	9 4.8	17 3.5

Chi-square(6df)=33.56; $P \leq .00$

These findings, regarding the judged overall usefulness of NFEIC services to the respondents' work in development, contrast somewhat with those regarding perceived relevance of NFEIC responses. In the case of the former, LDC citizens rate the Center much higher than do their DC counterparts. In the case of the latter, DC citizens rate the Center higher than do LDC citizens.

Disaggregating the data on judged overall usefulness of NFEIC services, by location according to basic development indicators, reveals little variation among the groupings ($p=.42$). It is developing country citizens, regardless of location, who most positively assess the contributions of the development information exchange service to their work in development and non-formal education.

Evaluating the overall usefulness of The NFE Exchange newsletter, 43.9 percent of the selected respondents indicate "very useful," 52.6 percent "useful," and 3.5 percent "not useful." Table 125 details responses by citizenship and location of work. LDC citizens in both LDC and DC locations are greatly over-represented in the "very useful" category, while DC citizens in both LDCs and DCs are under-represented. While 58.1 percent of the LDC citizens in LDC locations evaluate The NFE Exchange as "very useful,"

this drops to 30.5 percent for DC citizens in LDC locations. The reverse holds for the "useful" category, with DC citizens above the mean and LDC citizens below the mean.

The pattern of these findings corresponds with that found concerning the evaluation of overall usefulness of NFEIC services. Namely, LDC citizens rate both The NFE Exchange and Center services, generally, more positively than do DC citizens.

Little variation exists, concerning judged usefulness of The NFE Exchange, among the groupings when disaggregated by location according to basic development indicators ($p=.40$). This is again similar to the findings concerning assessment of NFEIC services.

Two additional items conclude consideration of the specialists' evaluation of Center publications and services with respect to their development roles. Regarding the importance of the Center as a source for ideas, contacts, and resources about development, 4.0 percent of the selected respondents regard the NFEIC as "the most important source," 35.5 percent regard it as "one of the most important sources," 48.2 percent indicate "of average importance as a source," 11.3 percent consider it "rarely important as a source," and 1.0 percent say "never important as a source."

Table 126 shows the differentiation of responses for this item by citizenship and location of work. Fifteen of the twenty individuals regarding the NFEIC as their single most important development information source are LDC citizens in LDC locations. Among those who regard the Center as one of the most important development sources, LDC citizens in both LDC and DC locations are greatly over-represented, while DC citizens in LDC and DC locations are under-represented. Among those who judge the NFEIC to be of average importance as a development source, the reverse holds with DC citizens over-represented and LDC citizens under-represented.

A pattern emerges when reviewing, in Table 127, corresponding data by location according to basic development indicators. There is increasing association between lower income location and valuing the NFEIC as one of the most important development sources. Increasing association exists between higher income location and assessing the Center to be of average importance as a source of development information.

Figure 16 visually depicts the relative evaluations of all seven groupings regarding the NFEIC as a development source.

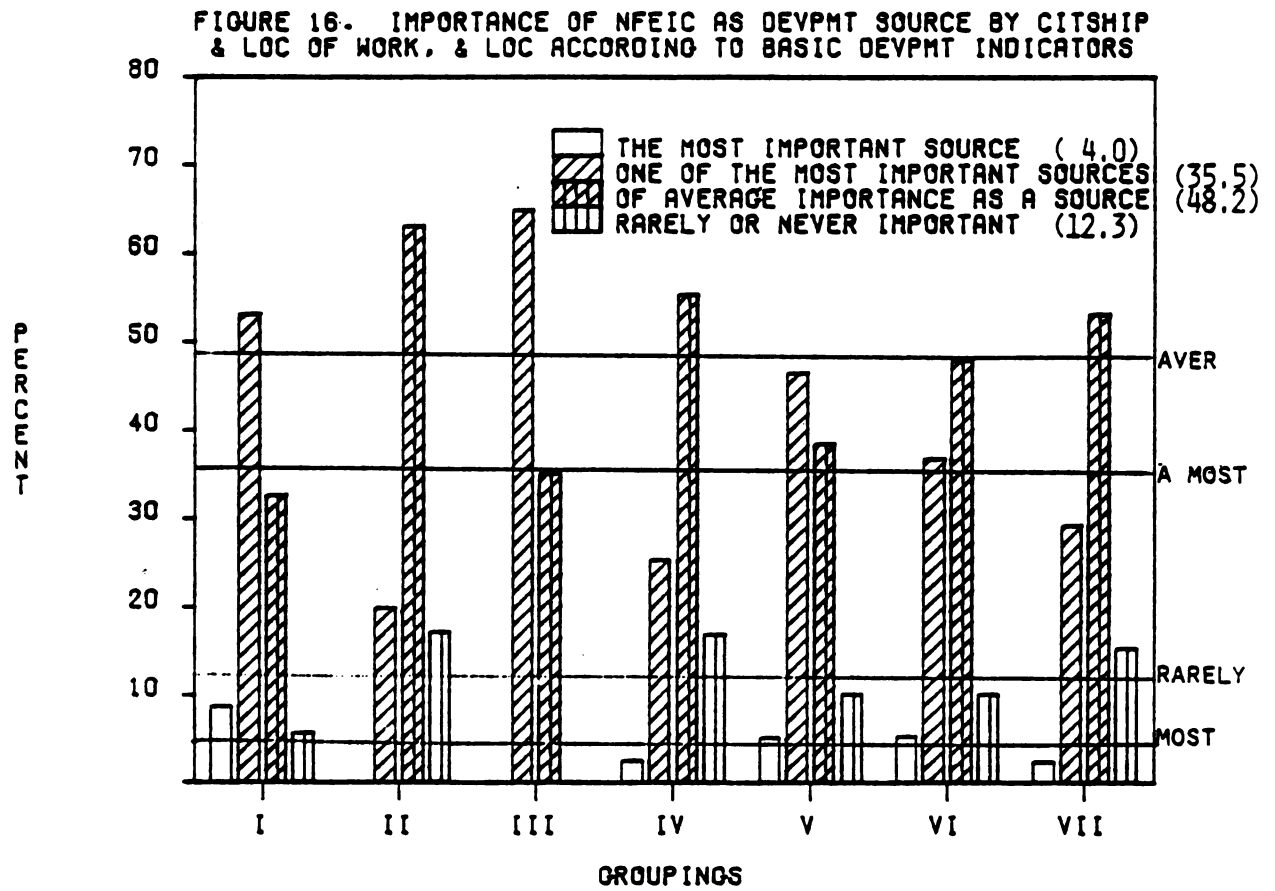
TABLE 126: IMPORTANCE OF THE NFEIC AS DEVELOPMENT SOURCE
BY CITIZENSHIP AND LOCATION OF WORK

Importance I as Dev Src	LDC/LDC (n=175)		II DC/LDC (n=111)		III LDC/DC (n=20)		IV DC/DC (n=190)		SUM I-IV (n=496)	
	n	%	n	%	n	%	n	%	n	%
The Most										
Important	15	8.6	0	0	0	0	5	2.6	20	4.0
One of Most										
Important	93	53.1	22	19.8	13	65.0	48	25.3	176	35.5
Of Average										
Importance	57	32.6	70	63.1	7	35.0	105	55.3	239	48.2
Rarely										
Important	9	5.1	17	15.3	0	0	30	15.8	56	11.3
Never										
Important	1	0.6	2	1.8	0	0	2	1.11	5	1.0

TABLE 127: IMPORTANCE OF THE NFEIC AS DEVELOPMENT SOURCE
BY LOCATION ACCORDING TO BASIC DEVELOPMENT
INDICATORS

Importance as V Dev Source	Low-Inc (n=99)		VI Mid-Inc (n=188)		VII Indust (n=209)		SUM V-VII (n=496)	
	n	%	n	%	n	%	n	%
The Most								
Important	5	5.1	10	5.3	5	2.4	20	4.0
One of Most								
Important	46	46.5	69	36.7	61	29.2	176	35.5
Of Average								
Importance	38	38.4	90	47.9	111	53.1	239	48.2
Rarely								
Important	9	9.1	17	9.0	30	14.4	56	11.3
Never								
Important	1	1.0	2	1.1	2	1.0	5	1.0

Chi-square = 14.24, $p \leq .08$



Finally, regarding the importance of the NFEIC as a source for ideas, contacts, and resources about non-formal education, 11.3 percent of the respondents regard the Center as "the most important source," 39.2 percent judge it "one of the most important sources," 40.1 percent indicate "of average importance as a source," 8.4 percent believe it "rarely important as a source," and 0.9 percent reply "never important as a source."

Table 128 provides data differentiating responses by citizenship and location of work. LDC citizens in LDC locations are the most inclined of any grouping to judge the NFEIC their most important source of information on non-formal education. Among those who regard the Center as one of the most important NFE sources, LDC citizens in both LDC and DC locations are greatly over-represented, while DC citizens in LDC and DC locations are under-represented. Among those who consider the NFEIC to be of average importance as an NFE information source, the reverse applies with DC citizens over-represented and LDC citizens under-represented.

Comparing Table 126 on the judged importance of the NFEIC as a development source, with Table 128 on its importance as an NFE source, it is further observed that

TABLE 128: IMPORTANCE OF THE NFEIC AS NON-FORMAL
EDUCATION SOURCE BY CITIZENSHIP AND LOCATION
OF WORK

Importance I LDC/LDC II DC/LDC III LDC/DC IV DC/DC SUM I-IV as NFE Src (n=157) (n=105) (n=14) (n=165) (n=441)										
	n	%	n	%	n	%	n	%	n	%
The Most										
Important	24	15.3	9	8.6	1	7.1	16	9.7	50	11.3
One of Most										
Important	83	52.9	32	30.5	9	64.3	49	29.7	173	39.2
Of Average										
Importance	42	26.8	49	46.7	3	21.4	83	50.3	177	40.1
Rarely										
Important	8	5.1	13	12.4	1	7.1	15	9.1	37	8.4
Never										
Important	0	0	2	1.9	0	0	2	1.2	4	0.9

Chi-square(12df)=39.65; $P \leq .0001$

slightly greater importance is attached to the latter type: 4.0 percent versus 11.3 percent, respectively, indicate "the most important source;" 35.5 percent versus 39.2 percent indicate "one of the most important sources."

Little variation is found when considering judged importance of the NFEIC as a non-formal education information source, by location according to basic development indicators ($p=.23$).

In sum, concerning the specialists' evaluation of Center publications and services vis-a-vis their development roles, LDC citizens in both LDC and DC locations are consistently higher in their assessments of the overall usefulness of the Center, The NFE Exchange, and the importance of the NFEIC as a source for ideas, resources and contacts about development and non-formal education, than are DC citizens. Lower income location is increasingly associated with higher assessment of the Center as a development source. Only with regard to perceived relevance of NFEIC responses do DC citizens rate the Center higher than their LDC counterparts.

These findings lend further support to the notion that LDC citizens in LDC locations may be relying on the NFE Information Center for a broad range of materials because

they are relatively more isolated in their development roles. Furthermore, their need for a range of development materials may be greater. Two possible explanations suggest themselves. First, LDC citizens in LDC locations are apt to have less access locally to the kinds of development data bases which abound in many of the developed countries. And, second, their development roles are found, in the preceding chapter, to be more varied in terms of the multiple fields in which they are involved concurrently in performing these roles. It is also possible that an attitude exists which assesses materials received from industrialized countries as better than locally available information and knowledge summaries.

Nature of Information-Influenced Change

Also of interest regarding the respondents' use and valuation of the Non-Formal Education Information Center and network is the nature of activities stimulated by the information received from the Center. To assess this, the specialists are asked whether they have ever used the information received from the NFEIC to make changes or to do something new in the education programs with which they are involved. Only 100 (19.9%) of the selected respondents reply negatively. Lack of information-influenced changes is significantly differentiated when considering the

respondents by citizenship and location of work ($p=.05$), but not significantly differentiated when considering them by location according to basic development indicators ($p=.96$).

Table 129 depicts lack of information-influenced activities by citizenship and location of work. DC citizens in LDC locations report an above-mean incidence of no change (28.3%), while LDC citizens in LDC locations indicate less than mean incidence of no change (14.9%).

To permit examination of the types of activities stimulated by information received from the NFEIC, Table 130 provides data on the frequency of mention of each type and on the extent of association between each activity undertaken and the various personnel groupings. At least a quarter of the respondents report using the information received from the Center to suggest a new design or new guidelines for an existing program (30.3%), write a report or position paper (29.1%), use different kinds of training (27.9%), and to propose or plan a new program (25.9%). Eleven percent mention using NFEIC information to begin a new program.

Table 131 gives further detail on the types of information-influenced activities by citizenship and location of work, all significantly differentiated among the

TABLE 129: LACK OF INFORMATION-INFLUENCED CHANGES BY CITIZENSHIP AND LOCATION OF WORK

Inf-influ- enced chng	I LDC/LDC (n=174)	II DC/LDC (n=113)	III LDC/DC (n=20)	IV DC/DC (n=195)	SUM I-IV (n=502)
	n %	n %	n %	n %	n %
No	26 14.9	32 28.3	4 20.0	38 19.5	100 19.9
NR (infer yes)	148 85.1	81 71.7	16 80.0	157 80.5	402 80.1

Chi-square(3df)=7.72; $P \leq .05$

TABLE 130: EXTENT OF ASSOCIATION BETWEEN INFORMATION-INFLUENCED CHANGES AND CITIZENSHIP WITH LOCATION OF WORK, AND LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Type of Change	Total f	Mean %	Groups I-IV Chi- Square	p	Groups V-VII Chi- Square	p
Suggest New Design or Guidelines for Program	152	30.3	29.09	.00 s	13.63	.00 s
Write Report of Position Paper	146	29.1	14.09	.00 s	.57	.75
Use Different Kinds of Training	140	27.9	10.75	.01 s	5.59	.06 s
Propose or Plan New Program	130	25.9	24.47	.00 s	5.63	.06 s
Begin New Program	54	10.8	15.09	.00 s	3.68	.16

s = significant at least at .06 level, with 3 d.f. for Groups I-IV and 2 d.f. for Groups V-VII

TABLE 131: INFORMATION-INFLUENCED CHANGES BY CITIZENSHIP AND LOCATION OF WORK

Type of Change	I LDC/LDC (n=174)		II DC/LDC (n=113)		III LDC/DC (n=20)		IV DC/DC (n=195)		SUM I-IV (n=502)	
	n	%	n	%	n	%	n	%	n	%
Suggest New Design/Guide for Prog	79	45.4	27	23.9	4	20.0	42	21.5	152	30.3
Write Reprt/Pos Paper	58	33.3	21	18.6	11	55.0	56	28.7	146	29.1
Use Diff Kinds of Training	64	36.8	28	24.8	4	20.0	44	22.6	140	27.9
Propose/Plan New Program	67	38.5	17	15.0	6	30.0	40	20.5	130	25.9
Begin New Program	31	17.8	5	4.4	2	10.0	16	8.2	54	10.8

TABLE 132: SELECTED INFORMATION-INFLUENCED CHANGES BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Type of Change	V Low-Inc (n=103)		VI Mid-Inc (n=185)		VII Indust (n=214)		SUM V-VII (n=502)	
	n	%	n	%	n	%	n	%
Suggest New Design or Guidelines for Program	38	36.9	68	36.8	46	21.5	152	30.3
Use Diff Kinds of Training	32	31.1	60	32.4	48	22.4	140	27.9
Propose or Plan New Program	34	33.0	51	27.6	45	21.0	130	25.9

groupings. Noteworthy is the fact that LDC citizens in LDC locations report the greatest incidence of activities or changes for each type considered, while DC citizens in both LDC and DC locations are below the mean in each case.

Table 132 details the three types of activities significantly differentiated at least at the .06 level. With regard to each of these -- suggesting a new design or guidelines for an existing program, using different kinds of training, and planning a new program -- development specialists in low and middle-income countries show higher than mean involvement, while those in industrialized countries indicate less than mean involvement.

In short, LDC citizens in LDC locations are most inclined to use the information received from the Non-Formal Education Information Center to make changes or do something new vis-a-vis their roles as educators. Also, personnel working in lower income countries, including both LDC and DC citizens, show greater incidence of making certain changes -- suggesting a new design, using different training methods, and planning a program -- than do those in industrialized countries. These findings lead to a hypothesis that those in LDCs rather than DCs are more directly involved with development programs, and those so engaged in their home locations, rather than as expatriates,

are most likely to show greater initiative in making changes related to those programs.

Nature of Respondents' Information Interests

The development information interests of those in communication with the NFE Information Center and network are comparatively examined in terms of the kinds of resources they find most useful, the parts of The NFE Exchange they consider most useful, and their topical interests in non-formal education and development.

Inquiry is made as to the kinds of resources the specialists find most useful to help them in their work in non-formal education and/or development. When considering, in Table 133, responses by citizenship and location of work, little differentiation is found among the groupings regarding their first preference, for case studies and project descriptions. DC citizens in LDC locations are greatly over-represented in the second aggregate preference, for practical materials like manuals and guides. LDC citizens in LDC locations are over-represented among those preferring theoretical materials concerning ideas and issues, while DC citizens in LDC locations are greatly under-represented in this regard. DC citizens in DC locations are over-represented among those preferring

TABLE 133: KINDS OF RESOURCES MOST USEFUL FOR NFE AND DEVELOPMENT WORK BY CITIZENSHIP AND LOCATION OF WORK

Kinds of Resources	I LDC/LDC (n=138)		II DC/LDC (n=103)		III LDC/DC (n=15)		IV DC/DC (n=155)		SUM I-IV (n=411)	
	n	%	n	%	n	%	n	%	n	%
Case Studies, Proj Descr	80	58.0	58	56.3	12	80.0	91	58.7	241	58.6
Practical Materials, Manuals	78	56.5	75	72.8	5	33.3	72	46.5	230	56.0
Theoretical Materials, Ideas&Issues	78	56.5	29	28.2	6	40.0	74	47.7	187	45.5
Annotated Bib- liographies	22	15.9	16	15.5	4	26.7	47	30.3	89	21.7

TABLE 134: KINDS OF RESOURCES MOST USEFUL FOR NFE AND DEVELOPMENT WORK BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Kinds of Resources	V Low-Inc (n=86)		VI Mid-Inc (n=156)		VII Indust (n=169)		SUM V-VII (n=411)	
	n	%	n	%	n	%	n	%
Case Studies, Proj Descr	48	55.8	91	58.3	102	60.4	241	58.6
Practical Materials, Manuals	57	66.3	96	61.5	77	45.6	230	56.0
Theoretical Materials, Ideas & Issues	39	45.3	69	44.2	79	46.7	187	45.5
Annotated Bib- liographies	14	16.3	24	15.4	51	30.2	89	21.7

annotated bibliographies.

Table 134 enables examination of corresponding data by location according to basic development indicators. Here, very little differentiation is observed among the groupings concerning preference for case studies and for theoretical materials. Regarding practical materials, greater preference is increasingly associated with lower income location. Annotated bibliographies tend to receive higher preference among those in industrialized countries versus those in lower income locations.

When asked which part of The NFE Exchange they find most useful, the selected respondents overwhelmingly (50.9%) select the main article of topical overview and synthesis. However, as shown in Table 135 which differentiates responses by citizenship and location of work, LDC citizens in LDC locations are greatly over-represented in this regard, while DC citizens in DC locations are under-represented. The bibliography receives greater mention by DC citizens in DC locations and lesser mention by LDC citizens in LDC locations. Project highlights, selected as the second most useful section of the periodical, special listings, and readers' notes, are not greatly differentiated among the groupings in their perceived utility.

TABLE 135: MOST USEFUL PART OF NFE EXCHANGE BY CITIZENSHIP AND LOCATION OF WORK

Part of NFE Exchg	I LDC/LDC (n=161)		II DC/LDC (n=110)		III LDC/DC (n=20)		IV DC/DC (n=179)		SUM I-IV (n=470)	
	n	%	n	%	n	%	n	%	n	%
Main Article	98	60.9	57	51.8	7	35.0	77	43.0	239	50.9
Project										
Highlights	38	23.6	19	17.3	9	45.0	41	22.9	107	22.8
Bibliography	10	6.2	14	12.7	2	10.0	36	20.1	62	13.2
Special										
Listings	10	6.2	15	13.6	2	10.0	19	10.6	46	9.8
Readers News	5	3.1	5	4.5	0	0	6	3.4	16	3.4

TABLE 136: MOST USEFUL PART OF NFE EXCHANGE BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Part of NFE Exchange	V Low-Inc (n=97)		VI Mid-Inc (n=175)		VII Indust (n=198)		SUM V-VII (n=470)	
	n	%	n	%	n	%	n	%
Main Article	61	62.9	95	54.3	83	41.9	239	50.9
Project								
Highlights	22	22.7	35	20.0	50	25.3	107	22.8
Bibliography	5	5.2	19	10.9	38	19.2	62	13.2
Special								
Listings	7	7.2	18	10.3	21	10.6	46	9.8
Readers News	2	2.1	8	4.6	6	3.0	16	3.4

Chi-square(8df)=20.41; P<.01

Considering, in Table 136, the responses for this item by location according to basic development indicators, one detects two distinct patterns. Selection of the synthesizing main article, as the most useful part of the periodical, is increasingly associated with lower income location. Preference for the annotated bibliography is increasingly associated with higher income location.

One aspect of these findings, concerning the kinds of resources and the sections of The NFE Exchange found most useful, is deserving of comment. The over-representation of LDC citizens in LDC locations in preference for theoretical materials on ideas and issues, and for the topical main article of the newsletter, suggests a particular need among this grouping for knowledge summaries related to development. This may owe, in part, to the relative paucity or inaccessibility of such works in developing countries, or to the little time that LDC citizens have amid their usual work in development to make or reflect upon knowledge summaries about various aspects of development.

To further tap the information interests of the development intermediaaries affiliated with the NFEIC, consideration is given to the two, then published, issues of The NFE Exchange that they would like to see reprinted.

Comparative analysis is made of the four thematic issues receiving mention by at least a quarter of the selected respondents: "Training for Development" (47.2%), "NFE and the Rural Poor" (43.6%), "Skills Training for Adults" (36.2%), and "Women in Development" (24.4%).

Table 137 provides data concerning the selection of these issues, by citizenship and location of work. Specialists in DC locations are found to be over-represented in interest in training, with those in LDC locations under-represented. DC citizens, regardless of location, show greater than mean interest in women in development, while LDC citizens manifest less than mean preference. Relatively little variation exists among the groupings concerning interest in NFE and the rural poor, and in skills training for adults.

Table 138 presents corresponding data for this item by location according to basic development indicators. Increased interest in training for development is evidenced by higher income location, and those in low-income countries show greater than mean interest in the topic of NFE and the rural poor. While relatively little variation exists among the groupings concerning skills training for adults and women in development, interest in the former increases slightly by lower income location and interest in the latter

TABLE 137: PREFERRED SELECTED ISSUES OF THE NFE EXCHANGE
BY CITIZENSHIP AND LOCATION OF WORK

Issue	I LDC/LDC (n=169x2)		II DC/LDC (n=103x2)		III LDC/DC (n=20x2)		IV DC/DC (n=183x2)		SUM I-IV (n=475x2)	
	n	%	n	%	n	%	n	%	n	%
Training for Development	75	44.4	40	38.8	15	75.0	94	51.4	224	47.2
NFE & Rural Poor	74	43.8	48	46.6	13	65.0	72	39.3	207	43.6
Skills Train- ing for Adults	63	37.3	38	36.9	3	15.0	68	37.2	172	36.2
Women in Development	27	16.0	34	33.0	1	5.0	54	29.5	116	24.4

TABLE 138: PREFERRED SELECTED ISSUES OF THE NFE EXCHANGE
BY LOCATION ACCORDING TO BASIC DEVELOPMENT
INDICATORS

Issue	V Low-Inc (n=98x2)		VI Mid-Inc (n=175x2)		VII Indust (n=202x2)		SUM V-VII (n=475x2)	
	n	%	n	%	n	%	n	%
Training for Development	37	37.8	78	44.6	109	54.0	224	47.2
NFE & Rural Poor	50	51.0	73	41.7	84	41.6	207	43.6
Skills Training for Adults	39	39.8	62	35.4	71	35.1	172	36.2
Women in Development	21	21.4	41	23.4	54	26.7	116	24.4

increases slightly by higher income location.

The development specialists also provide responses to the open-ended query as to which topics they would like to see treated in future issues of The NFE Exchange newsletter. The four topics mentioned by at least 15 (4.7%) of the selected respondents -- health, evaluation, mass media, and literacy -- are comparatively examined although the small numbers in each cell do not warrant much analysis.

Table 139, which differentiates responses by citizenship and location of work, reveals that the greatest interest in health is found among DC citizens in LDC locations. This grouping also shows the least interest in mass media, while DC citizens in DC locations demonstrate the greatest interest. Table 140, which displays responses by location according to basic development indicators, reveals that the interest in health resides mostly among personnel in middle-income countries. The table also shows increasing interest in mass media by higher income location (very little interest exists in low-income countries), and the greatest interest in literacy among personnel in low-income countries.

To recap, concerning the nature of the respondents' development information interests, LDC citizens in LDC

TABLE 139: PREFERRED SELECTED FUTURE TOPICS FOR THE NFE EXCHANGE BY CITIZENSHIP AND LOCATION OF WORK

Topic	I LDC/LDC (n=119x2)		II DC/LDC (n=75x2)		III LDC/DC (n=12x2)		IV DC/DC (n=112x2)		SUM I-IV (n=318x2)	
	n	%	n	%	n	%	n	%	n	%
Health	4	3.4	12	16.0	0	0	6	5.4	22	6.9
Evaluation	8	6.7	4	5.3	2	16.7	5	4.5	19	6.0
Mass Media	6	5.0	2	2.7	0	0	8	7.1	16	5.0
Literacy	6	5.0	4	5.3	0	0	5	4.5	15	4.7

TABLE 140: PREFERRED SELECTED FUTURE TOPICS FOR THE NFE EXCHANGE BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Topic	V Low-Inc (n=67x2)		VI Mid-Inc (n=128x2)		VII Indust (n=123x2)		SUM V-VII (n=318x2)	
	n	%	n	%	n	%	n	%
Health	2	3.0	14	10.9	6	4.9	22	6.9
Evaluation	3	4.5	9	7.0	7	5.7	19	6.0
Mass Media	1	1.5	7	5.5	8	6.5	16	5.0
Literacy	5	7.5	5	3.9	5	4.1	15	4.7

locations express about equal preference for case studies, practical materials, and theoretical materials. However, they are over-represented among the groupings in their preference for theoretical materials and for the main, synthesizing article of The NFE Exchange. DC citizens in LDC locations are greatly over-represented in their preference for practical materials and greatly under-represented in their preference for theoretical materials. LDC and DC citizens in DCs are distinguished in the extent of their interest in topical annotated bibliographies. Concerning the selected topics of training for development and women in development, greatest interest in the former is evidenced by personnel in DC locations regardless of citizenship, and greatest interest in the latter by DC citizens regardless of location.

Information Outreach and Brokering

To detect the extent of information brokering being assumed by the selected respondents, they are queried as to, first, the number of readers of their copy of The NFE Exchange and, second, what specific actions they take to expand the periodical's outreach.

Table 141 presents data on the number of readers of each respondent's last issue of The NFE Exchange, by

TABLE 141: NUMBER OF READERS OF THE NFE EXCHANGE BY CITIZENSHIP AND LOCATION OF WORK

Number of Readers	I LDC/LDC (n=144)	II DC/LDC (n=103)	III LDC/DC (n=17)	IV DC/DC (n=180)	SUM I-IV (n=444)
	n %	n %	n %	n %	n %
Self	10 6.9	29 28.2	5 29.4	42 23.3	86 19.4
Two or Three	36 25.0	48 46.6	5 29.4	80 44.4	169 38.1
Four to Nine	52 36.1	21 20.4	6 35.3	44 24.4	123 27.7
Ten to 85	46 31.9	5 4.9	1 5.9	14 7.8	66 14.9

Chi-square(9df)=77.53; $P \leq .00$ TABLE 142: NUMBER OF READERS OF THE NFE EXCHANGE BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Number of Readers	V Low-Inc (n=87)	VI Mid-Inc (n=161)	VII Indust (n=196)	SUM V-VII (n=444)
	n %	n %	n %	n %
Self	9 10.3	30 18.6	47 24.0	86 19.4
Two or Three	31 35.6	53 32.9	85 43.4	169 38.1
Four to Nine	28 32.2	46 28.6	49 25.0	123 27.7
Ten to 85	19 21.8	32 19.9	15 7.7	66 14.9

Chi-square(6df)=22.17; $P \leq .00$

citizenship and location of work. LDC citizens in LDC locations obtain the greatest readership of a single copy of the periodical. While 86 (19.4%) of the selected development specialists appear to be the only readers of the newsletter, LDC citizens in LDC locations are greatly below this mean for single readers, and the other groupings above it. The plurality of the respondents (169, 38.1%) report that the periodical is read by two or three persons. DC citizens, regardless of location, exceed this mean while LDC citizens fall short of it. Among the 123 (27.7%) respondents indicating that The NFE Exchange is read by four to nine persons, LDC citizens regardless of location are greatly over-represented, while DC citizens are under-represented. Among the 66 (14.9%) who report that the newsletter is read by ten or more individuals, LDC citizens in LDC locations are greatly over-represented, accounting for 46 members in this category.

Enabling examination of data for this item by location according to basic development indicators, Table 142 clearly reveals that increasingly higher readership of The NFE Exchange (four or more persons) is associated with lower income location. Smaller readership, of from one to three persons, is increasingly associated with higher income location.

Figure 17 graphically presents the relative readership of The NFE Exchange for all seven groupings.

Consideration is next given to whether, and the extent to which, the development specialists engage in certain activities to extend the outreach of the information exchange network through The NFE Exchange.

A majority of the respondents (52.9%) report engaging often in one of these activities: placing The NFE Exchange in a library. Table 143, which presents data on involvement in this activity by citizenship and location of work, reveals that LDC citizens in LDC locations are greatly over-represented in this regard. When examining, in Table 144, corresponding data by location according to basic development indicators, one observes increasing tendency by lower income location to place the periodical in the library often. Personnel in industrialized countries show the least evidence of forwarding the periodical to the library at all.

Tables 145 and 146 concern the activity of passing The NFE Exchange to fieldworkers and trainers. The former table, with data by citizenship and location of work, demonstrates that LDC citizens in LDC locations are greatly over-represented in frequent involvement also in this

FIGURE 17. NUMBER OF READERS OF THE NFE EXCHANGE BY CITSHIP & LOC OF WORK, & LOC ACCORDING TO BASIC DEVPMT INDICATORS

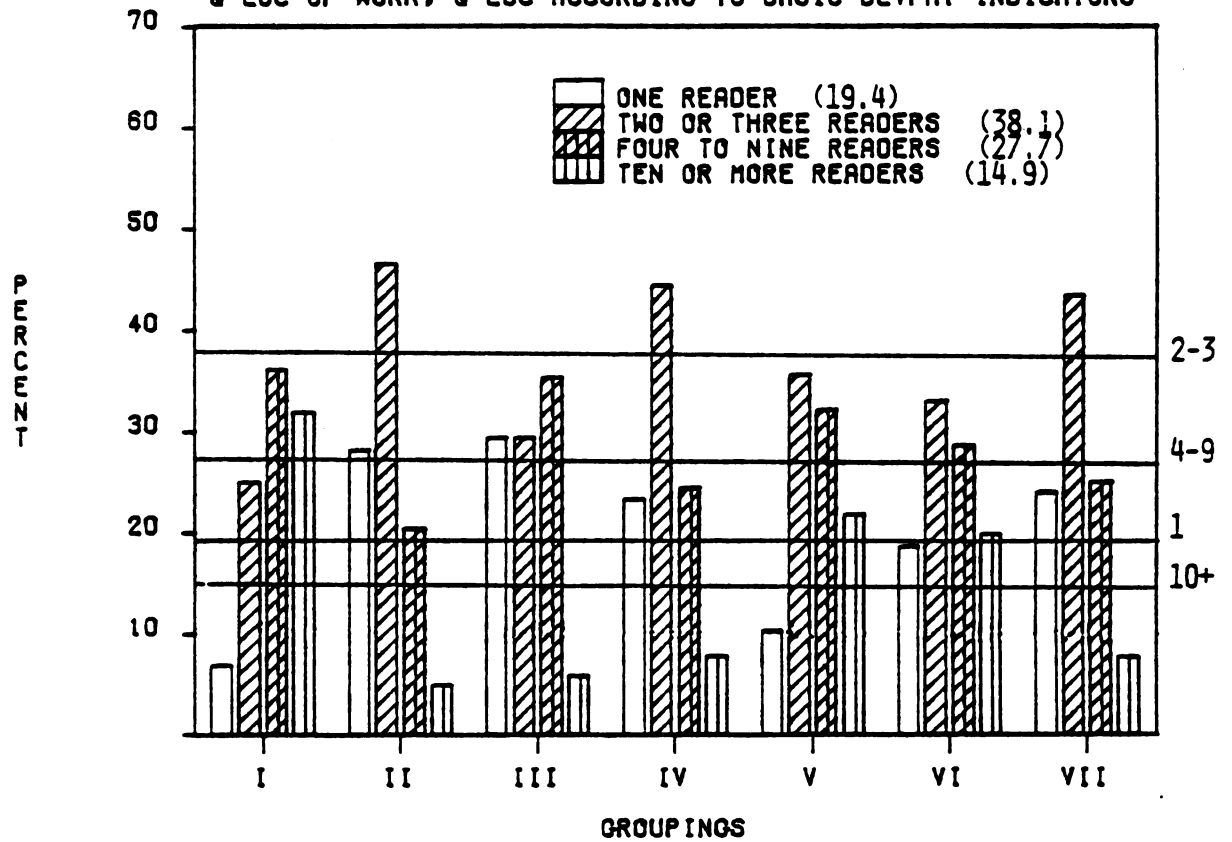


TABLE 143: WHETHER THE NFE EXCHANGE PLACED IN LIBRARY BY
CITIZENSHIP AND LOCATION OF WORK

NFE Exchng in Library	I LDC/LDC (n=134)	II DC/LDC (n=91)	III LDC/DC (n=13)	IV DC/DC (n=157)	SUM I-IV (n=395)
	n %	n %	n %	n %	n %
Often	89 66.4	44 48.4	4 30.8	72 45.9	209 52.9
Occasionally	28 20.9	12 13.2	1 7.7	28 17.8	69 17.5
Never	17 12.7	35 38.5	8 61.5	57 36.3	117 29.6

Chi-square(6df)=32.45; $P \leq .00$

TABLE 144: WHETHER THE NFE EXCHANGE PLACED IN LIBRARY BY
LOCATION ACCORDING TO BASIC DEVELOPMENT
INDICATORS

NFE Exchange in Library	V Low-Inc (n=81)	VI Mid-Inc (n=145)	VII Indust (n=169)	SUM V-VII (n=395)
	n %	n %	n %	n %
Often	50 61.7	83 57.2	76 45.0	209 52.9
Occasionally	14 17.3	27 18.6	28 16.6	69 17.5
Never	17 21.0	35 24.1	65 38.5	117 29.6

Chi-square(4df)=11.88; $P \leq .02$

TABLE 145: WHETHER THE NFE EXCHANGE PASSED TO FIELDWORKERS OR TRAINERS BY CITIZENSHIP AND LOCATION OF WORK

NFE Exchnng I LDC/LDC II DC/LDC III LDC/DC IV DC/DC SUM I-IV to Trainers(n=129) (n=94) (n=15) (n=155) (n=393)										
	n	%	n	%	n	%	n	%	n	%
Often	66	51.2	21	22.3	3	20.0	34	21.9	124	31.6
Occasionally	39	30.2	48	51.1	6	40.0	73	47.1	166	42.2
Never	24	18.6	25	26.6	6	40.0	48	31.0	103	26.2

Chi-square(6df)=35.73;P<.00

TABLE 146: WHETHER THE NFE EXCHANGE PASSED TO FIELDWORKERS OR TRAINERS BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

NFE Exchange V Low-Inc VI Mid-Inc VII Indust SUM V-VII to Trainers (n=84) (n=140) (n=169) (n=393)								
	n	%	n	%	n	%	n	%
Often	32	38.1	55	39.3	37	21.9	124	31.6
Occasionally	36	42.9	51	36.4	79	46.7	166	42.2
Never	16	19.0	34	24.3	53	31.4	103	26.2

Chi-square(4df)=14.28;P<.01

activity, while the other groupings are under-represented. The latter table identifies specialists in industrialized countries as once again least involved in passing the periodical to fieldworkers and trainers.

Concerning forwarding the newsletter to planners and policy makers, Table 147 shows that LDC citizens in LDC locations are again over-represented in frequent practice of this activity. Table 148, by location according to basic development indicators, reveals increasing incidence by lower income location of passing the periodical often to planners and policy makers.

The activity of suggesting that others write to the NFE Information Center for a copy of The NFE Exchange is significantly differentiated by citizenship and location of work, the data for which is presented in Table 149, but not by location according to basic development indicators ($p=.21$). LDC citizens regardless of location are over-represented in the frequent practice of this activity. DC citizens in DC locations, however, have the greatest incidence of engaging, at least occasionally, in the activity.

The final activity, reproducing sections of The NFE Exchange to send to others, is also significantly

TABLE 147: WHETHER THE NFE EXCHANGE PASSED TO PLANNERS OR POLICY MAKERS BY CITIZENSHIP AND LOCATION OF WORK

NFE Exchng to Planners	I LDC/LDC (n=124)	II DC/LDC (n=87)	III LDC/DC (n=15)	IV DC/DC (n=151)	SUM I-IV (n=377)
	n %	n %	n %	n %	n %
Often	43 34.7	9 10.3	2 13.3	23 15.2	77 20.4
Occasionally	57 46.0	40 46.0	6 40.0	76 50.3	179 47.5
Never	24 19.4	38 43.7	7 46.7	52 34.4	121 32.1

Chi-square(6df)=30.72;P<.00

TABLE 148: WHETHER THE NFE EXCHANGE PASSED TO PLANNERS OR POLICY MAKERS BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

NFE Exchange to Planners	V Low-Inc (n=81)	VI Mid-Inc (n=131)	VII Indust (n=165)	SUM V-VII (n=377)
	n %	n %	n %	n %
Often	24 29.6	28 21.4	25 15.2	77 20.4
Occasionally	35 43.2	63 48.1	81 49.1	179 47.5
Never	22 27.2	40 30.5	59 35.8	121 32.1

Chi-square(4df)=7.48;P<.11

TABLE 149: WHETHER THE NFE EXCHANGE SUGGESTED TO OTHERS
BY CITIZENSHIP AND LOCATION OF WORK

NFE Exchnng Suggested	I LDC/LDC (n=124)	II DC/LDC (n=87)	III LDC/DC (n=20)	IV DC/DC (n=168)	SUM I-IV (n=399)
	n %	n %	n %	n %	n %
Often	35 28.2	10 11.5	8 40.0	32 19.0	85 21.3
Occasionally	54 43.5	51 58.6	7 35.0	103 61.3	215 53.9
Never	35 28.2	26 29.9	5 25.0	33 19.6	99 24.8

Chi-square(6df)=19.56; $P \leq .00$

TABLE 150: WHETHER THE NFE EXCHANGE REPRODUCED FOR OTHERS
BY CITIZENSHIP AND LOCATION OF WORK

NFE Exchnng Reproduced	I LDC/LDC (n=103)	II DC/LDC (n=78)	III LDC/DC (n=14)	IV DC/DC (n=146)	SUM I-IV (n=341)
	n %	n %	n %	n %	n %
Often	13 12.6	3 3.8	0 0	19 13.0	35 10.3
Occasionally	49 47.6	32 41.0	3 21.4	80 54.8	164 48.1
Never	41 39.8	43 55.1	11 78.6	47 32.2	142 41.6

Chi-square(6df)=21.66; $P \leq .00$

differentiated by citizenship and location of work, but not by location according to basic development indicators ($p=.14$). Table 150 demonstrates that LDC citizens in LDC locations are similar to DC citizens in DC locations in greatest involvement in this activity, both on frequent and occasional bases.

In sum, LDC citizens in LDC locations appear most active in information brokering to extend the outreach of the NFE exchange network. This grouping has the greatest readership of The NFE Exchange, and the greatest incidence of involvement in three activities to disseminate ideas in the periodical (placing it in a library, passing it to fieldworkers and trainers, planners and policy makers). Furthermore, there is increasing involvement in the same activities by lower income location.

Intra-Network Contact

Two sets of items are used to explore intra-network contact stimulated by the Non-Formal Education Information Center. The first concerns whether the network-affiliates have contacted someone identified in the Center's resource materials, and, if so, how many such individuals. The second concerns whether project information or papers of the network affiliates have been cited in the Center's resource

materials, and, if so, how many requested further information of them.

In response to the first set of items, 187 (38.6%) of the selected specialists indicate that they have requested materials or further information from persons or organizations identified in the Center's newsletter, correspondence, or bibliographies. The subjects are not greatly differentiated, however, in their responses by citizenship and location of work ($p=.49$), nor by location according to basic development indicators ($p=.57$).

Queried as to how many persons or organizations have been asked to send further information, most of the respondents indicate that the number is five or less (93, 68.9%), while nearly a third report more than five such contacts (42, 31.1%). Very little differentiation is found among those responding, either by citizenship and location of work ($p=.54$) or by location according to basic development indicators ($p=.46$).

In response to the second set of items, 71 (18.0%) of the selected network affiliates report that one of their projects, papers or publications has been mentioned in The NFE Exchange. Detailing responses by citizenship and location of work, Table 151 shows that DC citizens in DC

TABLE 151: WHETHER RESPONDENT'S PAPER OR PROJECT INFORMATION IN THE NFE EXCHANGE BY CITIZENSHIP AND LOCATION OF WORK

Material in NFE Exc	I LDC/LDC (n=135)	II DC/LDC (n=96)	III LDC/DC (n=15)	IV DC/DC (n=149)	SUM I-IV (n=395)
	n %	n %	n %	n %	n %
Yes	23 17.0	12 12.5	0 0	36 24.2	71 18.0
No	112 83.0	84 87.5	15 100.0	113 75.8	324 82.0

Chi-square(3df)=9.19;P<.03

TABLE 152: WHETHER RESPONDENT'S PAPER OR PROJECT INFORMATION IN THE NFE EXCHANGE BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Material in NFE Exchange	V Low-Inc (n=75)	VI Mid-Inc (n=156)	VII Indust (n=164)	SUM V-VII (n=395)
	n %	n %	n %	n %
Yes	16 21.3	19 12.2	36 22.0	71 18.0
No	59 78.7	137 87.8	128 78.0	324 82.0

Chi-square(2df)=5.89;P<.05

TABLE 153: NUMBER OF REQUESTS RECEIVED FOR FURTHER INFORMATION BY CITIZENSHIP AND LOCATION OF WORK

Number of Req Rec'd	I LDC/LDC (n=15)	II DC/LDC (n=10)	III LDC/DC (n=0)	IV DC/DC (n=21)	SUM I-IV (n=46)
	n %	n %	n %	n %	n %
None	9 60.0	6 60.0	0 0	5 23.8	20 43.5
Few (1-9)	4 26.7	0 0	0 0	9 42.9	13 28.3
Many (10+)	2 13.3	4 40.0	0 0	7 33.3	13 28.3

locations are most likely to report having their paper or development project mentioned in the Center's periodical. Presenting responses by location according to basic development indicators, Table 152 reveals that personnel in low-income countries and those in industrialized countries are about equally over-represented in having their paper or project cited in the Center newsletter.

Responses to the query, how many persons or organizations have asked the respondents to send a paper or further project information after it was mentioned in The NFE Exchange, by citizenship and location of work, are presented in Table 153. Among the 20 individuals (43.5%) who report receipt of no requests, those in LDC locations are greatly over-represented while those in DC locations are under-represented. Among the 13 individuals (28.3%) who indicate receiving from one to nine requests for further information, DC citizens in DC locations are greatly over-represented and DC citizens in LDC locations under-represented. Among the 13 persons (28.3%) reporting receipt of ten or more requests, LDC citizens in LDC locations are found to be under-represented, while DC citizens regardless of location are over-represented.

Regarding intra-network contact, it is thus observed that approximately equal percentages of respondents by

citizenship and location of work, and by location according to basic development indicators, initiate contact, and with the same frequency, with others in the NFEIC network. DC citizens in DC locations appear most apt to have had one of their materials or projects cited in The NFE Exchange, closely followed by personnel in industrialized and in low-income countries. However, DC citizens in DC locations report receiving about twice as many requests for further information as do personnel in low-income countries.

The reasons for this pattern invite speculation. Some of the materials that are from LDC locations and cited in The NFE Exchange are in the category of "fugitive documents;" that is, unpublished or relatively inaccessible. Probably relatively few materials from DC locations and cited in The NFE Exchange would fall in this category. It seems reasonable to suppose that fewer fugitive documents would be solicited from their original source by persons in the NFE network. In addition to the acknowledged greater availability of development literature in developed versus developing countries, and the difficulty of procuring materials from many LDC locations, one might also question whether preferential value may be attached to materials from DC-based organizations. While it is beyond the scope of this study to carefully pursue these hypotheses, they do point to a critical area for further inquiry.

Network Collegiality

To detect whether affiliation with the Non-Formal Education Information Center and network differentially affords the development specialists intangible or other supports, two items are addressed.

The first asks the network affiliates whether, through their contacts with the NFEIC, which links 4000 persons in 131 countries who are interested in non-formal education, they feel a sense of commonality with others who share their interests. While 57.1 percent of the selected respondents reply affirmatively, Table 154 reveals that the responses are greatly differentiated by citizenship and location of work. LDC citizens regardless of location are greatly over-represented among those indicating a sense of commonality with others through the NFEIC, while DC citizens are under-represented. In fact, only three (1.7%) LDC citizens in LDC locations, and one (5.3%) of the LDC citizens in DCs respond negatively to the question, while DC citizens in LDCs and DCs show greater tendency to do so (14.0% and 15.9%, respectively).

When considering the data in Table 155 by location according to basic development indicators, one notes the greatest incidence of sense of commonality among personnel

TABLE 154: PERCEIVED SENSE OF COMMONALITY WITH OTHERS THROUGH THE NFEIC, BY CITIZENSHIP AND LOCATION OF WORK

Sense of Commonality	I LDC/LDC (n=174)	II DC/LDC (n=114)	III LDC/DC (n=19)	IV DC/DC (n=189)	SUM I-IV (n=496)
	n %	n %	n %	n %	n %
Yes	126 72.4	54 47.4	15 78.9	88 46.6	283 57.1
Not Certain	45 25.9	44 38.6	3 15.8	71 37.6	163 32.9
No	3 1.7	16 14.0	1 5.3	30 15.9	50 10.1

Chi-square(6df)=41.56; $P \leq .00$

TABLE 155: PERCEIVED SENSE OF COMMONALITY WITH OTHERS THROUGH THE NFEIC, BY LOCATION ACCORDING TO BASIC DEVELOPMENT INDICATORS

Sense of Commonality	V Low-Inc (n=100)	VI Mid-Inc (n=189)	VII Indust (n=207)	SUM V-VII (n=496)
	n %	n %	n %	n %
Yes	58 58.0	122 64.6	103 49.8	283 57.1
Not Certain	32 32.0	58 30.7	73 35.3	163 32.9
No	10 10.0	9 4.8	31 15.0	50 10.1

Chi-square(4df)=14.69; $P \leq .01$

in middle-income countries, followed next by those in low-income countries.

Figure 18 visually portrays the data from both tables and shows that the strongest sense of commonality among the seven groupings is expressed by LDC citizens.

A final item seeks to determine whether the respondents differentially report unexpected benefits as a result of their contact with the NFEIC. Table 156, which presents related data by citizenship and location of work, demonstrates that while a mean of 25.7 percent of the selected respondents affirm that they have received unexpected benefits, LDC citizens are once again above the mean and DC citizens below it.

The groupings are not significantly distinguished on this item by location according to basic development indicators ($p=.42$).

Regarding network collegiality, the data show that a much stronger sense of support through the NFE exchange network is perceived by LDC citizens than by DC citizens. This is perhaps not surprising when considering that LDC development specialists are frequently isolated geographically and professionally from others who share

FIGURE 18. PERCEIVED SENSE OF NETWORK COMMONALITY BY CITSHIP
& LOC OF WORK, & LOC ACCORDING TO BASIC DEVPMT INDICATORS

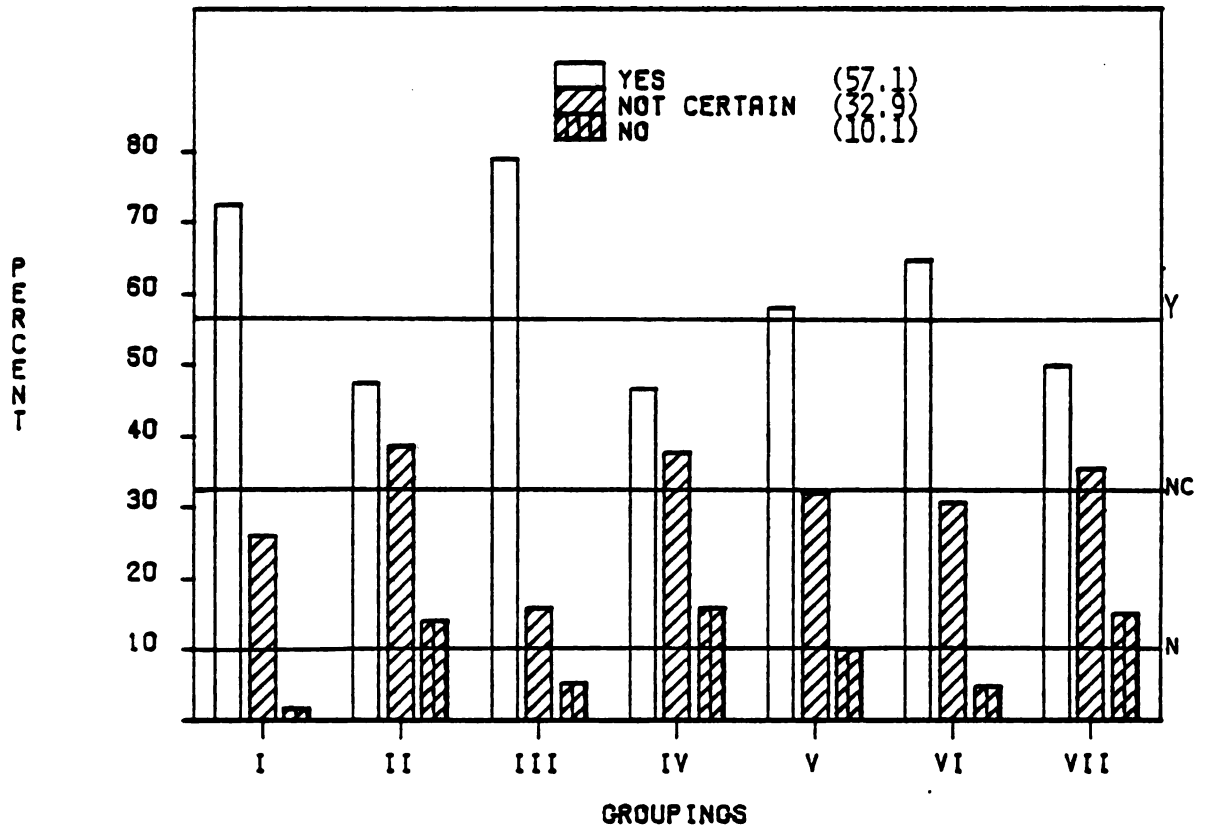


TABLE 156: UNEXPECTED BENEFITS DERIVED FROM CONTACT WITH NFEIC BY CITIZENSHIP AND LOCATION OF WORK

Unexpected Benefits	I LDC/LDC (n=169)		II DC/LDC (n=109)		III LDC/DC (n=17)		IV DC/DC (n=191)		SUM I-IV (n=486)	
	n	%	n	%	n	%	n	%	n	%
Yes	61	36.1	17	15.6	8	47.1	39	20.4	125	25.7
No	108	63.9	92	84.4	9	52.9	152	79.6	361	74.3

Chi-square(3df)=22.23; $P \leq .00$

their problems and interests. It is recalled that DC citizens regardless of location are more inclined than LDC citizens to report reliance on work associates as sources for learning about development and NFE. Furthermore, the fact that LDC citizens appear to derive more intangible support from contact with the NFEIC than do DC citizens also in LDCs may stem partially from a lesser familiarity with a range of development data bases and network supports.

CHAPTER 10

SELECTED CHARACTERISTICS CONTROLLING FOR GENDER

This chapter considers gender differences for selected demographic, development role, and network affiliation characteristics of the selected development specialists by citizenship and location of work. The author's interests lie particularly in the roles of women as brokers in development processes, the fields and activities in which they are engaged, the links which they thereby forge with various parts of the population, and some consequences of their involvement with the NFE information exchange network.

Analysis of gender development roles with a focus on women must necessarily occur in comparison with male development roles. For this reason, the discussion concerns the 129 women among 507 selected development specialists previously considered in this study, while referring throughout to corresponding data for the 378 men. Furthermore, focus is placed on gender development roles by citizenship within developing countries.

Certain patterns seem to emerge as significant from this analysis. The chapter gives the specific data supporting the tendencies noted. By way of preview, however, the reader is alerted to the following

observations.

The surveyed LDC females in LDCs, mostly Asian and Philippine, are, in several respects, more similar to the DC males in LDCs than they are to either their LDC male counterparts or the DC females, also in LDCs. Within developing countries, the LDC women compared with LDC men, and the DC men compared with the DC women, are more highly educated, more involved in planning or program design, less involved in community field work, more in non-formal education for professional skills upgrading, more inclined to spend most of their time in a capital city, to direct development efforts to planners and policy makers, to spend most of their time with development workers and planners, and less inclined to work as volunteers for development organizations.

The LDC men compared with LDC women, and the DC women compared with DC men, also within developing countries, are similar in being less highly educated, more involved in community field work, more inclined to spend most of their time in rural villages, to direct their development efforts to rural people, poor people, women and families; to work directly with them, to spend the most time with rural people, adults and youth; to be employed by national governmental organizations, and to work as volunteers for

development organizations.

The LDC and DC women in developing countries are more similar to each other than to the men in their tendency to spend the most time engaged in teaching or training and little time in administration, to be involved in basic needs-oriented non-formal education and curriculum development, and to have fewer years of development experience.

The LDC and DC men in developing countries are more similar to each other than to the women in their tendency to be engaged in the fields of integrated rural development, higher education, communication and media, and vocational skills training; to work in administration, to direct their development efforts to men, to spend more time with policy makers and high-level officials as well as local leaders, to have more years of development experience, and to be employed by academic or training institutions.

Finally, the LDC development specialists, both male and female, in developing countries are more akin to one another than to DC citizens in LDCs in their tendency to have received foreign graduate education, have more years of experience in non-formal education, and to use the information received via the Non-Formal Education

Information Center to initiate new development programs or strategies. They are also similar in their greater claim of feeling a sense of commonality via the NFE Information Center and network.

The emergent themes point to unique roles being played by the female and male, LDC and DC development specialists, in their work in developing countries. The LDC women surveyed are found to play strong, basic education and training roles but to do so among a spectrum of the population, including planners, not restricted to the rural poor. The LDC men, on the other hand, are found to be more engaged in rural applications of development efforts.

The DC women, young and many working as volunteers, also carry out applied development roles, particularly in the fields of health and nutrition, primarily through community-level field work. The DC men in LDCs, like the LDC women, appear to be engaged in more diverse and less applied development roles, interacting a good deal with decision makers in a range of social strata.

It is further discovered that gender differences serve less to distinguish use and value of the NFE Information exchange network than does LDC citizenship. Both female and male LDC development specialists claim greater incidence of

changes and perceived collegiality following from information received via the NFE Center.

The chapter now sketches the demographic characteristics of the development specialists by gender, then deals with their roles in development, and finally considers their use of the NFE Information Center and network.

The female groupings of analysis, by citizenship and location, consist of 35 LDC women in LDC locations, 35 DC women in LDC locations, 5 LDC women in DC locations, and 54 DC women in DC locations. Little reference is made to the LDC women in DCs because of the small size of this grouping. Analysis by location according to basic development indicators is not pursued for similar reasons: only four women are found among the 102 specialists in low-income countries, one each in Bangladesh, Mali, Upper Volta, and India.

The male groupings of analysis, by citizenship and location, consist of 144 LDC men in LDC locations, 78 DC men in LDC locations, 15 LDC men in DC locations, and 141 DC men in DC locations.

Selected Demographic Characteristics

The demographic profile of the development brokers by gender consists of an overview of their citizenship, location of work, age, level of formal education, and foreign schooling.

Concerning citizenship and location of work of the selected women, attention is first given to the 35 LDC citizens in LDC locations. Asians working in Asia (20) make up most of this grouping, followed by Latin Americans working in Latin America (10), and Africans working in Africa (5). No single country represents more than three women, with the notable exception of the Philippines, the locus of citizenship and work for 15 of the women.

The second grouping of women, 35 DC citizens in LDC work locations, consists mostly of U.S. citizens (31), along with one Canadian, and three Europeans. They work primarily in Africa (19) and Latin America (12), with a few in Asia (3) and one in Oceania.

The third grouping of women, 5 LDC citizens in DC locations, are Asian citizens (3) and Latin American citizens (2), and all work or study in the U.S.

The fourth grouping of women, 54 DC citizens in DC locations, are mostly citizens of North American countries (U.S., 44; Canada, 4), with five holding citizenship in European countries, and one in Oceania. They tend to work in the regions where they hold citizenship: North America, 49; Europe, 4; Oceania, 1.

The 144 LDC men in LDCs consist primarily of Asians working in Asia (81), followed by Africans working in Africa (40), Latin Americans working in Latin America (20), and individuals of Oceania working in Oceania and the Pacific (3). Four countries represent nearly half of the men in this grouping: India (22), Nigeria (17), Indonesia (15), and the Philippines (13). Interestingly, only one female Indian citizen is found among the selected specialists, one female Nigerian citizen, and no female Indonesian citizens.

Of the 78 DC men in LDCs, 50 (64.1%) are U.S. citizens and 16 (20.5%) U.K. citizens, with the remainder from various European countries and Canada. They work primarily in Africa (32) and Latin America (28), followed by Asia (17), with one in Oceania.

The 15 LDC men in DC locations consist of seven Asian citizens, four African citizens, and four Latin American

citizens. Most (11) work in the U.S., with the others in the U.K. (3) and Canada (1).

Of the 141 DC men in DC locations, 111 are citizens of North American countries (U.S., 102; Canada, 9), with 26 having citizenship in European countries -- half in the U.K., and four with citizenship in countries of Oceania. They also tend to work in the regions where they hold citizenship.

To enable examination of age by gender, Table 157 presents data on mean and median age for females and males by citizenship and location of work. The LDC women in LDC locations have the highest median age among females (38.3), while the DC women in LDCs have the lowest (28.0). In all groupings except that of LDC citizens in LDC locations, the women are younger than the men. Most striking is the gap between the median ages of the women and men in the DC/LDC grouping, 28.0 and 37.2 respectively. Reasons for these findings will be speculated upon later in the chapter.

Regarding level of formal education, the women, generally, are highly educated with nearly two-thirds (63.5%) educated at the masters or doctors level, and one-third (34.1%) to the level of university graduate, as shown by the data in Table 158. LDC women in LDC locations,

TABLE 157: AGE OF DEVELOPMENT PERSONNEL BY CITIZENSHIP AND LOCATION OF WORK CONTROLLING FOR GENDER

	I LDC/LDC		II DC/LDC		III LDC/DC		IV DC/DC	
	F	M	F	M	F	M	F	M
Age	(35)	(144)	(35)	(78)	(5)	(14)	(51)	(139)
Mean	39.8	39.5	31.1	40.6	32.2	38.4	38.9	42.8
Median	38.3	39.4	28.0	37.2	34.0	39.0	35.1	41.3

TABLE 158: LEVEL OF FORMAL EDUCATION BY CITIZENSHIP AND LOCATION OF WORK, CONTROLLING FOR GENDER

	I LDC/LDC		II DC/LDC		III LDC/DC		IV DC/DC		SUM I-IV	
	F	M	F	M	F	M	F	M	F	M
Level Formal Educ	(35)	(144)	(35)	(78)	(5)	(15)	(54)	(141)	(129)	(378)
Pre-Univ n	2	17	0	2	0	1	1	2	3	22
Grad %	5.8	11.9	0	2.6	0	6.7	1.9	1.4	2.3	5.8
U. Grad/ n	8	33	22	17	2	2	12	17	44	69
Post U. %	22.8	22.9	62.8	21.8	40.0	13.4	22.3	12.1	34.1	18.3
Masters n	19	56	9	28	3	7	24	44	55	135
%	54.3	38.9	25.7	35.9	60.0	46.7	44.4	31.2	42.6	35.7
Doctors n	6	38	4	31	0	5	17	78	27	152
%	17.1	26.4	11.4	39.7	0	33.3	31.5	55.3	20.9	40.2

and DC women in DC locations, are above the mean for females with graduate education with 71.4 percent and 75.9 percent, respectively. For LDC women in DC locations the rate of graduate education is 37.1 percent, and for LDC women in DC locations, 60.0 percent.

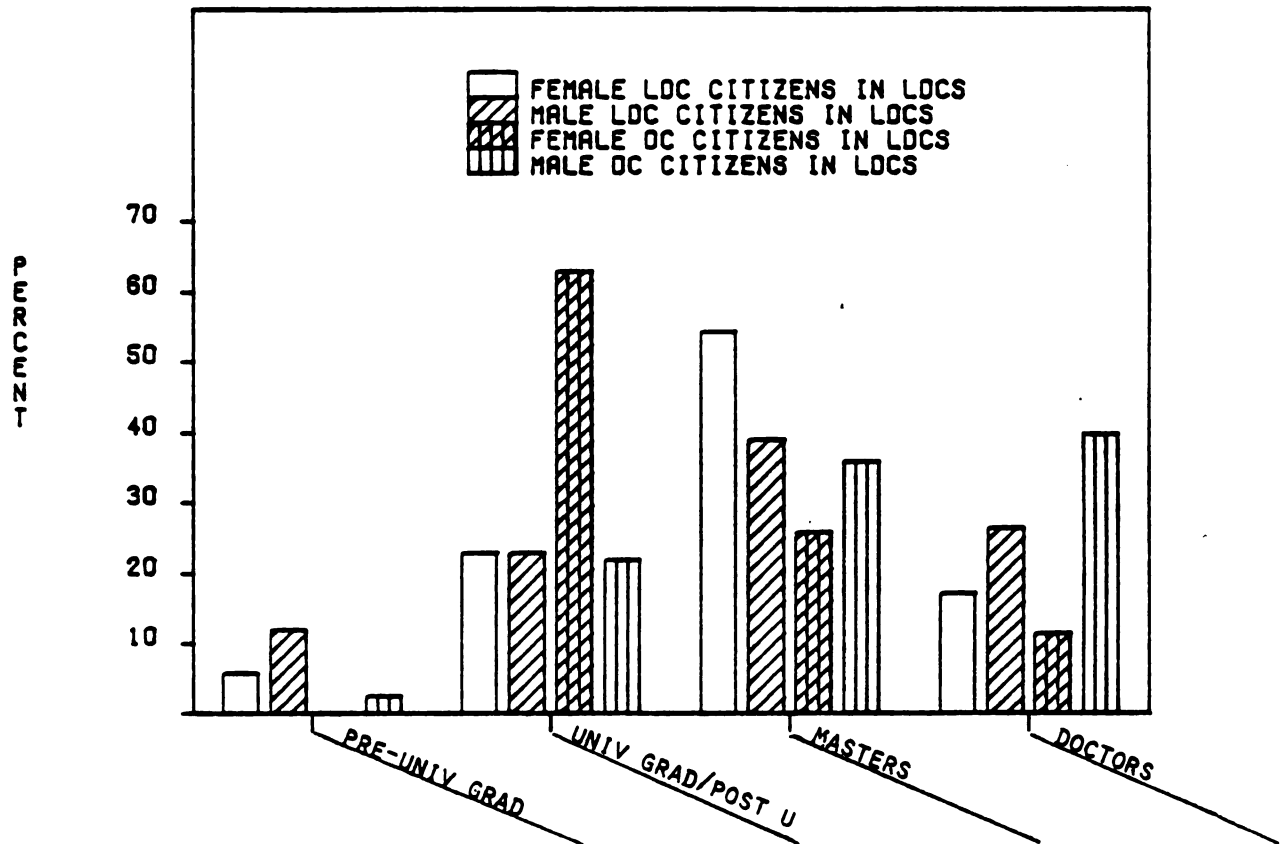
Whereas LDC women in LDCs are among the most highly educated of the females, LDC men in LDCs are the least highly educated of the males (65.3% at the graduate level). For DC males in LDCs the comparable figure is 75.6 percent, and for DC males in DC locations 86.5 percent.

It may be further noted from Table 158 that for all groupings except DC citizens in LDC locations, a greater percentage of women than men are educated at the masters level, while a greater percentage of men than women are educated at the doctors level.

Figure 19 graphically portrays formal education levels of the development personnel by citizenship and gender within developing countries.

With reference to foreign schooling, 56 (44.4%) of the 126 women reporting indicate that they have received foreign schooling outside their country of citizenship. Female LDC citizens in both DC and LDC locations are above this mean

FIGURE 19. FORMAL EDUCATION LEVELS BY CITIZENSHIP AND GENDER WITHIN DEVELOPING COUNTRIES



with 100 percent and 51.5 percent, respectively, reporting foreign education. Among the female and male development specialists working in LDCs, a greater proportion of men than women have received foreign schooling, while among those working in DCs a higher proportion of women have been foreign educated. Table 159 provides data on foreign schooling by citizenship and location of work, controlling for gender.

Regarding the level of the foreign education received, it can also be observed from Table 159 that the LDC female citizens are primarily foreign educated at the graduate level. The DC female citizens, on the other hand, tend to have their foreign schooling at levels other than graduate.

Since the indicated item concerns only foreign education rather than its precise location, further inquiry is made into the country location of the foreign education. Examining, first, the location of the foreign graduate education, it is found that all but one of the 14 female LDC citizens in LDC locations receiving such foreign education did so in industrialized countries, primarily in the U.S. A similar pattern holds for the male LDC citizens in LDC locations. Five of the eight female DC citizens in DC locations report receiving foreign graduate education in industrialized countries and the remainder in developing

TABLE 159: FOREIGN SCHOOLING BY CITIZENSHIP AND LOCATION
OF WORK, CONTROLLING FOR GENDER

	I LDC/LDC		II DC/LDC		III LDC/DC		IV DC/DC		SUM I-IV	
Foreign	F	M	F	M	F	M	F	M	F	M
Schooling	(33)	(140)	(35)	(78)	(5)	(15)	(53)	(138)	(126)	(371)
No	n 16	53	24	44	0	2	30	99	70	198
	% 48.5	37.9	68.6	56.4	0	13.3	56.6	71.7	55.6	53.4
Yes-	n 14	67	3	15	4	11	8	16	29	109
Graduate	% 42.4	47.9	8.6	19.2	80.0	73.3	15.1	11.6	23.0	29.4
Yes-othr	n 3	5	3	8	0	2	7	13	13	28
Higher	% 9.1	3.6	8.6	10.3	0	13.3	13.2	9.4	10.3	7.5
Yes-	n 0	4	3	2	0	0	1	2	4	8
Secondry	% 0	2.9	8.6	2.6	0	0	1.9	1.4	3.2	2.2
Yes-	n 0	11	2	9	1	0	7	8	10	28
Unclass.	% 0	7.9	5.7	11.6	20.0	0	13.2	5.8	7.9	7.5

countries. Most of the 16 male DC citizens in DC locations report receiving foreign graduate education in industrialized countries with one quarter receiving it in developing countries.

In sum, concerning the demographic backgrounds of 129 selected female development planners and practitioners affiliated with the Non-Formal Education Information Center and network, nearly one-third are LDC citizens with most of these working in developing countries, and a plurality being Philippine citizens. About two-thirds are DC citizens, primarily U.S., with nearly 40 percent working in developing countries and most of the rest in the U.S.

LDC women in LDCs have the highest median age while DC women in LDCs have the lowest. Except for LDC women in LDCs, the women in each of the four comparative groupings are considerably younger than their male counterparts. This is most notable in the case of DC women in LDCs whose median age (28) is nine years less than that of DC men in LDCs. One hypothesis for this is that, among temporary or permanent expatriate development personnel, women are more likely to be single or in a pre-family, early career period of their lives, while men are more likely to be with family in a mid-career period. Although the survey yields no data on civil status of the subjects, several items which do

enable examination of their career history are considered later in the chapter.

The female development specialists are highly educated with nearly all having at least a university or college degree. One-fifth are educated at the doctors level, over two-fifths at the masters level, and over a third at the university level. The fact that DC female citizens in LDCs are the least highly educated among all the women studied may be related to their relatively younger median age and to their hypothesized earlier career stage.

While nearly half of the female development personnel are foreign educated, women from developing versus developed countries are more apt to be so educated, in industrialized countries, and at a graduate level. Women from developed countries who are foreign educated are more apt to have received this education at a pre-graduate level. These findings suggest that developed countries tend to be the primary locus of graduate education for most of the female development specialists. They also invite speculation on possible influences and spin-offs of Western graduate education on LDC women working in development. Some refinements to the nature of the women's development roles, and their affiliation with the NFE information exchange network, are provided in the remaining parts of the chapter.

Selected Development Role Characteristics

Consideration of particular development role characteristics of the females in the study first includes focus on the content of their work: their primary field of development work, the development activity in which they spend the most time, the primary field of non-formal education work, the non-formal education activity in which they spend the most time.

Next considered are certain of their development broker linkages. Attention is addressed to the location in which they spend the most time in their work, selected parts of the population to whom their work is directed, selected parts of the population with whom they work directly, and those with whom they spend the most time in their development roles.

Finally, the career histories of the female development specialists are examined with particular attention to the length of their experience in development and in non-formal education, the kind of organization which employs them, and whether they perform volunteer development work.

Content of Development Work

With respect to the field representing their primary area of work in development, the data for which are displayed in Table 160, the female personnel identify the following fields with the greatest frequency: education or training of others to work in development (19, 17.9%), health (12, 11.3%), integrated rural development (10, 9.4%), general non-formal education (8, 7.5%), literacy and/or basic education (8, 7.5%), nutrition (7, 6.6%). Four of these fields are among those receiving most frequent mention by the males in the survey. Communication and media and higher education, however, replace health and nutrition as involving a greater percentage of the males.

Several patterns emerge when the female subjects are distinguished by citizenship and location of work. Female LDC citizens in LDC locations are greatly above the mean in mention of education and training of others as their primary area of development work (38.5%). They are also above the mean for female involvement in the fields of integrated rural development and general non-formal education, while below the mean in literacy/basic education, health, and nutrition. The latter three fields account for a total of just three female LDC citizens in LDC locations.

TABLE 160: SELECTED PRIMARY FIELD OF DEVELOPMENT WORK BY
CITIZENSHIP AND LOCATION OF WORK, CONTROLLING
FOR GENDER

		I LDC/LDC		II DC/LDC		III LDC/DC		IV DC/DC		SUM I-IV	
		F	M	F	M	F	M	F	M	F	M
Primary Fld		(26)	(124)	(33)	(60)	(2)	(9)	(45)	(111)	(106)	(304)
Dev Work											
Educ or Training of Trainers	n	10	15	4	5	1	3	4	19	19	42
	%	38.5	12.1	12.1	8.3	50.0	33.3	8.9	17.1	17.9	13.8
Intgrtd Rural Develpmt	n	3	25	2	8	0	0	5	9	10	42
	%	11.5	20.2	6.1	13.3	0	0	11.1	8.1	9.4	13.8
General NFE	n	4	13	0	8	0	1	4	8	8	30
	%	15.4	10.5	0	13.3	0	11.1	8.9	7.2	7.5	9.9
Literacy Basic Ed	n	1	12	1	3	0	1	6	9	8	25
	%	3.8	9.7	3.0	5.0	0	11.1	13.3	8.1	7.5	8.2
Higher Educ	n	1	10	1	7	0	1	4	9	6	27
	%	3.8	8.1	3.0	11.7	0	11.1	8.9	8.1	5.7	8.9
Commun, Media	n	0	12	1	6	0	1	1	11	2	30
	%	0	9.7	3.0	10.0	0	11.1	2.2	9.9	1.9	9.9
Health	n	1	4	8	3	0	0	3	7	12	14
	%	3.8	3.2	24.2	5.0	0	0	6.7	6.3	11.3	4.6
Agri- culture	n	1	3	1	7	0	0	1	4	3	14
	%	3.8	2.4	3.0	11.7	0	0	2.2	3.6	2.8	4.6
Exten- sion	n	0	2	2	1	1	1	2	5	5	9
	%	0	1.6	6.1	1.7	50.0	11.1	4.4	4.5	4.7	3.0
Vocatnl Skills Programs	n	0	7	1	2	0	0	0	3	1	12
	%	0	5.6	3.0	3.3	0	0	0	2.7	0.9	3.9
Nutri- tion	n	0	1	6	0	0	0	1	0	7	1
	%	0	0.8	18.2	0	0	0	2.2	0	6.6	0.3
Other/ Multi- Response	n	5	20	6	10	0	1	14	27	25	58
	%	19.2	16.1	18.2	16.7	0	11.1	31.1	24.3	23.6	19.1

Female DC citizens in LDC locations are noteworthy in their large representation in the fields of health (24.2%) and nutrition (18.2%) while having relatively low representation in the other fields mentioned. Female DC citizens in DC locations, while more evenly distributed among the various fields, are found above the means for females in the fields of literacy/basic education, integrated rural development, and higher education.

A few differences between females and males, by citizenship and location within selected fields, merit comment. In LDC locations the women in the survey tend more than the men to be involved in the education or training of others to work in development, while in DC locations men are more involved in this field. Men in LDCs report greater involvement than women in integrated rural development and in higher education, whereas these proportions are more balanced in DC locations. Additionally, DC males account for most of the involvement in agriculture among all the specialists in LDCs. Finally, males account for nearly all of the reported work in communication and media, regardless of citizenship and location.

In summary, concerning the development fields of the women in the survey, those who are LDC citizens in LDC

locations are primarily involved in the preparation of others to work in development. They also work in general non-formal education. Female DC citizens in LDCs, on the other hand, are most numerous in the specific and applied fields of health and nutrition, fields in which almost no female and few male LDC citizens are found.

Figure 20 visually highlights the levels of relative involvement, within developing countries, in selected development fields, by citizenship and gender.

To derive a better sense of what the individuals do within these fields of development, examination is next made of the development activity in which they spend the most time. Table 161 reveals that the female development specialists report the following activities with the greatest frequency: teaching or training (27, 20.9%), research or evaluation (22, 17.1%), community field work (21, 16.3%), planning or program design (20, 15.5%). The male specialists also name three of these activities most frequently, but include administration among those most frequently named (67, 17.7%) in lieu of community field work (28, 7.4%).

When the female subjects are differentiated by citizenship and location of work, it is observed that LDC

FIGURE 20. PRIMARY INVOLVEMENT IN SELECTED DEVELOPMENT FIELDS BY CITIZENSHIP & GENDER WITHIN DEVELOPING COUNTRIES

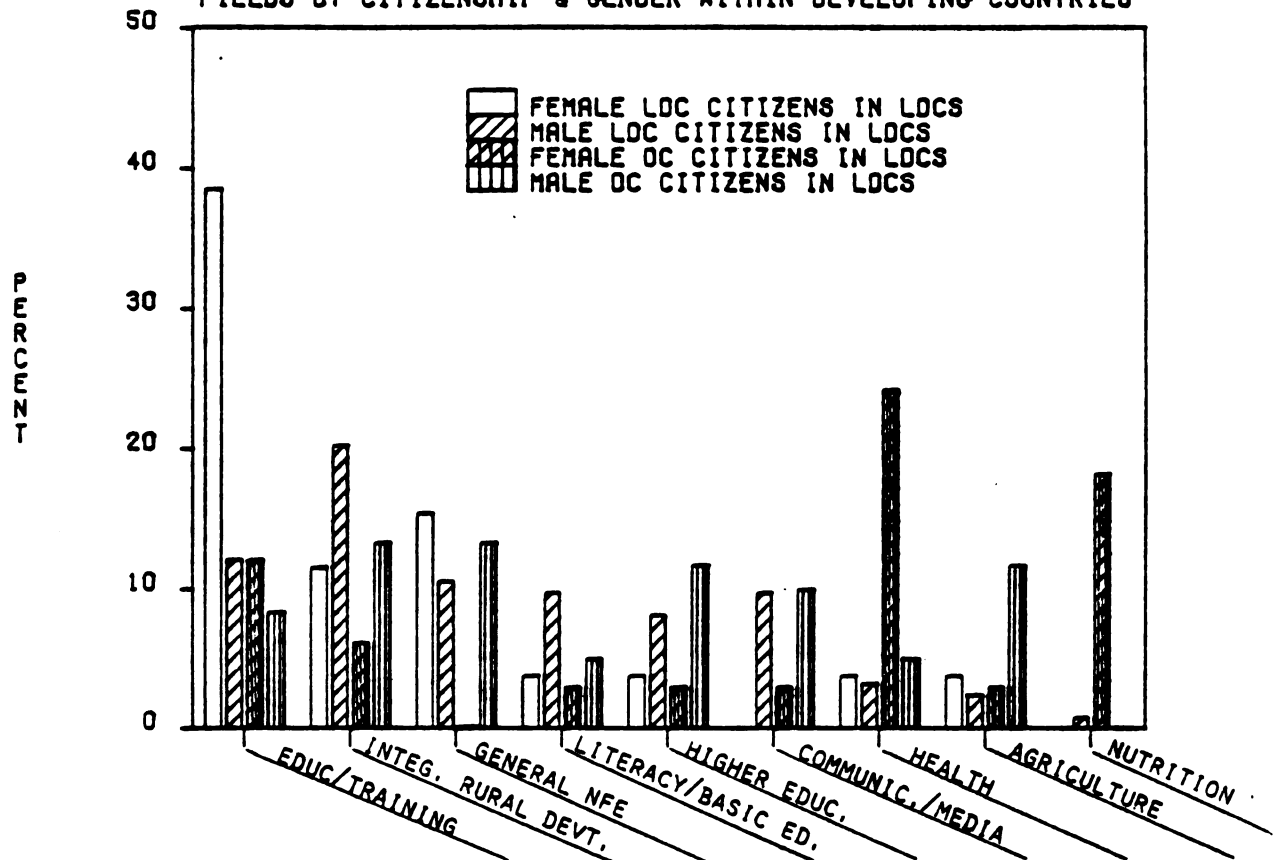


TABLE 161: DEVELOPMENT ACTIVITY IN WHICH MOST TIME SPENT
BY CITIZENSHIP AND LOCATION OF WORK,
CONTROLLING FOR GENDER

Dev Activ of Greatest Time		I LDC/LDC		II DC/LDC		III LDC/DC		IV DC/DC		SUM I-IV	
		F (35)	M (144)	F (35)	M (78)	F (5)	M (15)	F (54)	M (141)	F (129)	M (378)
Teach/ Train	n	10	28	9	15	1	4	7	40	27	87
	%	28.6	19.4	25.7	19.2	20.0	26.7	13.0	28.4	20.9	23.0
Plan/ Prog Des	n	7	26	4	24	2	3	7	27	20	80
	%	20.0	18.1	11.4	30.8	40.0	20.0	13.0	19.1	15.5	21.2
Adminis- tration	n	2	23	2	18	0	1	5	25	9	67
	%	5.7	16.0	5.7	23.1	0	6.7	9.3	17.7	7.0	17.7
Research /Eval	n	7	18	2	9	1	3	12	21	22	51
	%	20.0	12.5	5.7	11.5	20.0	20.0	22.2	14.9	17.1	13.5
Commun Fld Work	n	2	19	13	5	0	1	6	3	21	28
	%	5.7	13.2	37.1	6.4	0	6.7	11.1	2.1	16.3	7.4
Doc or Inf Serv	n	3	7	1	1	0	0	5	6	9	14
	%	8.6	4.9	2.9	1.3	0	0	9.3	4.3	7.0	3.7
Study	n	0	2	0	0	1	1	4	6	5	9
	%	0	1.4	0	0	20.0	6.7	7.4	4.3	3.9	2.4
Policy Making	n	1	7	0	1	0	2	1	1	2	11
	%	2.9	4.9	0	1.3	0	13.3	1.9	0.7	1.6	2.9
Other	n	3	14	4	5	0	0	7	12	14	31
	%	8.6	9.7	11.5	6.4	0	0	13.0	8.5	10.9	8.2

citizens in LDC locations are most concentrated in the activities of teaching and training (28.6%), planning and program design (20.0%), and research and evaluation (20.0%). Female DC citizens in LDCs are most strikingly engaged in community field work (37.1%), as well as in teaching and training (25.7%). Female DC citizens in DC locations are predominantly engaged in research and evaluation (22.2%).

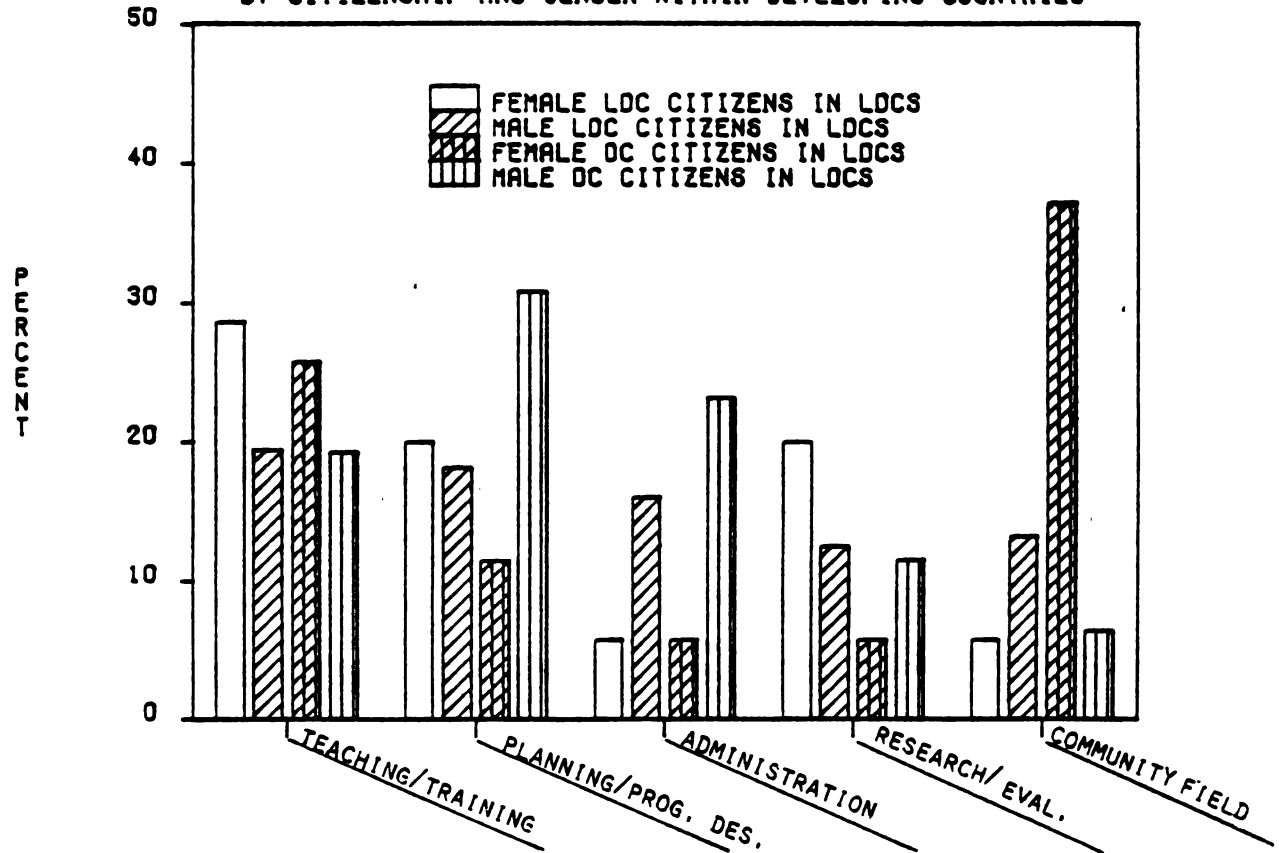
Particular differences emerge between females and males concerning primary development activity by citizenship and location of work. In LDC locations it is the women who are most involved in teaching or training activities, while in DC locations it is the men. A large percent of male DC citizens in LDCs are engaged in planning and program design while the percent is much lower for female DC citizens in LDCs. With respect to the activity of administration, males greatly out-represent females in every grouping by citizenship and location. The women in the survey tend to be more involved than the men in research and evaluation, except in the case of female DC citizens in LDCs. Finally, whereas among LDC citizens in LDCs, men rather than women are engaged in community field work, this is greatly reversed among DC citizens in LDCs. In essence, few female LDC citizens in the study are found primarily involved in community-level field work.

Figure 21 graphically presents the levels of primary involvement in selected development activities, within developing countries, by citizenship and gender.

Tentatively emerging is a hypothesis that higher education for women working in LDCs is negatively associated with the tendency to be primarily engaged in community field work. This would relate to the lower mean graduate education level of female DC citizens in LDCs compared with their LDC counterparts. It might also be speculated that development activities regarded as lower status in a society (for example, community field work) may be more likely to be assumed by foreigners whose reference groups differently attribute status. Thus, a relatively young, female Peace Corps volunteer involved in community field activities may accrue higher status from her DC reference group than would a female LDC citizen engaged in such work in her own society. Furthermore, industrialized country women in LDCs may not come under local cultural bans such as prohibition of travel alone, especially if unmarried.

To probe the first hypothesis, the education levels of females engaged primarily in community-level field work in LDCs are examined. Both of the female LDC citizens so engaged are found to be highly educated at the graduate

FIGURE 21. PRIMARY INVOLVEMENT IN SELECTED DEVPMT ACTIVITIES
BY CITIZENSHIP AND GENDER WITHIN DEVELOPING COUNTRIES



level. Of the 13 female DC citizens so engaged, 23.1 percent are educated at the graduate level. It is recalled that 71.4 percent of the female LDC citizens in LDCs have graduate education, while the figure for female DC citizens in LDCs is only 37.1 percent. Although there are very few cases being examined, it appears that tendency to be engaged in community-level field work is only slightly related to lower rather than higher education level for DC females working in LDCs. Instead, the hypothesis that development activities regarded as lower status or culturally inappropriate in a society may be carried out by foreigners more than by persons indigenous to the area seems deserving of further study in research sequel to this.

Turning next to consideration of the primary field of non-formal education in which the female development specialists are found, one notes in Table 162 that they are mostly engaged in basic needs education (42, 49.4%), followed by professional skills upgrading (13, 15.3%), and vocational skills training (9, 10.6%). The males are somewhat more evenly distributed among these three fields (30.9%, 21.5%, and 21.5%, respectively).

When the females are differentiated by citizenship and location of work, LDC citizens in LDC locations, and DC citizens in DC locations, are found to be less involved in

TABLE 162: PRIMARY FIELD OF NON-FORMAL EDUCATION WORK BY
CITIZENSHIP AND LOCATION OF WORK, CONTROLLING
FOR GENDER

		I LDC/LDC		II DC/LDC		III LDC/DC		IV DC/DC		SUM I-IV	
		F	M	F	M	F	M	F	M	F	M
Primary Fld	NFE Work	(24)	(114)	(25)	(53)	(4)	(6)	(32)	(73)	(85)	(246)
Basic	n	12	43	13	11	0	3	17	19	42	76
Needs Ed	%	50.0	37.7	52.0	20.8	0	50.0	53.1	26.0	49.4	30.9
Voc											
Skills	n	2	24	4	17	1	1	2	11	9	53
Training	%	8.3	21.1	16.0	32.1	25.0	16.7	6.3	15.1	10.6	21.5
Prof											
Skills	n	5	20	2	14	0	1	6	18	13	53
Upgrade	%	20.8	17.5	8.0	26.4	0	16.7	18.8	24.7	15.3	21.5
Enrich-	n	1	11	0	1	1	0	1	4	3	16
ment Ed	%	4.2	9.6	0	1.9	25.0	0	3.1	5.5	3.5	6.5
Other,											
Multi-	n	4	16	6	10	2	1	6	21	18	48
Response	%	16.6	14.0	24.0	18.9	50.0	16.7	18.7	28.8	21.2	19.5

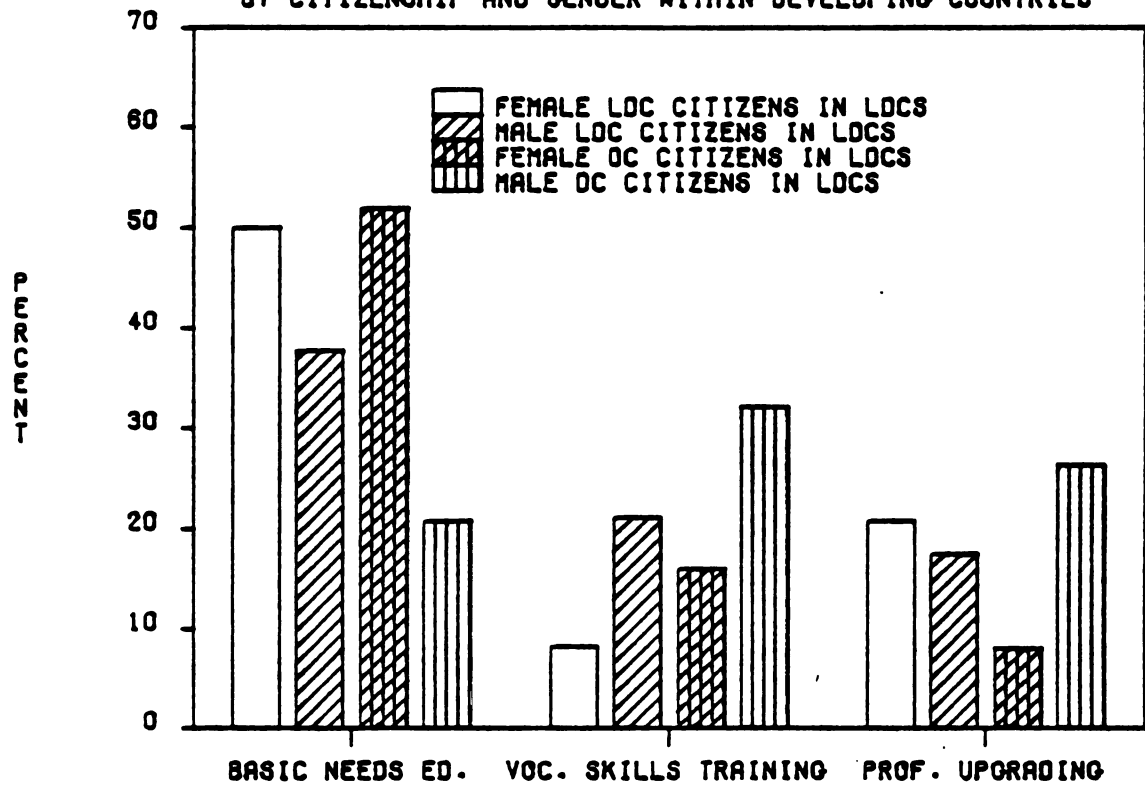
vocational skills training and more involved in professional skills upgrading than are female DC citizens in LDCs. The female development specialists in each of these three groupings are involved at approximately equally high levels in basic needs education. Males are much less involved than females in basic needs education, in each of the three groupings discussed, and more involved than females in vocational skills training.

In sum, involvement in basic needs education tends to be particularly associated with the female development specialists, although it is the field of non-formal education engaging a plurality of the males. If the fundamental fields of basic needs education and vocational skills training are combined, female DC citizens in LDCs are found to be the most highly engaged. This again points to the pragmatic and very basic skill areas being addressed by foreign women in developing countries.

Figure 22 enables a visual portrayal of the relative primary involvement in selected fields of non-formal education by citizenship and gender, within developing countries.

To consider the activity within non-formal education in which the specialists spend the most time, attention is

FIGURE 22. PRIMARY INVOLVEMENT IN SELECTED NFE FIELDS
BY CITIZENSHIP AND GENDER WITHIN DEVELOPING COUNTRIES



turned to Table 163. The female development specialists are found most heavily represented in the activities of program design (29, 27.1%) and instruction (22, 20.6%), while the male development specialists are predominantly engaged in administration (73, 25.3%) and program design (65, 22.6%).

Considering the females by citizenship and location of work, one finds little variation among the groupings in uniformly high level of involvement in program design. Regarding instruction, however, considerable variation occurs, with female DC citizens in LDC locations having the greatest involvement (37.5%), and females in the other groupings much less. At the same time, female DC citizens in LDCs are little engaged in research or administration activities. Female DC citizens in DC locations are noteworthy in their primary involvement in research and evaluation activities.

The differences between females and males are most dramatic in the case of administration. Regardless of citizenship and location, males report a higher level of primary involvement in this activity than do females. Concerning program design, female rather than male LDC citizens are more apt to be involved, while male rather than female DC citizens are so.

TABLE 163: NFE ACTIVITY IN WHICH MOST TIME SPENT BY
CITIZENSHIP AND LOCATION OF WORK, CONTROLLING
FOR GENDER

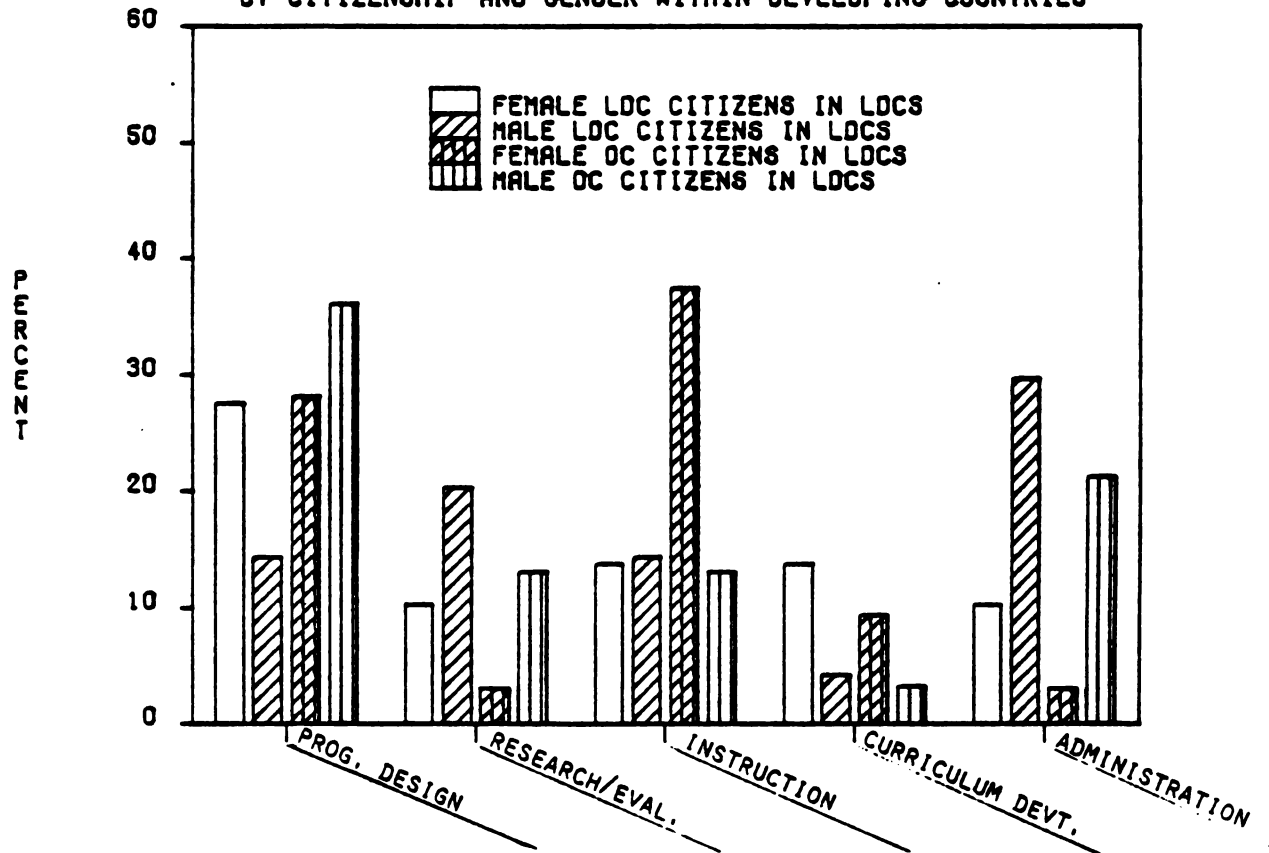
NFE Activ of Greatest Time		I LDC/LDC		II DC/LDC		III LDC/DC		IV DC/DC		SUM I-IV	
		F (29)	M (118)	F (32)	M (61)	F (4)	M (8)	F (42)	M (101)	F (107)	M (288)
Program	n	8	17	9	22	1	3	11	23	29	65
Design	%	27.6	14.4	28.1	36.1	25.0	37.5	26.2	22.8	27.1	22.6
Research	n	3	24	1	8	1	3	9	19	14	54
/Eval	%	10.3	20.3	3.1	13.1	25.0	37.5	21.4	18.8	13.1	18.8
Instruc-	n	4	17	12	8	1	2	5	18	22	45
tion	%	13.8	14.4	37.5	13.1	25.0	25.0	11.9	17.8	20.6	15.6
Curric	n	4	5	3	2	1	0	2	6	10	13
Devlpmt	%	13.8	4.2	9.4	3.3	25.0	0	4.8	5.9	9.3	4.5
Adminis-	n	3	35	1	13	0	0	5	25	9	73
tration	%	10.3	29.7	3.1	21.3	0	0	11.9	24.8	8.4	25.3
Support	n	3	5	2	2	0	0	4	1	9	8
Services	%	10.3	4.2	6.3	3.3	0	0	9.5	1.0	8.4	2.8
Other,											
Multi-	n	4	15	4	6	0	0	6	9	14	30
Response	%	13.7	12.7	12.5	9.8	0	0	14.2	8.9	13.1	10.4

Figure 23 offers a graphic representation of the activities in which the specialists in developing countries spend the most time, by citizenship and gender.

In sum concerning the content of the development work of the females in the survey, it is seen that they are primarily engaged in the general training of other development workers, and in both broad-based and applied, especially health-related, fields of development. Their development work is most often focused at the level of "basic needs." LDC women in LDCs are particularly involved in the education or training of others and in general and integrated development. DC women in LDCs are most engaged in applied, health-care fields, while DC women in DCs are most often found in education or training.

The activities of the female development specialists typically entail teaching or instruction, research or evaluation, community field work and program planning. They rarely entail administration, a seemingly male preserve. LDC women in LDCs are little involved in community field work. DC women in LDCs, on the other hand, are highly involved in field activities and seldom involved in research.

FIGURE 23. PRIMARY INVOLVEMENT IN SELECTED NFE ACTIVITIES
BY CITIZENSHIP AND GENDER WITHIN DEVELOPING COUNTRIES



A hypothesis is proposed that DC women in LDCs tend more than LDC women in LDCs to assume development roles involving applied fields (especially health and nutrition) and carried out via community field work. This may relate, in part, to the former grouping's relatively lower mean age and lower level of formal education. It is also speculated that foreign women engaged in development activities in developing countries may be able to perform roles that are locally defined as having relatively lower status but that are not so defined by their own reference groups, or that may involve culturally circumscribed behavior patterns such as travel alone.

Development Broker Linkages

Attention is next turned to selected development broker linkages of the females in the survey, deriving from work location, intended work beneficiaries and persons with whom they work directly. Examining the location in which the specialists spend the most time, it is found that the women are predominantly located in a capital city (30, 40.0%), followed by rural villages (26, 34.7%). For men the pattern is similar (39.7% and 30.0%, respectively).

Several noteworthy discriminations appear, however, when considering the development specialists, in Table 164, by location, citizenship, and gender. In LDC locations, more LDC than DC women work in a capital city, while more DC than LDC women work in rural villages. For men the reverse holds. More DC than LDC men work in a capital city, while more LDC than DC men work in rural villages.

These findings further suggest that LDC women may be somewhat more engaged than DC women in LDCs in development broker linkages with other than the intended beneficiaries of the development efforts. This may relate to the earlier hypothesis that LDC women in LDCs assume relatively higher-status development roles than do the surveyed DC women in LDCs.

At the same time, more LDC than DC men in LDCs appear directly engaged in rural applications of development efforts. This may similarly relate to the hypothesized higher-status development roles assumed by DC men in LDCs vis-a-vis both DC women and LDC men. It is possible that this owes, in part, to the higher level of formal education of DC men in LDCs relative to the other development specialists.

TABLE 164: LOCATION WHERE MOST TIME SPENT IN DEVELOPMENT
ACTIVITIES BY CITIZENSHIP AND LOCATION OF
WORK, CONTROLLING FOR GENDER

Location of Most Time	I LDC/LDC		II DC/LDC		III LDC/DC		IV DC/DC		SUM I-IV	
	F		M		F		M		F	
	(24)	(113)	(22)	(49)	(4)	(10)	(25)	(65)	(75)	(237)
Rural Villages	n 8	48	9	11	2	4	7	8	26	71
	% 33.3	42.5	40.9	22.4	50.0	40.0	28.0	12.3	34.7	30.0
Capital City	n 11	40	9	26	1	4	9	24	30	94
	% 45.8	35.4	40.9	53.1	25.0	40.0	36.0	36.9	40.0	39.7
Towns	n 1	7	1	2	0	0	3	12	5	21
	% 4.2	6.2	4.5	4.1	0	0	12.0	18.5	6.7	8.9
Non-Cap Cities	n 1	6	1	7	1	1	5	13	8	27
	% 4.2	5.3	4.5	14.3	25.0	10.0	20.0	20.0	10.7	11.4
Country-side	n 2	8	2	3	0	1	1	3	5	15
	% 8.3	7.1	9.1	6.1	0	10.0	4.0	4.6	6.7	6.4
Multi-Response	n 1	4	0	0	0	0	0	5	1	9
	% 4.2	3.5	0	0	0	0	0	7.7	1.3	3.8

Two kinds of broker linkages are next examined: first, the intended beneficiaries of the specialists' efforts, and, second, those with whom they actually work directly. Concerning parts of the population to whom their development efforts are directed, seven population segments are selected for consideration. The female development personnel report working with these segments in the following order of frequency: poor people (72.1%), women (66.7%), rural people (65.9%), families (50.4%), men (46.5%), policy makers (39.5%), and planners (38.8%). The percentages of men working with the specified segments are less in the cases of the poor, women, and families; while more in the case of men.

Many key distinctions become apparent when considering citizenship and location in Table 165. Female LDC citizens in LDC locations have considerably less than mean (for females) mention of all the population segments except policy makers and planners. At the same time, male LDC citizens in LDCs have greater than mean (for males) mention of all the population segments except policy makers and planners.

Nearly the reverse holds in the case of DC women in developing countries. DC women are greatly above the mean

**TABLE 165: SELECTED PARTS OF POPULATION TO WHOM
DEVELOPMENT EFFORTS DIRECTED BY CITIZENSHIP
AND LOCATION OF WORK, CONTROLLING FOR GENDER**

	I LDC/LDC		II DC/LDC		III LDC/DC		IV DC/DC		SUM I-IV	
Parts of	F	M	F	M	F	M	F	M	F	M
Population	(35)	(144)	(35)	(78)	(5)	(15)	(54)	(141)	(129)	(378)
Poor	n 17	102	30	61	4	11	42	71	93	245
	% 48.6	70.8	85.7	78.2	80.0	73.3	77.8	50.4	72.1	64.8
Rural	n 17	113	31	60	3	9	34	66	85	248
	% 48.6	78.5	88.6	76.9	60.0	60.0	63.0	46.8	65.9	65.6
Women	n 15	96	28	55	2	10	41	74	86	235
	% 42.9	66.7	80.0	70.5	40.0	66.7	75.9	52.5	66.7	62.2
Men	n 14	92	19	56	2	11	25	78	60	237
	% 40.0	63.9	54.3	71.8	40.0	73.3	46.3	55.3	46.5	62.7
Families	n 10	70	24	30	3	9	28	46	65	155
	% 28.6	48.6	68.6	38.5	60.0	60.0	51.9	32.6	50.4	41.0
Policy Makers	n 15	52	6	24	2	7	28	67	51	150
	% 42.9	36.1	17.1	30.8	40.0	46.7	51.9	47.5	39.5	39.7
Planners	n 15	58	7	23	4	7	24	58	50	146
	% 42.9	40.3	20.0	29.5	80.0	46.7	44.4	41.1	38.8	38.6

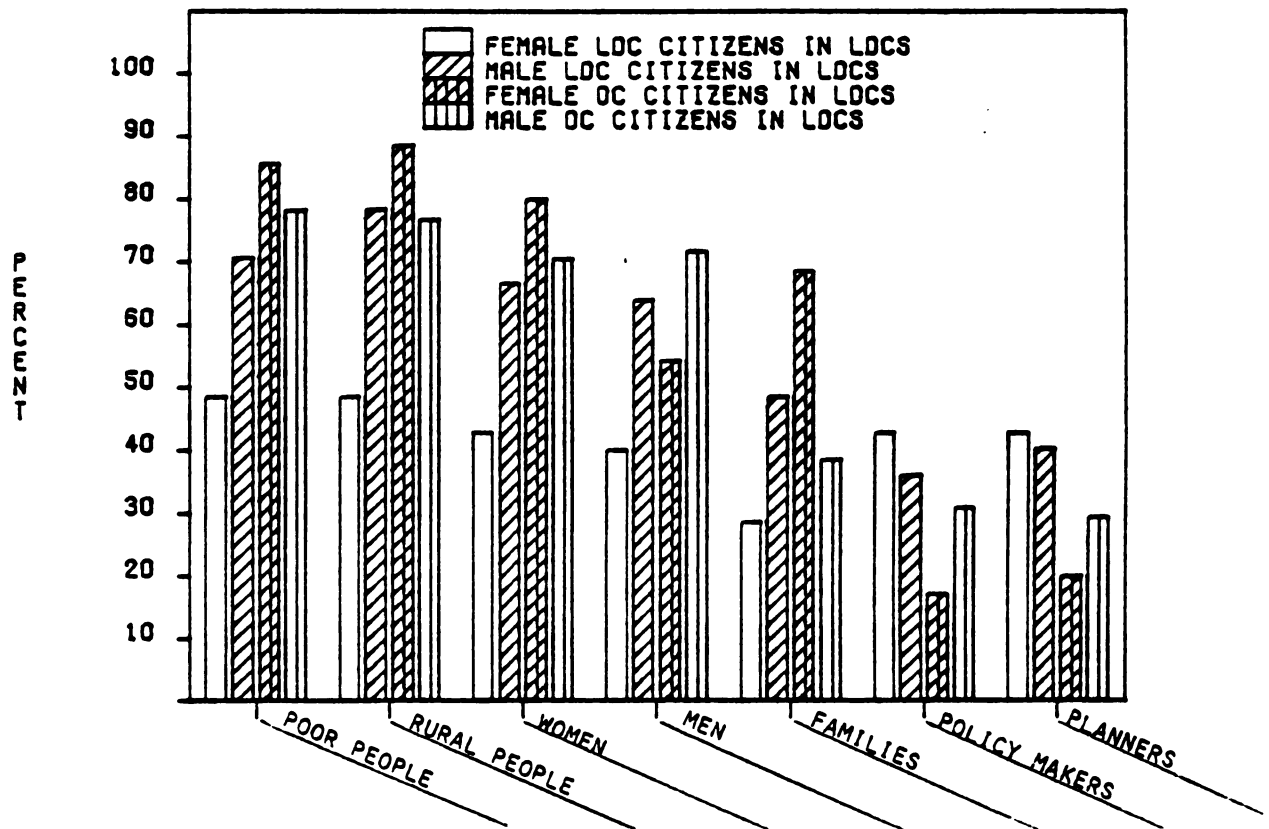
(for females) in identifying all the population segments as intended beneficiaries of their efforts, except policy makers and planners. The DC men in LDCs, while above the mean (for males) in identifying all the population segments except families, policy makers, and planners, do identify most of the population segments with less frequency than the DC women in LDCs. The exceptions, those segments which the DC men identify more often than their female counterparts, are men, policy makers, and planners.

Figure 24 highlights these patterns of identification of intended development beneficiaries, by citizenship and gender, within developing countries.

Among DC citizens in DC locations, females give greater mention than males to each population segment except that of men.

Emerging from these findings, then, is a configuration in which, among the examined LDC development specialists in LDCs, men more than women direct their efforts to poor rural people of both sexes, while women more than men direct their efforts to more highly placed persons (i.e., policy makers and planners). This may relate to the somewhat higher educational levels achieved by the female versus male LDC citizens and their consequent assumption of higher status

FIGURE 24. SELECTED PARTS OF POPN TO WHOM DEVPMT EFFORTS DIRECTED. BY CITSHIP AND GENDER WITHIN DEVELOPING COUNTRIES



development roles. Among the examined DC development specialists in LDCs, women more than men direct their efforts toward poor rural people, especially women and families, while men more than women direct their efforts to policy makers and planners. It is again hypothesized that the higher educational levels of the male versus female DC citizens may be associated with their performance of higher status development roles.

The studied DC women in LDCs appear to perform more applied, rurally-based development roles engaged in to a lesser extent by LDC women. Correspondingly, the DC men appear to engage in broker development roles not assumed to the same degree by the LDC men.

Consideration is now given to selected parts of the population with whom the specialists have a direct working relationship. Table 166 shows that, for the segments identified, the women tend to work mostly with other women (62.8%), men (45.0%), policy makers (40.3%), and rural people (40.3%). At least 40 percent of the men name all of these segments, plus planners (51.1%).

Differentiating the responses by citizenship and location of work, it is found in developing countries that female DC citizens report working directly with women and

**TABLE 166: SELECTED PARTS OF POPULATION WITH WHOM WORK
DIRECTLY IN DEVELOPMENT EFFORTS BY CITIZENSHIP
AND LOCATION OF WORK, CONTROLLING FOR GENDER**

		I LDC/LDC		II DC/LDC		III LDC/DC		IV DC/DC		SUM I-IV	
Parts of		F	M	F	M	F	M	F	M	F	M
Population	(35)	(144)	(35)	(78)	(5)	(15)	(54)	(141)	(129)	(378)	
Men	n	15	86	15	53	3	11	25	73	58	223
	%	42.9	59.7	42.9	67.9	60.0	73.3	46.3	51.8	45.0	59.0
Women	n	19	85	28	39	3	11	31	62	81	197
	%	54.3	59.0	80.0	50.0	60.0	73.3	57.4	44.0	62.8	52.1
Planners	n	16	79	7	40	2	10	24	64	49	193
	%	45.7	54.9	20.0	51.3	40.0	66.7	44.4	45.4	38.0	51.1
Policy Makers	n	14	71	8	38	1	9	29	67	52	185
	%	40.0	49.3	22.9	48.7	20.0	60.0	53.7	47.5	40.3	48.9
Rural	n	13	78	21	36	2	6	16	37	52	157
	%	37.1	54.2	60.0	46.2	40.0	40.0	29.6	26.2	40.3	41.5
Poor	n	14	63	15	32	3	6	19	33	51	134
	%	40.0	43.8	42.9	41.0	60.0	40.0	35.2	23.4	39.5	35.4
Families	n	7	40	6	10	1	3	8	11	22	64
	%	20.0	27.8	17.1	12.8	20.0	20.0	14.8	7.8	17.1	16.9

rural people to a greater extent than do female LDC citizens. The reverse holds concerning planners and policy makers with whom more LDC than DC women work.

Male LDC citizens in developing countries report working directly with each of the population segments to a greater extent than do female LDC citizens. A similar pattern holds in the case of DC citizens in LDCs except regarding women, rural people, and families -- identified more often by the females. Interestingly, among DC citizens in DC locations there tends to be less variation among males and females than occurs in LDC locations.

It is revealing to compare Tables 165 and 166, the former focusing on selected parts of the population to whom development efforts are directed, and the latter on the extent to which those segments are directly linked with the specialists in their development work. The female LDC citizens in LDC locations tend to actually work directly with those who are the intended beneficiaries of their development efforts. Poor people are the intended beneficiaries of the efforts of 48.6 percent of the LDC women and involved in direct linkages with 40.0 percent of them. Concerning rural people, the ratio is 48.6 percent and 37.1 percent, respectively. Concerning women, 42.9 percent and 54.3 percent; men, 40.0 percent and 42.9

percent; families, 28.6 percent and 20.0 percent; policy makers, 42.9 percent and 40.0 percent; planners, 42.9 percent and 45.7 percent.

The male LDC citizens in LDC locations are more inclined to name several segments as the intended beneficiaries of their efforts than to work with them directly; for instance, poor people (70.8% and 43.8%, respectively); rural people (78.5% and 54.2%, respectively); and families (48.6% and 27.8%, respectively).

For the female DC citizens in LDC locations the gap between intended beneficiaries and direct linkages is even greater in the case of poor people (85.7% and 42.9%, respectively), rural people (88.6% and 60.0%, respectively), and families (68.6% and 17.1%, respectively).

The male DC citizens in LDC locations also tend to name most of the selected population segments as intended beneficiaries with greater frequency than they mention working with them directly. The notable exceptions are men (71.8% and 67.9%, respectively), policy makers (30.8% and 48.7%, respectively), and planners (29.5% and 51.3%, respectively). The pattern for female and male DC citizens in DC locations similarly identifies poor people, rural people, women and families as intended beneficiaries to a

greater extent than as direct linkages.

In sum, there is greater disparity for DC versus LDC females in LDCs between identification of certain intended development beneficiaries and the extent to which they are being worked with directly. Although a greater gap exists for DC women in LDCs in the frequency of mention of rural women as the objects of their development efforts and the extent of working with them directly, DC women do report considerably more direct working relationships with rural women than do the LDC women. Finally, DC males in LDCs reveal greater tendency to work on behalf of poor rural people, especially women, through direct working relationships with policy makers and planners than through the intended beneficiaries themselves.

When the respondents are asked to more specifically indicate the two or three population segments with whom they spend the most time, several distinctions become apparent in controlling for gender, as noted in Table 167.

The female LDC citizens in LDC locations are most inclined to identify teachers or trainers (47.8%), development workers (30.4%), and planners (30.4%). The female DC citizens in LDC locations most often name women (37.9%), trainers or teachers (31.0%), and rural people

**TABLE 167: THREE PARTS OF POPULATION WITH WHOM MOST TIME
SPENT IN DEVELOPMENT WORK BY CITIZENSHIP AND
LOCATION OF WORK, CONTROLLING FOR GENDER**

		I LDC/LDC		II DC/LDC		III LDC/DC		IV DC/DC		SUM I-IV	
Parts of		F	M	F	M	F	M	F	M	F	M
Population	(23)	(118)	(29)	(59)	(3)	(11)	(37)	(92)	(92)	(280)	
Trainers/n	11	24	9	18	1	5	14	34	35	81	
Teachers %	47.8	20.3	31.0	30.5	33.0	45.5	37.8	37.0	38.0	28.9	
Devlpmt n	7	22	6	20	0	2	5	16	18	60	
Workers %	30.4	18.6	20.7	33.9	0	18.2	13.5	17.4	19.6	21.4	
Adults n	3	30	5	8	1	1	4	25	13	64	
%	13.0	25.4	17.2	13.6	33.0	9.1	10.8	27.2	14.1	22.9	
Policy n	3	26	2	9	0	4	8	21	13	60	
Makers %	13.0	22.0	6.9	15.3	0	36.4	21.6	22.8	14.1	21.4	
Planners n	7	22	3	11	0	3	7	19	17	55	
%	30.4	18.6	10.3	18.6	0	27.3	18.9	20.7	18.5	19.6	
Students n	4	19	7	5	1	3	10	22	22	49	
%	17.4	16.1	24.1	8.5	33.3	27.3	27.0	23.9	23.9	17.5	
Rural n	4	32	8	15	0	1	3	4	15	52	
People %	17.4	27.1	27.6	25.4	0	9.1	8.1	4.3	16.3	18.6	
Mid-Lev n	3	12	3	15	0	1	5	28	11	56	
Offcls %	13.0	10.2	10.3	25.4	0	9.1	13.5	30.4	12.0	20.0	
High-Lev n	0	22	3	11	0	4	2	14	5	51	
Offcls %	0	18.6	10.3	18.6	0	36.4	5.4	15.2	5.4	18.2	
Local n	2	24	2	6	0	2	3	7	7	39	
Leaders %	8.7	20.3	6.9	10.2	0	18.2	8.1	7.6	7.6	13.9	
Poor n	3	15	2	8	0	1	3	3	8	27	
%	13.0	12.7	6.9	13.6	0	9.1	8.1	3.3	8.7	9.6	
Youth n	1	21	3	3	1	0	2	4	7	28	
%	4.3	17.8	10.3	5.1	33.3	0	5.4	4.3	7.6	10.0	
Women n	2	11	11	2	0	0	7	1	20	14	
%	8.7	9.3	37.9	3.4	0	0	18.9	1.1	21.7	5.0	
Men n	0	4	2	8	0	1	1	5	3	18	
%	0	3.4	6.9	13.6	0	9.1	2.7	5.4	3.3	6.4	

(27.6%). Female DC citizens in DC locations most frequently mention trainers or teachers (37.8%), students (27.0%), and policy makers (21.6%).

The male LDC citizens in LDC locations work most with rural people (27.1%), adults (25.4%), and policy makers (22.0%). The DC males in LDCs spend the most time with development workers (33.9%), trainers or teachers (30.5%), rural people (25.4%), and mid-level officials (25.4%). The DC males in DCs work most with trainers or teachers (37.0%), mid-level officials (30.4%), and adults (27.2%).

It is instructive to focus on several of the population segments because of the considerable discrimination found by citizenship and location of work, when controlling for gender. Concerning policy makers and high-level officials, within developing countries the men, regardless of citizenship, are more inclined than the women to report spending a good deal of time with them. In fact, no LDC women in LDCs identify high-level officials as one of the parts of the population with whom they spend the most time. DC women in DCs report about as much time spent as men with policy makers, but less time than men with high-level officials. This raises the question of whether women, despite comparable education levels with men, nevertheless have less access to higher level decision-makers most of

whom may themselves be men.

LDC women in LDCs and DC men in LDCs are similar in their greater tendency to spend time with development workers and planners than do LDC men and DC women, also in LDCs. This relates to an earlier observation that the higher educated LDC women and DC men in developing countries appear to perform somewhat higher status, less applied development roles than those assumed by the less highly educated DC women and LDC men in LDCs. However, it also appears that the highest level liaisons with decision-makers are primarily engaged in by men.

LDC men in LDCs are noteworthy in their indication of time spent with local leaders and youth, while DC women in LDCs deserve mention because of their great time spent in development work with other women.

Finally, regarding the poor, it is especially deserving of comment that this population segment, while the intended beneficiaries of the efforts of more than half of the development specialists, is, nevertheless, identified as a segment with whom less than 14 percent of the specialists spend the most time. Rather than work with the poor directly, most of the development specialists surveyed spend the most time with trainers and teachers and other

development workers. This holds true regardless of gender. One caveat is necessary, however, in that it is likely that many of the trainers and development workers may also themselves be among the relatively poor.

Figure 25 enables a visual summary of the two or three parts of the population with whom the specialists in developing countries spend the most time.

In summary, concerning the broker linkages of the LDC-based females in the survey, it is seen that they are divided between capital city and rural village locales. Although poor rural women figure largely as among the intended beneficiaries of their efforts (though less prominently so for LDC women in LDCs), LDC women spend the most time with teachers or trainers, and development workers. DC women in LDCs spend considerably more time with rural people and with women than do LDC women, who are more inclined to spend time with planners.

These findings lend further support to the image of LDC women development specialists as having complex broker linkages through their diverse development roles. They, more than DC women also in LDCs, appear to interact at multiple levels of social strata in carrying out their development activities. The linkages of DC women in LDCs

FIGURE 25. 2 OR 3 PARTS OF POPN WITH WHOM MOST TIME SPENT,
BY CITIZENSHIP AND GENDER WITHIN DEVELOPING COUNTRIES

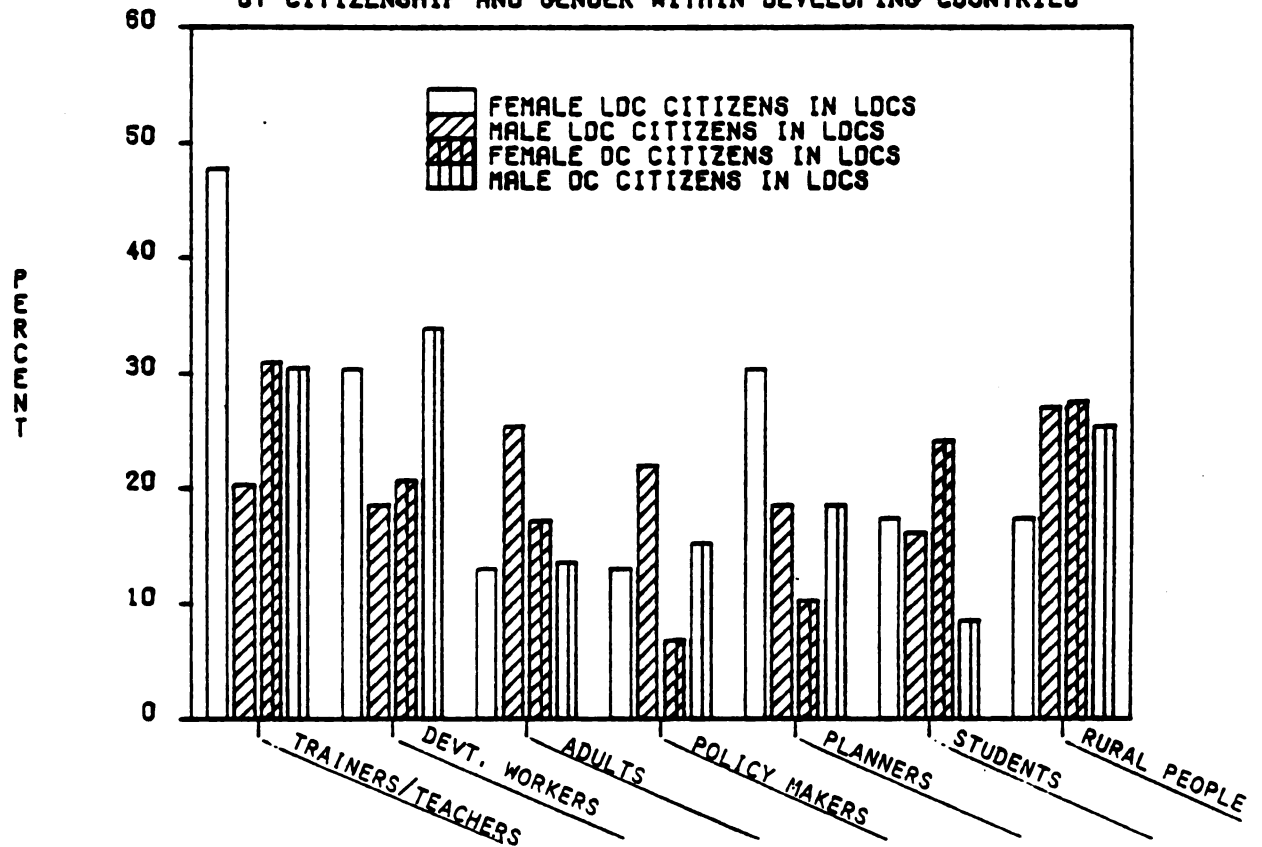
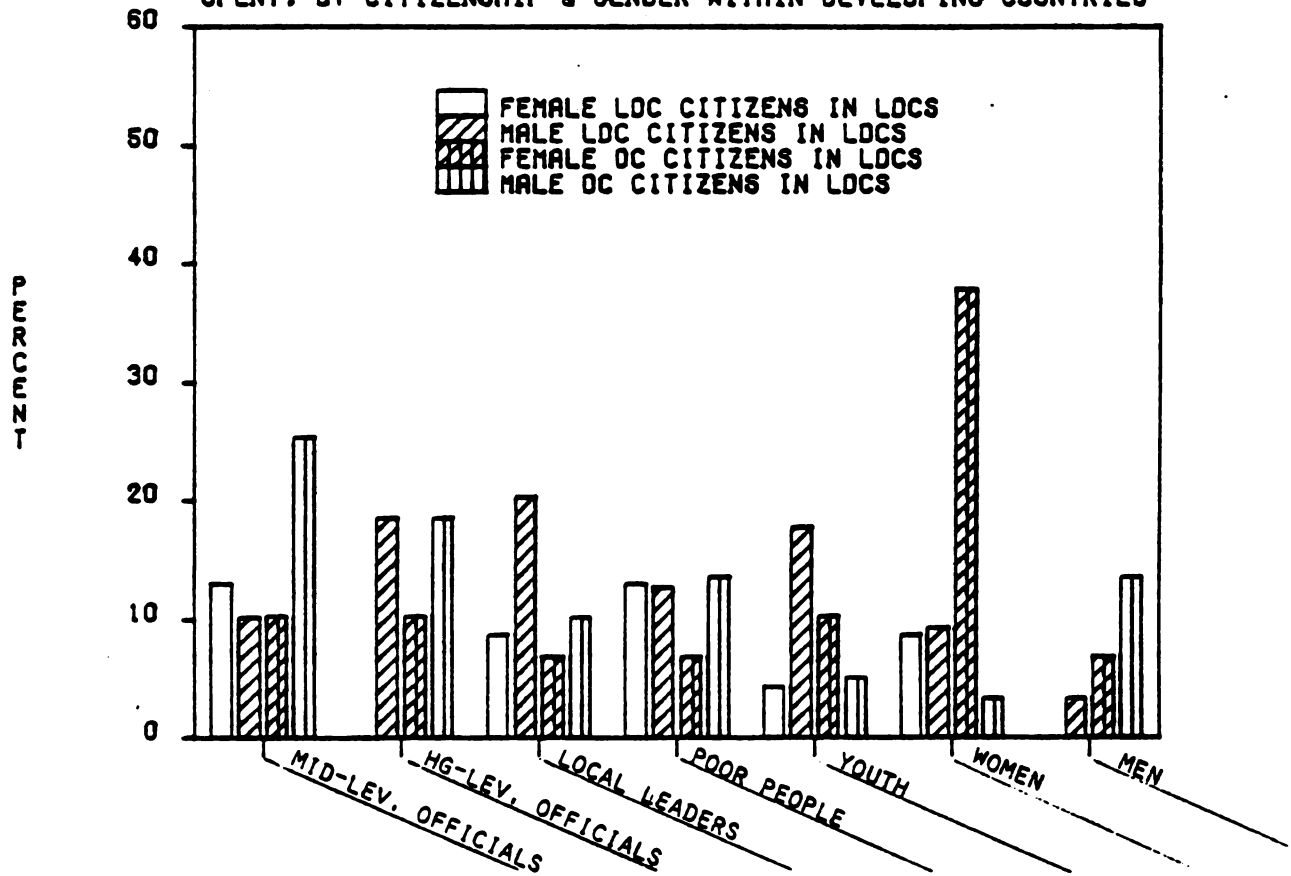


FIGURE 25 (CONTD). 2 OR 3 PARTS OF POPN WITH WHOM MOST TIME SPENT, BY CITIZENSHIP & GENDER WITHIN DEVELOPING COUNTRIES



seem to be stronger among rural women who are intended beneficiaries of their development efforts, but weaker among planners and certain decision makers.

The linkages, however, of DC men in LDCs are more similar to those of the LDC women with respect to their complexity and bridging with various social strata. All of the female development specialists are under-represented in linkages with policy makers and high-level officials.

Career History

To complete the sketch of development role characteristics of the females and the males in this study, brief consideration is given to selected aspects of their career histories: years of development experience, years of non-formal education experience, kind of employing organization, and whether engaged in volunteer work in development.

Table 168 provides data on the mean and median years of experience in development for females and for males by citizenship and location of work. Among the females, DC women in DC locations have the highest median years of development experience (7.5), although their median age (35.1) is not the highest among the women. They are

**TABLE 168: YEARS OF DEVELOPMENT EXPERIENCE BY CITIZENSHIP
AND LOCATION OF WORK, CONTROLLING FOR GENDER**

Years in Devlpmt	I LDC/LDC		II DC/LDC		III LDC/DC		IV DC/DC	
	F (34)	M (141)	F (34)	M (77)	F (2)	M (15)	F (52)	M (137)
Mean	7.5	9.5	5.1	9.0	1.0	11.1	9.1	12.4
Median	5.5	7.9	3.0	7.9	1.0	10.0	7.5	10.6

**TABLE 169: YEARS OF NON-FORMAL EDUCATION EXPERIENCE BY
CITIZENSHIP AND LOCATION OF WORK, CONTROLLING
FOR GENDER**

Years in NFE	I LDC/LDC		II DC/LDC		III LDC/DC		IV DC/DC	
	F (29)	M (128)	F (33)	M (67)	F (4)	M (10)	F (46)	M (118)
Mean	6.5	7.5	3.7	6.7	1.0	8.1	7.8	10.7
Median	5.3	5.3	2.6	4.2	1.0	5.5	5.1	9.7

followed in length of experience by LDC women in LDCs (5.5) with a median age of 38.3, then by DC women in LDCs (3.0) with a median age of 28.0.

In all four groupings, the women have less development experience than the men. This ranges from a gap of only 2.4 years among LDC citizens in LDC locations, to one of 3.1 years among DC citizens in DC locations, and one of 4.9 years among DC citizens in LDC locations.

Because most of the development specialists are currently working in non-formal education, Table 169 details their mean and median years of experience in this area. Among the females, LDC women in LDCs and DC women in DCs are similar in having 5.3 and 5.1 median years of NFE experience, respectively. DC women in LDCs are much lower with 2.6 years of experience in non-formal education.

The gap in years of NFE experience is not as great between females and males as the gap in development experience. No gap in median years of NFE experience is found among LDC citizens in LDC locations, while a gap of 1.6 years exists among DC citizens in LDC locations, and one of 4.6 years among DC citizens in DC locations.

The data point to the finding that both the female and the male specialists have been engaged with non-formal education for nearly as long as they have been involved in development. They also reveal that LDC women in LDCs, and DC women in DCs, tend to have longer professional histories in development and non-formal education, than do the DC women in LDCs. This would help to explain the more varied broker linkages of the former women and the seemingly more restricted linkages of the DC women in LDCs.

Next examined are the kinds of employing organizations of the females and the males surveyed. Table 170 presents data for this item by citizenship and location of work, controlling for gender.

Female LDC citizens in LDC locations are found most frequently in private voluntary organizations (24.2%), followed by national government organizations (18.2%). The female DC citizens in LDC locations are overwhelmingly found affiliated with national governmental organizations (47.6%). The U.S. government Peace Corps is the sponsoring organization for many of these individuals. Female DC citizens in DC locations are found most commonly affiliated with academic or training institutions (33.3%).

TABLE 170: KIND OF EMPLOYING ORGANIZATION BY CITIZENSHIP
AND LOCATION OF WORK, CONTROLLING FOR GENDER

Kind of Organiztn	I LDC/LDC		II DC/LDC		III LDC/DC		IV DC/DC		SUM I-IV	
	F (33)	M (134)	F (21)	M (71)	F (3)	M (13)	F (48)	M (130)	F (105)	M (348)
Academic/ Training	n 3 % 9.1	21 15.7	2 9.5	11 15.5	0 0	3 23.1	16 33.3	54 41.5	21 20.0	89 25.6
Govt: Nat'l	n 6 % 18.2	42 31.3	10 47.6	20 28.2	1 33.3	6 46.2	7 14.6	15 11.5	24 22.9	83 23.9
PVO	n 8 % 24.2	18 13.4	3 14.3	10 14.1	0 0	0 0	8 16.7	7 5.4	19 18.1	35 10.1
Govt: Int'l	n 3 % 9.1	13 9.7	3 14.3	11 15.5	0 0	4 30.8	1 2.1	4 3.1	7 6.7	32 9.2
Reli- gious	n 3 % 9.1	6 4.5	0 0	9 12.7	0 0	0 0	2 4.2	4 3.1	5 4.8	19 5.5
Govt: Local	n 2 % 6.1	9 6.7	0 0	0 0	0 0	0 0	3 6.3	7 5.4	5 4.8	16 4.6
Other Pub Org	n 0 % 0	1 0.7	0 0	0 0	0 0	0 0	2 4.2	11 8.5	2 1.9	12 3.4
Founda- tion	n 1 % 3.0	4 3.0	0 0	4 5.6	0 0	0 0	1 2.1	2 1.5	2 1.9	10 2.9
Bus,Ind, Com	n 0 % 0	0 0	0 0	2 2.8	0 0	0 0	0 0	2 1.5	0 0	4 1.1
Other, Multi- Response	n 7 % 21.2	20 14.9	3 14.3	4 5.6	2 66.7	0 0	8 16.7	24 18.5	20 19.0	48 13.8

Among the males, LDC citizens in LDC locations are most numerous in national governmental organizations (31.3%), DC males in LDC locations are most commonly affiliated with national governmental organizations (28.2%), particularly USAID and the Peace Corps, while those in DC locations are mostly found in academic or training institutions (41.5%).

Focusing on selected kinds of employing organizations yields a couple of patterns. For all groupings, men are more apt than women to be found in academic or training institutions, but DC citizens in DC locations predominate in this kind of organization. Women are more likely than men to be affiliated with private, voluntary organizations, though the distinction is not strong among DC citizens in LDC locations.

Turning next to investigation of whether more women or men work as volunteers for organizations involved in development, it is found in Table 171 that, in the aggregate, the women studied are only slightly more represented as volunteers than are the men (27.6% and 23.3%, respectively). However, there is considerable discrimination by citizenship and location of work when controlling for gender. LDC women in LDCs are found to have the fewest development volunteers among them (11.4%), while

TABLE 171: WHETHER WORK AS VOLUNTEER FOR ORGANIZATION INVOLVED IN DEVELOPMENT BY CITIZENSHIP AND LOCATION OF WORK, CONTROLLING FOR GENDER

Volunteer for Devt Organiztn	I LDC/LDC		II DC/LDC		III LDC/DC		IV DC/DC		SUM I-IV	
	F	M	F	M	F	M	F	M	F	M
	(35)	(127)	(34)	(76)	(5)	(14)	(49)	(135)	(123)	(352)
Yes	n 4	30	20	13	1	3	9	36	34	82
	% 11.4	23.6	58.8	17.1	20.0	21.4	18.4	26.7	27.6	23.3
No	n 31	97	14	63	4	11	40	99	89	270
	% 88.6	76.4	41.2	82.9	80.0	78.6	81.6	73.3	72.4	76.7

DC women in LDCs have the greatest number of volunteers (58.8%). Most of this latter group, it should be added, are affiliated with the U.S. Peace Corps. Nearly one-fifth (18.4%) of the DC women in DCs report working as volunteers for development organizations but this is considerably less than their male counterparts.

Among the men, DC citizens in LDC locations are least represented as volunteers (17.1%), while LDC men in LDCs and DC men in DCs have a higher frequency as volunteers (23.6% and 26.7%, respectively).

Speculation again arises concerning possible similarity between DC women and LDC men, both in developing countries, and both of whom appear to be engaged in more applied, rurally-based development work.

In summary, concerning the selected aspects of the career history of the females surveyed, it is found that they have been involved with non-formal education nearly as long as they have been engaged in development work. Although they have fewer years of development experience than the men in all categories by citizenship and location of work, the gap is less in terms of years of experience in non-formal education, a rather recently recognized field of development. Both LDC women in LDCs, and DC women in DCs

tend to have longer professional histories in development than do DC women in LDCs. The women are affiliated with various types of organizations: the LDC women in LDCs more commonly with private voluntary organizations, the DC women in LDCs overwhelmingly with national governmental organizations particularly the U.S. Peace Corps, and DC women in DCs with academic institutions. Over one-quarter of the females report working as volunteers for organizations engaged in development, but LDC women in LDCs are the least represented, and DC women in LDCs the most. Since DC women in DCs are more highly represented in volunteer development work than are LDC women in LDCs, both of whom are about equally highly educated, no inference can be drawn relating higher education or higher status development roles to decreased involvement in volunteerism.

To complete the examination of gender differences for selected demographic, development role, and network affiliation characteristics of the selected development specialists, attention is finally turned to consideration of network influences.

Network Affiliation Characteristics

Two items are selected to examine certain influences of affiliation with the Non-Formal Education Information Center

and network for the development specialists, by gender. First, consideration is given to responses to the queries whether the information received from the NFE Information Center was ever used to make changes or to do something new. Several general patterns can be noted in Table 172.

Regarding the females surveyed, LDC women in LDCs report the greatest incidences of using information from the NFEIC to do all of the things mentioned: suggest a new design or guidelines for an existing program, write a report or position paper, use different kinds of training (instructional) materials or approaches, propose or plan a new program, and begin a new program. However, the women, generally, report less incidence than the men in undertaking these changes. The LDC citizens, both female and male, in LDCs are the most inclined of any group by citizenship and location of work, to initiate the changes indicated, and there is very little difference between the LDC women and men in this regard.

Two-fifths of the LDC women in LDCs report using information from the NFEIC to suggest new program guidelines and to propose or plan a new program. A third affirm initiating new kinds of training, a quarter writing a report or position paper, and nearly a fifth beginning a new program.

TABLE 172: INFORMATION-INFLUENCED CHANGES BY CITIZENSHIP
AND LOCATION OF WORK, CONTROLLING FOR GENDER

Type of Change	I LDC/LDC		II DC/LDC		III LDC/DC		IV DC/DC		SUM I-IV	
	F (35)	M (139)	F (34)	M (77)	F (5)	M (15)	F (53)	M (141)	F (127)	M (372)
Suggest New Prog	n 14	65	5	22	1	3	11	31	31	121
Des/Guid	% 40.0	46.8	14.7	28.6	20.0	20.0	20.8	22.0	16.5	32.5
Write Re- port/Pos	n 10	48	3	18	1	10	14	42	28	118
Paper	% 28.6	34.5	8.8	23.4	20.0	66.7	26.4	29.8	22.0	31.7
Use Diff Kinds of	n 12	52	10	18	1	3	10	34	33	107
Training	% 34.3	37.4	29.4	23.4	20.0	20.0	18.9	24.1	26.0	28.8
Propose/ Plan New	n 14	53	3	13	2	4	5	35	24	105
Program	% 40.0	38.1	8.8	16.9	40.0	26.7	9.4	24.8	18.9	28.2
Begin New Prog	n 6	25	2	3	1	1	1	15	10	44
	% 17.1	18.0	5.9	3.9	20.0	6.7	1.9	10.6	7.9	11.8

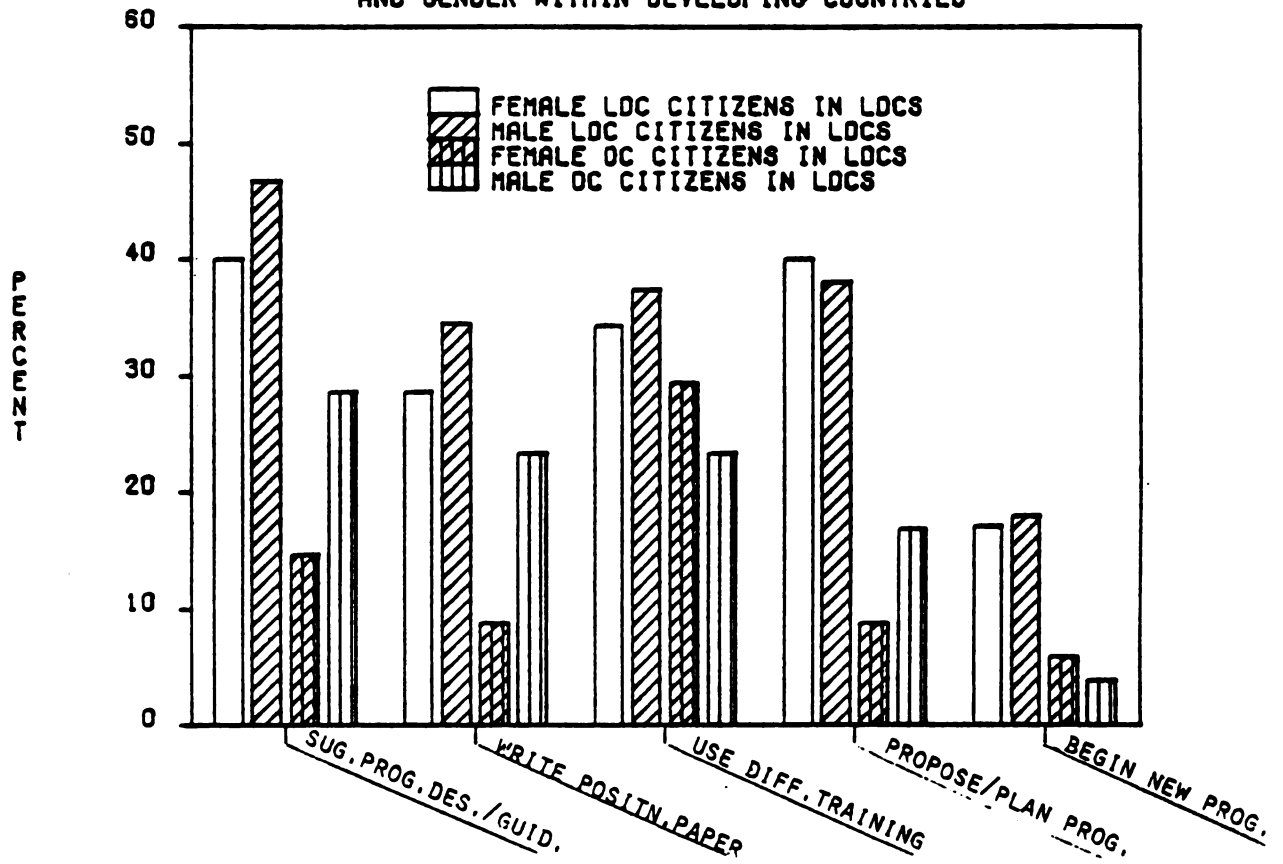
Although nearly a third of the DC women in LDCs indicate using the information to employ different kinds of training, they report relatively little initiation of the other activities. The DC men in LDCs are considerably more active than the DC women in using the information received from the NFEIC to do something new. Both the DC females and males in LDCs show little initiation of new programs through use of the information received, which perhaps relates to their expatriate status.

DC citizens in DCs, both female and male, reflect moderate use of the information to do something new. Generally, one-fifth to one-quarter report undertaking the various tasks identified. The women, however, are much less active than the men in proposing or beginning new programs.

Figure 26 visually summarizes the data on information-influenced changes by citizenship and gender in developing countries.

Consideration is next given to gender differences regarding perceived sense of commonality with similarly interested others through the NFE Information Center. Table 173, which presents the data for this item, reveals two patterns. Women, regardless of citizenship and location,

FIGURE 28. INFORMATION-INFLUENCED CHANGES BY CITIZENSHIP AND GENDER WITHIN DEVELOPING COUNTRIES



**TABLE 173: PERCEIVED SENSE OF COMMONALITY WITH OTHERS
THROUGH THE NFEIC BY CITIZENSHIP AND LOCATION
OF WORK, CONTROLLING FOR GENDER**

		I LDC/LDC		II DC/LDC		III LDC/DC		IV DC/DC		SUM I-IV	
Sense of Common- ality		F	M	F	M	F	M	F	M	F	M
		(34)	(140)	(35)	(77)	(5)	(14)	(52)	(136)	(126)	(367)
Yes	n	25	101	21	32	5	10	34	54	85	197
	%	73.5	72.1	60.0	41.6	100	71.4	65.4	39.7	67.5	53.7
Not Certain	n	9	36	10	34	0	3	13	57	32	130
	%	26.5	25.7	28.6	44.2	0	21.4	25.0	41.9	25.4	35.4
No	n	0	3	4	11	0	1	5	25	9	40
	%	0	2.1	11.4	14.3	0	7.1	9.6	18.4	7.1	10.9

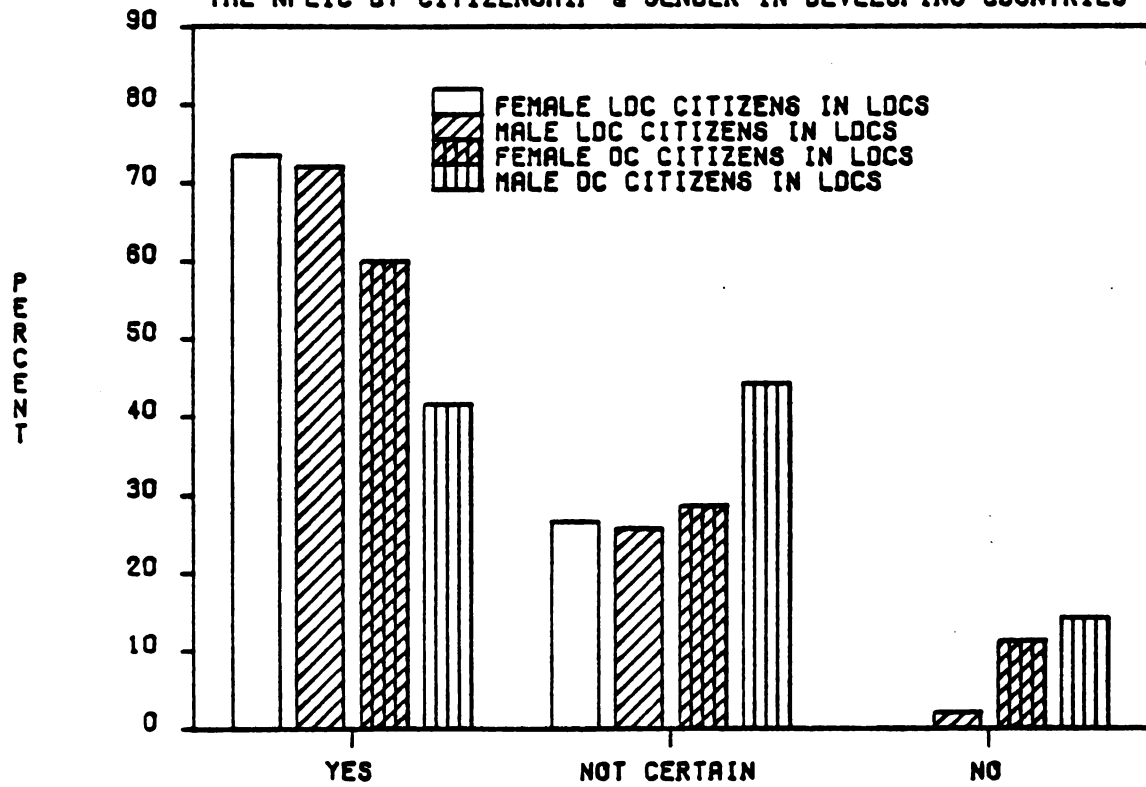
report a greater sense of commonality with others through the NFEIC than do men. The difference is greatest between DC females and males in LDCs (60.0% and 41.6%, respectively), and between DC females and males in DCs (65.4% and 39.7%, respectively). There is little variation, however, between LDC females and males in LDCs, who have the greatest claim of commonality (73.5% and 72.1%, respectively) of any grouping by citizenship and location.

In fact, only three (1.7%) LDC citizens in LDC locations, all men, report no sense of commonality. For DC citizens in LDC locations the corresponding figure is 15 persons (13.4%), and for DC citizens in DC locations it is 30 (16.0%).

Figure 27 portrays the extent of perceived sense of commonality with others, through the NFEIC network, by citizenship and gender in developing countries.

The findings point to a much greater professional and/or psychological reliance on the NFE information exchange network by LDC citizens in LDC locations, and a relatively strong reliance by women compared with men. The findings also tentatively suggest that these patterns hold regardless of level of education or nature of development work.

FIGURE 27. PERCEIVED SENSE OF COMMONALITY W/ OTHERS THROUGH THE NFEIC BY CITIZENSHIP & GENDER IN DEVELOPING COUNTRIES



In sum, concerning selected network affiliation characteristics, the most salient finding is that female and male LDC citizens are both the most inclined of any group, by citizenship and location of work, to initiate changes as a result of information received from the NFEIC, and the most reliant on the Center and network for ties with others who share their interests.

Interpretations and implications of these findings, and those noted earlier, are speculated upon in the final chapter which follows.

PART III

SUMMARY AND CONCLUSIONS

CHAPTER 11

KEY FINDINGS AND IMPLICATIONS

This chapter synthesizes several sets of key findings and draws implications, both conceptual and practical. Because this is a case study of the actors in one development information exchange network, the data and insights on selected characteristics of these development planners, practitioners, researchers, and administrators cannot be generalized to all such individuals. Nevertheless, it is anticipated that this exploratory research will assist in the identification of some promising new areas for further inquiry.

The chapter is organized into two parts. The first presents summaries of five sets of findings, corresponding to the five data-reporting chapters. The second speculates on the meaning of the findings. It does this by identifying emergent themes and referring to selected development paradigms to determine how the findings support, negate or modify these perspectives, or how they suggest still new ways of thinking about development intermediaries.

Key Findings

Set One: Demographic Characteristics of NFEIC Network Affiliates

Among the 510 selected development specialists in contact with the Non-Formal Education Information Center, citizens of developing countries also working in LDCs tend to be men, by a ratio of four to one, 39 median years of age, educated to the graduate level -- two-thirds of these via foreign education in industrialized countries, and be bi- or tri-lingual with over another quarter having facility in four or more languages.

Surveyed citizens of developed countries who are working in developing countries are twice as likely to be men, relatively young -- 35 median years of age, educated to the graduate level, speak at least two languages, and have the greatest relative likelihood of facility in four or more languages -- with nearly two-fifths reporting such capability.

Citizens of developed countries who are also working in industrialized countries are two and a half times as likely to be men, 40 median years of age, most likely to be educated to the graduate level with nearly half to the

doctoral level, have the greatest tendency among the groupings to be monolingual while also having over a quarter with facility in four or more languages.

Considering the development intermediaries by location according to basic development indicators permits further refinements. Those working in low-income countries tend overwhelmingly to be male, by a ratio of 25 to one. Those in middle-income countries are relatively young, least highly educated, with DC citizens accounting for half of the females. Finally, monolingualism is decreasingly associated with work in a lower income location while facility in four or more languages is increasingly associated with lower income location.

Set Two: Development Role Characteristics

The development specialists surveyed are characterized by a breadth of concurrent involvement in diverse development fields and distinguished in only a few fields by disparate levels of involvement. A large majority are involved in education or training and more than half in integrated rural development.

LDC citizens in LDC locations demonstrate the greatest aggregate involvement in the multiple development fields

considered together, while DC citizens in DC locations tend to have the lowest aggregate involvement. This suggests a greater tendency for development personnel in developing countries to be simultaneously engaged in a broader range of fields in their development roles than are those in developed countries who may be more narrowly focused or specialized in those fields with which they are involved.

DC citizens in LDC locations are noteworthy for their relatively greater involvement with such applied development fields as health, nutrition, and agriculture. LDC citizens in LDC locations are distinguished by their greater relative involvement in general non-formal education, vocational training, and in pre-university formal education. DC citizens in DC locations are best characterized by their low involvement, relative to the other specialists, in nearly all of the development fields significantly distinguished by citizenship and location of work.

When location of work and national origin are considered simultaneously, location appears to have a stronger influence than national origin on diversity of development role. (I.e., a development specialist of DC origin living in a developing country tends to indicate involvement in a broader range of development fields than those development specialists who are DC citizens and live

in an industrialized country.)

For all of the development fields significantly differentiated by location according to basic development indicators -- integrated rural development, general non-formal education, nutrition, agriculture, vocational skills training, and family planning -- there is evidence of increasingly greater involvement by lower income location.

Just as the surveyed development specialists are characterized by a broad involvement in diverse fields of development, so, too, are they found to be engaged in a broad spectrum of activities in connection with their development roles. Over one-third are involved in planning or program design, teaching or training, research or evaluation, administration, community-level field work, and policy making.

Only a few activities distinguish the subjects by citizenship and location of work, and by location according to basic development indicators. Personnel in low-income countries are found engaged in planning or program design, and in policy making, to a much greater extent than are their counterparts in either middle-income or industrialized countries. This prompts speculation that development specialists in low-income countries tend to be among a

smaller pool of skilled personnel and, hence, expected to perform higher-level functions than their counterparts elsewhere. It also raises the question of whether the fact that nearly all (96%) of the respondents in low-income countries are males relates to their over-representation in higher status development activities.

Consideration of development activity in which most time is spent, by location according to basic development indicators, reveals a tendency toward increasing primary involvement by lower income location for the activities of planning or program design, community field work, and policy-making. Decreasing primary involvement by lower income location is associated with the activities of teaching or training, and research or evaluation.

The development personnel tend to rely on publications more than any other source for information, resources, and ideas to learn about development. Over a third also mention development organizations or specialists with whom direct, face-to-face communication, and people for whom the development projects are intended. The first two are not significantly differentiated by citizenship and location of work, nor by location according to basic development indicators. People for whom the projects are intended are relied upon considerably more by DC citizens in LDC

locations than by their LDC counterparts. Reliance on work associates as a development information source tends to be increasingly associated with higher income location, perhaps owing to the relative job isolation of development personnel in lower income countries from others with similar roles. Personnel in middle-income countries are found to be much below the mean in their mention of projects as a source of development information, and are above the mean in their mention of instructors and courses. A possible explanation for this may lie in the younger mean age of this grouping compared with those in low-income and in industrialized countries. This, coupled with the presence in middle-income countries of many DC citizens, could mean that the subjects have less field experience in development and more in the formal and fairly recent study of development. Little differentiation is found of the other development information sources by location according to basic development indicators.

Over nine-tenths of the surveyed affiliates of the NFE Information Center and network are involved in non-formal education, and they tend to be concurrently involved in more than one field. For basic needs education, with which a majority of the subjects are engaged, vocational training, and professional skill upgrading, a pattern exists of increasing involvement by decreasing income location. This

suggests that non-formal education, especially that related to basic needs and vocational training, may be regarded as particularly suited to the requirements of low-income countries.

The development specialists are concurrently engaged in a wide array of activities as part of their roles in non-formal education. Over two-fifths are engaged in program design, research and evaluation, instruction, curriculum development, and administration as part of their work in non-formal education. The specialists tend not to be greatly distinguished when compared by citizenship and location of work, nor by location according to basic development indicators. Concerning program design, however, increasing involvement in this activity tends to be associated with work in lower income locations.

While program design and administration are the two activities in which the development personnel spend the most time to carry out their work in non-formal education, LDC citizens in LDC locations are apt to spend more time in administration and less in program design. DC citizens working in LDCs tend to be engaged more in the design and implementation of non-formal education programs, rather than in their management or assessment. The latter activities tend to be assumed within developing countries to a greater

extent by citizens indigenous to those countries, possibly because those activities are associated with higher professional statuses. In addition, because program administration relates more essentially to matters of control, it is reasonable to suppose that such control is in the hands of indigenous citizens rather than outsiders.

For all groupings of the development specialists, publications are the most relied upon source for information and ideas about non-formal education. There is an increasing tendency to rely upon work associates, the second preferred source, by higher income location.

LDC citizens are more apt than DC citizens, regardless of location, to participate in education or training programs in non-formal education -- at the international, national, and local levels. They may be dependent on international gatherings to maintain linkages with a network of others with similar development roles, to receive professional recognition for their work, and to learn about new knowledge and applications in their areas of interest. Also, travel to international conferences may be a perquisite of their social or professional positions. DC citizens working in LDCs tend to have the lowest participation of any grouping. This may owe to their lack of sponsorship for such meetings, their lack of ties to the

professional networks which hold the conferences and, hence, their lack of knowledge about the meetings, or to the temporary nature of their development work assignment.

Those working in developing countries, regardless of citizenship, are much more likely than those in developed country locations to report using non-formal education as a method to carry out development programs or goals. Greater use of NFE in development programs also tends to be increasingly evidenced by lower income location. These findings suggest that the roles actually being assumed in non-formal education for development are engaged in to a greater extent in LDC rather than DC locations, and carried out there by both LDC and DC citizens. They further infer that the utility of non-formal education for development may be better appreciated and realized by those whose work is closer to the persons for whom the development programs are intended.

The three obstacles judged by at least half of the development specialists as most problematic in carrying out development programs involving NFE are lack of integration and coordination among ministries or local service agencies, development workers or specialists not adequately trained for the task, and local people and organizations not sufficiently involved in the program. LDC citizens working

in LDC locations tend to identify a range of obstacles to a greater extent than the other development specialists. Furthermore, greater frequency of identification of obstacles tends to be increasingly associated with lower income location. Those development specialists in low-income countries have the highest frequencies of mention of most obstacles, while those in industrialized countries appear to have the lowest obstacle identification rate. A possible conclusion is that the obstacles to carrying out development programs using NFE may be greater or more numerous in low-income compared with middle-income countries. At a minimum, an array of obstacles tends to be perceived as greater or more numerous by the development intermediaries actually working in the lowest income locations.

Furthermore, the obstacles identified as problematic tend to be oriented considerably more to structure than to values for persons in low-income countries. The reverse holds for DC citizens in LDC locations who are somewhat over-represented in their identification of value-oriented obstacles, and under-represented in their identification of structure-oriented obstacles. It is speculated that those performing roles in non-formal education and development in the most impoverished settings come to focus more on confining structures and institutions as sources of

problems, than on the values and behaviors of intended project beneficiaries. In countries which are less economically disadvantaged, the dominance of oppressive structures may be less keenly felt. In view of the greater than mean identification of value-oriented obstacles by those in middle-income countries, it might be further speculated that this somewhat relates to the lower mean age of this grouping and a correspondingly greater optimism in the power of individual change. Furthermore, the briefer mean duration of development experience on the part of DC citizens in LDCs relative to the other groups might be associated with a greater optimism in effecting change and a lesser cognizance of the limiting nature of social structures.

Set Three: Development Broker Linkages and Career History

The development specialists are characterized by considerable mobility in their work. As might be expected, work in rural villages and the countryside tends to be increasingly associated with lower income location, while work in urban settings appears increasingly associated with higher income location. DC citizens tend to be much more likely than their LDC counterparts, also in developing countries, to work in urban rather than rural areas.

The development intermediaries are similar in the breadth of the population segments to whom their work is primarily directed. At the same time, they are distinguished by varying levels of involvement on behalf of many of the various population segments. Persons working in developing countries, in contrast to those in developed countries, are distinguished by their greater mention of rural people, women, men, and youth as intended beneficiaries of their development efforts. Those working in developed countries, on the other hand, mention policy makers, planners, and foreigners to a greater extent than do their counterparts. LDC citizens in LDC locations tend more than the other development personnel to identify adults, youth, and development workers as parts of the population to whom their work is primarily directed. DC citizens in LDC locations appear more likely than the other groupings of development specialists to direct their efforts to poor rural people, women and men, and least likely to direct efforts to policy makers and planners. DC citizens in DC locations appear most likely to focus attention on policy makers, mid-level officials, and the middle classes, and least apt to direct efforts to poor rural adults and youth, development workers, families, and children.

These findings lead to the observation that specialists in developed countries, in contrast to those in developing countries, target their efforts to a greater extent toward higher status and highly skilled population segments than to the rural poor directly. Development intermediaries in LDCs appear to focus their efforts to a greater extent on rural adults and youth.

All of the specialists tend to direct their efforts in similar proportions to teachers or trainers of others to work in development.

The development specialists are increasingly directed in their work to poor rural people, women, youth, other development workers, and children as work is in lower income locations. Policy makers, planners, and foreigners tend increasingly to be the target of development efforts for the specialists in higher income locations.

Two lines of speculation are offered for consideration. First, it may be that as societies achieve greater realization of basic development indicators, they also become more complex. Complex societies would tend to harbor greater numbers of skilled specialists such as policy makers and planners. They would also seem likely to contain more

foreigners seeking education or employment. As high-level specialized personnel are present in a society, it is reasonable to think that they would increasingly be used as development brokers and, hence, the target of the development efforts of others. Second, it may similarly be that the basic development needs of the majority in the lowest income locations are so great that they, rather than higher-level intermediaries, are the direct target of development activities in those societies.

The development intermediaries are also characterized by the breadth of the population segments with whom they have direct linkages in their development roles. As might be expected, the LDC-based development specialists tend to have more direct links with rural people than do their counterparts in DC locations. LDC citizens in LDC locations tend to have the greatest contact among the development specialists with youth and families, the latter generally being more central to the lives of individuals in LDCs than in DCs.

Furthermore, personnel in developing countries have not only a broad array of direct development linkages but also more numerous linkages with many of the population segments. Work in lower income location is increasingly associated with direct personal contact with women, other development

workers, local leaders, rural people, youth, families, and children. People in the middle classes are increasingly found to be the contacts of specialists in higher income locations.

For all three income locations -- low, middle, and high or industrialized -- direct contact with policy makers and planners occurs at roughly similar rates even though the policy makers and planners tend less to be the intended beneficiaries of the development specialists in lower income locations. This suggests a pragmatic need to interact with such key individuals even though development activities may not be primarily directed to them.

While two-thirds of the development specialists name poor and rural people as intended objects or beneficiaries of their development efforts, many fewer (two-fifths) participate in direct linkages with poor and rural people.

Citizens of developed countries also working in industrialized countries tend to have the longest career histories in development, nearly a third with at least fifteen years experience and less than one-fifth with four or fewer years experience. Citizens of developed countries working in LDCs tend to have the shortest development career histories, with more than two-fifths having four or less

years of experience. Length of development experience appears to relate in these instances to the relative ages of the two groupings.

Experience in non-formal education is approximately two years less for each grouping of development specialists when compared with length of experience in development. As found regarding development experience, DC citizens in DC locations have the highest mean experience in NFE while DC citizens in LDC locations have the lowest. Respondents in middle-income countries report the shortest average period of NFE experience, perhaps owing to the presence of relatively young DC citizens.

To explain their current work involvement, the development personnel in LDCs are more likely than those in DCs to refer to a personal commitment to helping the poor. LDC citizens in LDC locations tend to have received an assignment in NFE or development from the organization already employing them. DC citizens more than the other specialists report specifically looking for work in development.

Personnel working in industrialized countries tend more than their counterparts to explain that they have been working in the field for several years, corresponding with

their high mean length of development experience. Work in a lower income location tends to be increasingly associated with commitment to helping the poor, and assignment from employing organization, to explain how one came to one's current development work. This seems reasonable in view of the greater preponderance of poor where national income level is lower, and the likelihood that employing organizations, perhaps reflecting national policy, would be increasingly involved in the work of non-formal education and development in lower income areas.

Academic or training institutions, and national government organizations or agencies, are the types of employing organizations accounting for nearly half of the development specialists surveyed. Higher income location tends to be increasingly associated with affiliation with academic institutions, while lower income location is increasingly associated with affiliation with national governmental organizations, private voluntary organizations, and religious organizations. Furthermore, there is an increasing tendency by higher income location toward having a second paid employment, with nearly one-fifth of the personnel in industrialized countries reporting this.

One quarter of the development specialists report working as volunteers for organizations involved in

development and/or non-formal education. The proportion of volunteerism is similar among all of the development personnel groupings, by citizenship and location of work and by location according to basic development indicators. DC citizens working as development volunteers in LDCs tend to be affiliated with national governmental organizations, most notably the U.S. Peace Corps. Development volunteers among the LDC citizens in LDC locations, and the DC citizens in DC locations, tend to perform their volunteer work primarily through private voluntary organizations. For voluntary work, there is a strong pattern of organizational affiliation with private voluntary organizations by higher income location. Most volunteers affiliated with national governmental organizations are located in middle-income countries, suggesting that most U.S. Peace Corps volunteers in contact with the NFEIC are there rather than in low-income countries.

In addition, thirty percent of all the development specialists indicate involvement in other activities in development or non-formal education independently or outside of the organizations indicated. DC citizens in DC locations appear most likely among the specialists to be paid for their independent work.

With reference to the development specialists' current employing organizations compared with their previous ones, affiliation with academic training institutions has tended to decline as has affiliation with business, religious organizations, and local governmental organizations. National governmental organizations have tended to experience the greatest increase in affiliation, followed closely by international governmental organizations and private voluntary organizations. DC citizens in LDC locations tend to account for the greatest shifts, most notably from academic institutions to national and international governmental organizations. This may relate to the young median age of this grouping and reflect shifts from academic study or teaching to professional or volunteer work in developing countries.

Two further patterns tend to emerge concerning previous employing organizations: affiliation with academic institutions appear most associated with industrialized country location, and affiliation with national governmental organizations is most likely to be associated with developing country location.

More than two-thirds of the development intermediaries indicate that their previous position also involved

non-formal education or development, suggesting a pattern of continued career involvement in these areas. The specialists are not differentiated concerning previous employment in development by citizenship and location of work, nor by location according to basic development indicators.

Set Four: Network Use and Valuation Characteristics

Most of the development specialists have initiated communication with the Non-Formal Education Information Center, nearly half of these making contact three or more times. Among the specialists, LDC citizens in LDC locations appear most likely to initiate contact with the Center. Furthermore, the development intermediaries tend to be more likely to contact the Center as their work is in lower income locations.

Personnel in middle-income countries tend to have contacted the Center one or two times (mostly owing to the lower frequency of contact of DC citizens), and those in low-income countries three to eight times. While a plurality of those in industrialized countries have initiated communication once or twice, this grouping is most strongly represented among those in the category of nine or more times.

The development intermediaries appear most inclined to initiate contact to solicit Center publications, particularly LDC citizens in LDC locations and personnel in low-income locations. In fact, the development specialists in low-income countries tend to be most inclined to name multiple reasons, and in greatest frequency, for communicating with the NFE Information Center. Those in industrialized countries, on the other hand, tend to identify fewer reasons and in least frequency.

Three reasons for contacting the Center sharply differentiate the groupings. Regarding two of these, to ask about NFE training and to get professional encouragement in one's development work, LDC citizens in LDC locations and personnel in low-income countries tend to account for the greatest representation among the specialists. Regarding the third reason, to request Center publications for others, DC citizens in DC locations and personnel in industrialized countries appear to be the greatest intermediaries.

The greater incidence and frequency of contacting the NFE Information Center on the part of LDC citizens in LDC locations, together with their greater tendency to do so to seek professional encouragement in their work suggests a unique dependency on the Center and exchange network. It

appears that this grouping of development specialists is in greatest need of frequent and multiple supports, perhaps because of their relative isolation from other such resource networks. The tendency for incidence, frequency, and range of reasons for contacting the Center to rise as income location lowers gives further support to this hypothesis. While DC citizens in DC locations appear least directly dependent on the NFE Center, they do tend to be most active in extending the services of the information exchange network to others.

Concerning the specialists' evaluation of Center publications and services vis-a-vis their development roles, LDC citizens in both LDC and DC locations tend to be consistently higher than are DC citizens in their assessments of the overall usefulness of the Center, The NFE Exchange, and the importance of the Center as a source for ideas, resources and contacts about development and non-formal education. Lower income location is increasingly associated with higher assessment of the NFE Information Center as a development source. Only with regard to perceived relevance of Center responses do DC citizens rate the NFE Information Center higher than do their LDC counterparts.

These findings lend further support to the notion that LDC citizens in LDC locations may be relying on the Center for a broad range of materials because they are relatively more isolated in their development roles. Furthermore, their need for a range of development materials may be greater. Two possible explanations suggest themselves and will be expanded upon later in the chapter. First, LDC citizens in LDC locations are apt to have less access locally to the kinds of development data bases which abound in many of the developed countries. And, second, their development roles are found to be more varied in terms of the multiple fields in which they are involved concurrently in performing these roles.

Of particular importance is the finding that LDC citizens working in LDC locations tend to be most inclined to use the information received from the Non-Formal Education Information Center to make changes or do something new vis-a-vis their roles as educators. Also, personnel working in low-income countries, including both LDC and DC citizens, reveal greater incidence of making certain changes -- suggesting a new design or guidelines for an existing program, using different kinds of instructional or training methods, and proposing or planning a new program -- than do those in industrialized countries. These findings lead to a

hypothesis that those in LDCs rather than DCs are more directly involved with development programs, and those so engaged in their home locations rather than as expatriates, are most likely to show greater initiative in making changes related to those programs.

Regarding the nature of the respondents' development information interests, LDC citizens in LDC locations express about equal preference for case studies, practical materials, and theoretical materials. However, they tend to be over-represented among the specialists in their preference for theoretical materials and for the main synthesizing article of The NFE Exchange. DC citizens in LDC locations are greatly over-represented among the specialists in their preferences for practical materials and greatly under-represented in their preference for theoretical materials. LDC and DC citizens in DCs tend to be distinguished in the greater extent of their interest in topical annotated bibliographies. Concerning the selected topics of training for development and women in development, greatest interest in the former tends to be evidenced by personnel in DC locations regardless of citizenship, and greatest interest in the latter by DC citizens regardless of location.

LDC citizens in LDC locations appear most active in information brokering to extend the outreach of the NFE exchange network. This grouping has the greatest readership of The NFE Exchange (nearly one-third have their issues read by more than ten persons), and the greatest incidence of involvement in three activities to disseminate ideas in the periodical: placing it in a library, passing it to fieldworkers and trainers, and to planners and policy makers. Furthermore, there tends to be increased involvement in the same activities by lower income location.

Regarding intra-network contact, all of the groupings of development specialists tend to initiate contact, and with similar frequency, with others in the NFE Information Center network. DC citizens in DC locations appear most apt to have had one of their materials or projects cited in The NFE Exchange, closely followed by personnel in industrialized countries and in low-income countries. However, DC citizens in DC locations tend to receive about twice as many requests for further information as do personnel in low-income countries. This may owe to the "fugitive" nature (i.e., unpublished or inaccessible) or many of the materials that are received by the Center from LDC locations and to the possibility that fewer fugitive documents would be solicited from their original source by

persons in the NFE network. But, in addition to the greater availability of development literature in developed countries and the difficulty of procuring materials from many LDC locations, it might also be questioned whether preferential value may be attached to materials from DC-based organizations. These notions are discussed further in the latter part of the chapter.

Concerning network collegiality, LDC citizens tend to experience a much stronger sense of support through the NFE exchange network than do DC citizens. Again, this may relate to their relatively greater geographical and professional isolation from others who share their problems and interests. The finding that LDC citizens appear to derive greater intangible support from contact with the NFE Center and network than do DC citizens, also in LDCs, may stem partially from a lesser familiarity with a range of development data bases and network supports. However, it may also be that DC citizens in LDC locations have been in their development roles for a shorter period of time and, hence, not yet experiencing the same degree of professional or information isolation.

Set Five: Selected Characteristics by Gender

The men surveyed who are citizens of, and working in, developing countries tend to be highly educated. As in the case of the expatriate men, the LDC men tend to be involved in a broad range of development fields, most particularly in integrated rural development. Their work in non-formal education occurs mostly in the fields of basic needs education and vocational skills training. Their development activities tend to be based in rural villages and cover a broad spectrum with no single type of activity predominating. However, vis-a-vis their LDC female counterparts, the LDC men are involved to a much greater extent in the activities of administration, research and evaluation of non-formal education, and in community field work to implement development programs. While they focus upon and tend to work directly with the rural poor, the men also work with policy makers and planners to a greater extent than do either the LDC or the DC women also in developing countries. They tend to be employed mainly with national governmental organizations and many engage in voluntary development work.

The women who are citizens of developing countries, mostly in Asia and the Philippines, and also engaged in development work there, tend to be highly educated, over one-half at the masters level. They are of similar age as

the male development specialists also in developing countries, and considerably older than the female expatriates. Their principal field of development work is the education or training of others to work in development, and this is engaged in to a much greater extent than for the other development specialists working in LDCs. The focus of their effort in non-formal education is basic needs education, an endeavor they share with the female expatriates studied. Their principal activities in development consist of program design, teaching or training, and curriculum development, done primarily in a capital city but also in rural villages. The development efforts of the LDC women tend to be directed to policy makers and planners nearly as much as they are to the rural poor. They spend their most time with trainers or teachers followed by development workers and planners. Among their counterparts working in LDCs, they appear most inclined to be employed by private voluntary organizations and least likely to be engaged in voluntary development work.

Among the development specialists surveyed, a greater tendency is noted for women working in developing countries to be from industrialized countries than is true for men working in LDCs. The LDC-based women from industrialized countries, and the U.S. is principally represented in this regard, tend to be younger than their male counterparts and

less highly educated. They are more apt than DC men or LDC women to be working as rurally-located volunteers in the applied development fields of health and nutrition in which almost no female and few male LDC citizens are found and in which few male DC citizens are found. The focus of their work in non-formal education is basic needs-oriented. Women from industrialized countries who are working in LDCs are most likely to spend their time in community-level field work and in teaching or training, especially of other women. They are much less involved in planning or program design, research or evaluation, and administration.

The men from industrialized countries, chiefly the U.S. and the U.K., who are working in LDCs tend to be considerably older than their female counterparts and more highly educated. They appear to be collectively involved in a range of development fields, including the comprehensive areas of integrated rural development and general non-formal education, the applied field of agriculture, as well as higher education. The foci of their work in non-formal education tend to be vocational skills training and professional skills upgrading. Their principal activities in development consist of planning or program design and administration, conducted primarily in a capital city. While the male citizens of industrialized countries who are working in LDCs tend to direct their development efforts to

the rural poor, as do the other development specialists, they also direct their efforts to policy makers and planners to a greater extent than do their female counterparts. They spend their most time with development workers, mid-level and high-level officials and planners, and seldom work as volunteers.

Emergent Themes, Meanings for Development, and
New Research Directions

The Horizontal, Development-Information Exchange Network
for the Generating and Sharing of Innovation

This study focuses upon development planners, practitioners and educators affiliated with an applied information exchange network concerning non-formal education for development. As such it builds upon, but then parts from, recent network studies which have considered relatively closed, homogeneous groups of scientists who form "invisible colleges" (e.g., Crane, 1969, 1972; Useem, Useem, Othman and McCarthy, 1977, 1981; Cano, 1981), and from those which have concerned the vertical diffusion of innovation (e.g., Rogers, 1971). Also as such, the study invites fresh paradigmatic orientations which move beyond both modernization and dependency perspectives of networks and macro change.

The "invisible college" studies have tended to amplify aspects of the "modernization process" by considering the ways in which scientists within a research field are linked and function primarily to generate new knowledge rather than to disseminate or use it. These networks tend to be small, restricted in subject, active in terms of member

participation, and elitist. Most "invisible college" network participants are part of the academic, socio-economic and cultural "core," and have been highly educated owing to backgrounds of relative affluence. While a high degree of symmetry and relative status equality exist among participants in such a network, the members tend to be in high status positions, socio-economically as well as professionally, in their own nation states.

Many of the development specialists affiliated with the Non-Formal Education Information Center and network do tend to have characteristics similar to those comprising "invisible college" networks -- many are highly educated, most from developing countries have received graduate training in the industrialized countries, women are in the minority (except in the case of the Philippines), and most have careers in development. But not all fit this pattern, as detailed in previous chapters, leaving the model wanting for the network studied here. For the most part, little is known by the development specialists about one another's professional or social status. The specialists are not unified by common academic socialization in a single research field. Furthermore, most of the network affiliates appear concerned less with the generation of knowledge for its own sake and more with its application. They also tend to be loosely and indirectly linked through the NFE

Information Center rather than directly with one another. Nevertheless, the network is seen as serving several important functions (e.g., knowledge accruing, linkage with others, moral support) for its members, particularly for those who may be more professionally and geographically isolated within developing countries.

The network studies examining diffusion of innovations have tended to assume a dependency relationship between the highly educated sources of innovations, usually deriving from the industrialized West (or North), and the receivers or adopters of innovations, usually in the underdeveloped East (or South). The international technical assistance network, and the international network of aid which shape agenda of education priorities, have been cited (Arnove, 1980; Berman, 1979) as two further variations on the theme of networks characterized by dependency structures.

It is possible to examine the NFEIC network in terms of structural dependencies (and a later section will do this concerning literature in non-formal education). The promotion of non-formal education, itself, during the 1970's owes much to the financial assistance of USAID, the World Bank, and several foundations, as noted in Chapter 2. The relative commonality of interest among the development specialists in basic-needs oriented non-formal education

might be taken as an illustration of one such common agenda shaped by the international aid network, although controversy is emerging concerning this focus.

But the dependency framework of analysis fails to allow examination of exchange relationships that are not unidirectional and vertical, and marked by the dissemination of knowledge and practices from the center (industrialized countries) to the periphery (Third World developing countries). The study of emerging, open structures that promote broad-based knowledge generation and the exchange of ideas and information about the results of innovations, in response to locally determined problems, thus seems a promising new research direction.

In horizontal exchange networks, sometimes alluded to as horizontal diffusion networks (Rogers and Kincaid, 1981) and participatory research groups (Hall, 1979), a new mode of complex collaboration can be envisioned. Conceptual constructs regarding actors, exchange relationships, products of exchange, and the nature of knowledge generation all are distinct from those of the relatively closed, homogeneous "invisible college" framework of analysis and from the linear (top-down, core-periphery) diffusion framework.

As with the other models, the horizontal exchange framework is as normative as it is descriptive. Both the nature and the number of actors are expanded. A host of diverse persons is now seen as contributing to the development of new knowledge and understandings. The involvement of local intermediaries and the "intended beneficiaries" of innovations tends to be sought in defining local problems, needs, and conditions and in assessing the results of innovations. The makers of macro knowledge summaries tend to be seen as dependent on the inputs of practitioners and persons outside the professional core as the intended beneficiaries may be on the assistance of others. The horizontal, development information exchange network tends to be predicated on the assertion that ideas and innovations should, and do, flow not only from more developed to less developed sources, but also from peasants to planners, practitioners and researchers, and from relatively newer centers of knowledge production to those more established. (The data reported herein give evidence of this type of information exchange, but also indicate that the rate of flow from the developed countries to the developing ones is considerably stronger than the reverse.) An assumption usually exists that a lesser status differential is operating simply because statuses are locally or contextually determined and not germane to those

participating in the exchange network. Knowing what and how replaces knowing who as a measure of individual effectiveness (Rogers and Kincaid, 1981, p. 344). Collaborative linkages are not necessarily with the most professionally or socially similar. Dependency is seen to decrease as local involvement increases.

Focus on the normative form of transnational horizontal network linkages, however, should not preclude critical examination of metropole structures of control or influence. For instance, Arnove (1980) suggests that the support of international research and training networks of individuals and institutions, by foundations and aid agencies in industrialized countries, often accrues primary benefit to the metropolitan centers. Developing country affiliates may, for example, undertake politically sensitive research which outsiders would be unable to, and then publish it for academicians and policy makers in the metropolises owing to the lack of a scholarly infrastructure within much of the Third World. However, besides matters of intentional metropole control, the data described herein suggest that the LDC respondents are more dependent than DC respondents for knowledge summaries, regardless of source, as their valuing of the lead, synthesizing article in The NFE Exchange indicates.

In sum, the horizontal information exchange network, international and transnational, is here noted as an emerging form through which to further study new modes of topically-oriented collegial exchanges among persons worldwide who may be dissimilar in their academic and social backgrounds, and not in face-to-face communication, but who are bonded by a common interest in a new area of inquiry and practice. Besides the non-formal education exchange network, one might cite the nascent transnational networks of planners, practitioners, and researchers of appropriate technology, women in development, farming systems, and intercultural communication, and of other interest fields occurring at the intersections of various academic disciplines.

Some promising areas of inquiry concerning such networks include identification and analysis of trends toward professionalization and status stratification, patterns of information flows among key organizations and actors, density and influence mapping of centers of study and innovation, and patterns of structural evolution of particular information exchange networks. (See, for example, the work of Jequier, 1981; Useem, Useem, and McCarthy, 1979.) It might be further queried to what extent information exchange networks reflect asymmetrical

structural patterns of dependency on centers and institutions in the affluent and industrialized "core" of the world system. Equally importantly, who are the beneficiaries of such network linkages, who are disadvantaged, and in what ways? How might examination of this question be shaped by the unit of analysis -- e.g., the individual researcher or practitioner, the nation state, the social or professional class? Furthermore, to what extent are the exchange networks able to accept or promote shifting balances of influence in the direction of greater attention to the roles of Third World institutions and actors? (See, for example, the burgeoning literature on the New International Information Order (International Commission for the Study of Communication Problems, 1980; Gunter et al., 1979; Gunter, 1979; International Documentation and Communication Centre, 1980; Postgate et al., 1979) and on the importance of building local knowledge and information systems (Cano, 1981; Unesco, 1979, 1981; Vielle, 1979). And, it would be particularly instructive to know how such information exchange networks may contribute to "knowledge creep" and the accretion of policy (Weiss, 1980).

Development Role Diversity and Related
Development Information Use and Valuation

The research herein reported reveals two major patterns which are hypothesized to be related. The first focuses on the diversity versus specialization of development roles, and the second on the generality versus specificity of development information needs.

As earlier noted, development personnel in developing countries appear to be concurrently engaged in a broader range of development fields and sectors than are those specialists in developed countries. Additionally, among the personnel in low and middle-income countries, LDC rather than DC citizens generally assume the greatest aggregate involvement in the collection of development fields considered together. Development specialists who are DC citizens working in DC locations tend to have the least relative involvement in the development fields identified, suggesting greater specialization in a particular field rather than diverse involvement in several.

Further consideration of diversity versus specialization of development roles is noted with respect to the development activity in which the specialists are most

engaged. While there tends to be increasing primary involvement by lower income location for the rather broad-based activities of planning or program design and community field work (also for the more specialized activity of policy making), there tends to be increasing primary involvement by higher income location in the activities of teaching and research, the latter activity highly specialized, and the former highly specialized at the level of higher education.

The direct development broker linkages of personnel in developing countries are similarly seen as covering a broader array of population segments, and for many of these being more numerous, than are those of personnel in industrialized countries. This again suggests greater development role specialization, in this instance reflected by the restriction of range and extent of direct linkages on the part of personnel in industrialized countries.

Just as greater diversity versus specialization of development roles tends to be evidenced in developing countries, and particularly by LDC rather than DC citizens, a corresponding pattern is noted regarding development information needs and uses.

For example, LDC citizens in LDC locations are most likely to initiate contact with the Non-Formal Education Information Center, and development specialists in low income countries are most inclined to name multiple reasons, and in greatest frequency, for communicating with the Center. Similarly, LDC citizens are higher than DC citizens in their assessment of the usefulness of the Center as a source for ideas and resources about development, while lower income location is increasingly associated with higher evaluation of the Center. Theoretical, synthesizing materials tend to be especially prized among the development specialists by LDC citizens, although they equally favor case study and practical materials.

Furthermore, LDC citizens in LDC locations, and personnel in low-income countries, appear most inclined to use the information received from the Center to effect changes in their development work.

Two overlapping hypotheses are suggested to explain these patterns linking development role diversity and breadth of development information needs and use. The first hypothesis addresses relative access to development resources and literature, and the second derives from the nature of the development roles being assumed.

Regarding relative access to development resources and published materials, the hypothesis offered is that development planners, administrators, practitioners, and researchers located in developing countries tend to have fewer development resources at hand than do personnel in industrialized countries. A strong development information infrastructure is particularly lacking in low-income countries. As a result, development information centers and exchange networks which enable specialists in resource-scarce settings to obtain materials, and to make contacts with similarly interested others, appear to assume an ever more important role for such developing country-based individuals. It would further seem that a development information center which makes resources available without charge to the user would increase in utility to specialists in developing countries owing to the frequent difficulty of converting and exporting foreign currency.

But access is thought to explain only some of the variation in patterns of development information need, use and valuation. It also appears that as development personnel, and particularly LDC citizens, are located in lower income countries, their development roles become more broad. These diverse roles touch upon multiple sectors of

development, engage the personnel in more varied kinds of activities, and link them with more segments of the population. This would help to explain the reliance of LDC citizens in LDCs on the NFE Information Center and network for a broad range of development resources and the subsequently high assessment ascribed to such materials and services.

It seems reasonable to think that as development personnel work in settings closest to the daily realities of the field, that is, at the points of actual project implementation, the greater is the range of efforts in which they must be engaged. Hence, the greater the need to draw from diverse knowledge bases the information and support needed to undertake one's development role.

On the other hand, the development personnel residing in industrialized countries might be expected to have more specialized roles and, thus, more narrowly defined interests regarding development. Many of these are researchers, university educators, or planners charged with precisely defined topical tasks or with direct work linkages to highly specialized audiences. Some are attempting to make macro knowledge summaries to extend the frontiers of knowledge about some aspect of development. Therefore, they are apt to need more narrowly focused data on a smaller range of

subjects, and to go to a number of specialized sources to obtain it.

Those in developing countries with more diverse development roles, and relatively isolated geographically and professionally, are thus hypothesized to use a smaller range of development information sources with greater frequency and for a broader topical array and type of resources. Similar conclusions were reached in recent work analyzing inquiries regarding women in development made by development planners, practitioners, and researchers (Claffey, Kelly, Pigozzi and Useem, 1981). The authors found that requesters of resources covering a wide spectrum of development topics tended to be located in developing countries or to be of LDC national origin, while those with requests more precisely focused on the topic of women in development were more numerous among those living in industrialized countries or of DC national origin. They also found that location has a stronger influence than national origin, when both are considered together, in predicting range of information interests expressed. Furthermore, the authors noted that information seekers working as reseachers or evaluators, predominantly located in developing countries, and professors tend to express interests more sharply focused on specifically-defined, women in development issues, while practitioners and

planners, predominantly located in developing countries, tend to show concern with a broader range of development topics (e.g., health, agriculture, income generation, education). Relative access to development information and development role diversity were both used to explain the variation in range of information interests expressed.

By this line of speculation, it would follow that individuals with diverse development roles would be most likely to use the broad range of information received to make changes or to do something new vis-a-vis their development work. This would be so both because of the array of information sought and received and because of the more diverse fields and activities to which the information could potentially be applied.

Also by this line of reasoning, the relatively lesser acquisition, evaluation, and use of information from the NFE Information Center by DC versus LDC citizens in developing countries may relate to their more specialized roles in development and to their access to other development resource bases. It may also relate to their shorter length of time in the field producing a lesser sense of professional isolation than might be felt by the LDC citizens who have been at their development roles for a longer period of time. Further, the younger mean age of the

DC citizens in LDC locations may suggest that they have come to their current development work directly from study or early development professions, or have been in the field too short a time to have acquired a need for an array of development information.

Disparities in Symbolic Reliance on Transnational
Resource Networks

Another theme emerging from the findings and building upon the patterns previously discussed concerns the high degree of symbolic, in addition to merely practical, meaning which the Non-Formal Education Information Center exchange network seems to hold for LDC citizens in LDC locations. The greater tendency of LDC development specialists working in LDCs to report contacting the Center for professional encouragement in their work is indicative of the symbolic reinforcement sought through such a network. Furthermore, LDC citizens in LDCs report actually experiencing a much stronger sense of support and collegiality through the NFE network than do DC citizens, and this pattern seems to hold regardless of level of education and nature of development role.

Subsequent research might profitably explore whether perceived symbolic supports derived from transnational resource exchange networks are correlated, for example, with perceptions of being professionally "one of a kind" in one's immediate institutional setting, geographically isolated from similarly interested others, and in need of professional or psychological validation from centers of

study in industrialized countries. The conceptual and empirical work regarding scientific networks as "third cultures" (e.g., Useem, Useem, Othman, and McCarthy, 1981; Useem, Useem, and McCarthy, 1979) contribute useful notions and methodologies in this regard.

Further research might also examine whether perceived symbolic meaning derived from a transnational information exchange network associates (negatively) with individuals' degree of centrality versus peripheral status within the network in terms of numbers and complexities of interactions initiated and received, proximity to development research and information centers, and extent of similar "extensive networks" (Useem, Useem, Othman, and McCarthy, 1981) and other "boundary spanning" contacts (Galaskiewicz, 1979:22).

Relative to other development personnel, the stronger reliance of LDC planners and practitioners in LDCs on the NFE information exchange network both for access to knowledge summaries and practical information, and for symbolic linkage with similarly interested others, should not be overlooked by those DC development specialists who would direct policy regarding the support of such efforts.

Gender Role Divergence and Functionality in
Development Work

The findings previously summarized concerning the development specialists, by citizenship and gender in developing countries, invite fresh speculation on the concepts of role divergence and functionality.

Social constructs of divergence and functionality tend to stress economic determinants and outcomes in a stratified global system. While the role of a native bridgehead elite as brokers in such a process has been examined in the modernization and dependency literature, role divergence as influenced by gender and as assumed by expatriates in developing countries has escaped scrutiny.

Marxist and dependency literature (e.g., Meyer et al., 1980) suggests that world market forces lead to distinct roles for different societies in a stratified world economy. In this orientation, the underdeveloped countries are found to produce the raw materials and to play supportive roles for the capitalist industrialized countries which accrue primary economic gain.

The concept of divergence might be appropriated for use in a different context, however, one that is not defined by nation-states nor determined by a global monopoly economy. Instead, the non-economic factors of gender, professional status, and cultural reference groups emerge as potentially significant to an understanding of patterns of development role performance and social change interventions.

The finding that female DC citizens in LDC locations tend to be engaged in certain applied fields of development, namely health and nutrition, in which virtually no LDC women are found, and particularly so at the level of community field work, in which few LDC women are primarily engaged, begs further examination of status definitions of development roles. So, too, does the discovery that DC males account for most of the involvement in agriculture among all of the development specialists in LDCs. It might be asked, for example, to what extent expatriates perform important development roles deemed of low status by particular cultural norms or reference groups, but not so by the expatriates' own reference groups. How might legitimizing or status-enhancing functions be achieved by expatriate involvement in selected development fields? What sorts of communication and exchange linkages are enhanced and which made less accessible by certain development status

occupations, and how do these vary by national origin?

Since lower education level for DC females working in LDCs appears only slightly related to tendency to be engaged in community-level field work, another hypothesis is sought to help explain some of the development role divergence. Proposed is the hypothesis that some development activities regarded as lower status in a society may be carried out by foreigners more than by persons indigenous to the area. The greater involvement of foreign women in developing countries in pragmatic and very basic skill areas may stem from their ability to perform roles that are locally defined as having relatively lower status but are not so defined by the foreign women's own reference groups. For instance, the work of a young Peace Corps volunteer engaged in rurally-based health programs may not be seen as socially or professionally appropriate work for a similarly well-educated, female LDC citizen. For the industrialized country female, however, the work may be status-enhancing and regarded by her and her peers as a unique opportunity to acquire foreign experience and skills which will make her humanly richer, and professionally more attractive upon return home.

It would follow that persons performing development roles locally defined as lower status would have fewer

broker linkages with those considered to be playing higher status roles. At the same time, those engaged in development roles regarded as higher status would be expected to have greater access to others in higher status positions. In fact, this seems to be born out in that female LDC citizens tend, more than DC women also in LDCs, to interact at multiple levels of social strata in carrying out their development activities. The linkages of DC women in LDCs appear stronger among rural women who are the intended beneficiaries of their development efforts, but weaker among planners and certain decision makers.

The notions of development role divergence and comparative functionality assume even greater complexity upon observation that it is not simply foreign development personnel, especially women, from industrialized countries who engage in rurally-based development roles regarded as more applied and of lower status. Role divergence and correspondingly distinct functionality is also observed by gender among LDC citizens, and among DC citizens, within developing countries. DC men are found similar, in many respects, to LDC women. Both appear more engaged than their counterparts in higher status development roles in capital cities, involving planning and professional skills upgrading. Both tend more than their counterparts to direct their development efforts to planners and policy makers and

to spend their time with development workers and planners. Their development role linkages appear more complex, bridging various social strata. At the same time, LDC men are found similar, in many respects, to DC women also in LDCs. Both appear more engaged than their counterparts in applied, rurally-based development roles of seemingly lower professional status. Both tend to direct most of their efforts to rural people and to spend most of their time with them.

And yet locally defined professional status seems not to explain all of the divergence in development roles. It would be informative to further examine what gender role differences persist in development work regardless of professional work status or indigenous versus expatriate status (e.g., the relative absence of women in administration compared with men). And, might certain transnational or trans-societal exchanges and types of network links be influenced by such gender role realities?

For instance, the fact that no LDC women in LDC locations identify high-level officials as one of the three parts of the population with whom they spend the most time, while nearly a fifth of the LDC and DC men do, raises the question of whether women, despite similar education and professional levels as men, nevertheless have less access to

higher level decision-makers most of whom may themselves be men.

Gender role differences would thus seem to mix in important ways with professional status and cultural reference groups in deepening understanding of role divergence and functionality in development work. And further examination of such factors would greatly enrich current, economically-oriented notions regarding role divergence and functionality by providing a context for consideration of non-economic factors influencing trans- and intra-societal interchanges.

Asymmetrical Flow and Valuation of Development
Information

As noted, the thesis reports several sorts of data pointing to the greater reliance of LDC citizens in LDCs on the NFE Information Center and network for both informational and symbolic support, and to their higher evaluation of the Center's usefulness and importance as a source for development-related ideas, resources, and contacts. In addition, the data point to a possible pattern of asymmetrical flow and valuation of the development information contributed by participants in the NFE network. Specifically noted is that while development specialists in low-income countries approximate DC citizens in DC locations in the proportion who report having one of their contributed materials or affiliated projects cited in The NFE Exchange, DC citizens in DCs tend to receive about twice as many requests for further information as do those in low-income countries.

Two hypotheses may help explain this variation and merit further study. The first relates to the "fugitive" nature (i.e., unpublished or inaccessible) of many of the materials that are received by the NFE Information Center from LDC locations and to the tentative expectation that

fewer fugitive materials would be requested from LDC sources. The second posits a possible bias by development specialists, regardless of national origin or location, for development literature from more established or more esteemed industrialized country sources.

Support for the first hypothesis is found in recent literature critical of the continuing domination of the industrialized countries over less developed countries in the creation and distribution of knowledge products (Altbach, 1978, 1975). Books, journals, and applied research findings tend to be imported from industrialized countries into developing countries to a greater extent than such knowledge products are exported from developing to industrialized countries. Reasons for this, as discussed in the literature, include the intellectual heritage of colonialism, the preponderance of universities and research institutes in industrialized nations together with weaker academic infrastructures in many developing nations; control by DC-based multinational corporations of transnational book publishing, dominance of metropolitan languages, a poor information infrastructure in many developing countries, and simple shortage of locally published knowledge products owing to high costs of production and to a smaller distribution market.

It is possible that fewer requests for materials are reported received by the NFE network participants in low-income countries because of lost mail or other communication and distribution problems. But language and cost are not thought to provide major obstacles. Instead, it seems important to consider the second hypothesis and investigate whether a preference exists for development information from industrialized country sources.

Some recent conceptualizations regarding cultural capital -- the relative value assigned to different knowledge -- would seem suitable for adaptation in this regard. Most of the literature concerning knowledge as capital derives from a dependency framework of analysis and suggests that cultural capital and the flow of ideas is linked to economic capital and the movement of goods, the former deriving from or in tandem with, the latter. (Arno, 1980; Bourdieu, 1973; Bourdieu and Passeron, 1977; Apple, 1978; Berman, 1979; Karabel and Halsey, 1977; Hall, 1979.)

The notion of cultural capital is intriguing because it enables consideration of perceived value of knowledge. Empirical studies are yet needed, however, to examine configurations of which and whose ideas are most valued in

forming knowledge summaries. These configurations of cultural capital might then be mapped employing such units as author's LDC versus DC national origin and location of work, locus of knowledge origin according to basic development indicators, author's institution of highest formal education, nature of the professional networks with which the author is affiliated, and the media (ownership, prestige, outreach, degree of access) selected to give the knowledge exposure. The pertinent question is whether a pattern can be detected of knowledge and information valuation coincident with neo-colonial patterns of institutional (e.g., academic, economic) dominance. And, if so, what factors might help to explain this?

Finally, it might be asked how both foreign aid programs and transnational professional networks might strengthen the flow of development knowledge and information from developing countries, and its valuation there and within industrialized countries, thus enabling more prominence and legitimacy to be ascribed to cultural capital generated by LDC development specialists and in emerging centers of study in Africa, Asia, and Latin America. For the patterns noted lead to a sense that persons in the global metropolises know less of persons in the peripheries while the reverse holds for those in LDCs. This in itself should be cause for concern among those engaged in the work of locally-determined development.

APPENDIX

MICHIGAN STATE UNIVERSITY

INSTITUTE FOR INTERNATIONAL STUDIES
COLLEGE OF EDUCATION
513 ERICKSON HALL

EAST LANSING · MICHIGAN · 48824 · USA

PROGRAM OF STUDIES IN NON-FORMAL EDUCATION
INFORMATION CENTER

6 April 1979

Dear Colleague:

We ask your cooperation in completing this questionnaire and returning it by 1 June in the envelope provided (via airmail if overseas).

Just over four years ago, the Non-Formal Education Information Center began with a small collection of materials and the names of some two hundred interested persons in twenty countries. These initial participants were development planners and practitioners who had attended a conference on non-formal education at Michigan State University and who wished to keep informed about activities and knowledge in the field. Today, nearly 4000 development planners and fieldworkers in 131 countries maintain contact with the Information Center and, to some extent, with various others in the NFE network.

This is the first formal survey which we are making of persons in the NFE network. We ask your assistance in completing this questionnaire for several reasons:

- First, we need to update our mailing list. Increasing postal costs require us to be sure that the NFE Exchange newsletter is mailed only to those currently wishing it and confirming their present mailing address.
- Second, we want to assess the activities of our Center to find out what information services you find most useful.
- Third, we want to better understand the people themselves in the NFE network who are pioneering in the practice and study of non-formal education for development. In particular, we are interested in the kinds of work you are doing, how you became involved in non-formal education and/or development, and the places you look to for information and other support.
- Also, since professional activity in the field of non-formal education for development is relatively new and since people engaged in this work come from a variety of backgrounds and disciplines, we are interested in how the NFE Information Center network helps people to exchange their ideas and experiences with one another.

If your work does not concern non-formal education and/or development, or if circumstances do not allow you to complete the entire questionnaire, please answer questions 1 - 12 and return that portion.

Since we are interested in looking at general characteristics of those working in the field of non-formal education for development, your name will never be associated with specific remarks you may care to make. If you wish to respond more fully to any item in the questionnaire, please attach additional pages as needed.

Thank you very much for your interest and participation.

Sincerely,



Joan M. Claffey, Director
NFE Information Center

(DO NOT
WRITE HERE)

Page 2

1. Is the mailing label on the preceding page correct?
- 1 ☐ yes 2 ☐ no If "no", please correct the label.
2. Do you wish to continue receiving the NFE Exchange newsletter?
- 1 ☐ yes 2 ☐ no
3. When was your first contact with the NFE Information Center?
- 1 ☐ 1974 3 ☐ 1976 5 ☐ 1978
2 ☐ 1975 4 ☐ 1977 6 ☐ 1979
4. How did you first learn about the NFE Information Center? (Check one or two items.)
- 1 ☐ from a group or person already in contact with the Center 6 ☐ correspondence from the NFE Information Center
2 ☐ read about the publications or services 7 ☐ learned about the Center at a national or local conference
3 ☐ saw one of the NFE publications or the NFE Exchange newsletter 8 ☐ learned about the Center at an international conference
4 ☐ my organization was on the mailing list 9 ☐ other (explain: _____)
5 ☐ personal contact with someone from the NFE Information Center or Michigan State University
5. Have you ever written to or called the NFE Information Center?
- 1 ☐ yes 2 ☐ no If "no", omit questions 6-9 and begin with question 10.
6. About how many times have you written to or called the NFE Information Center? _____
7. If you have communicated with the NFE Information Center, what were the reasons for doing so? (Check all items that apply.)
- 1 ☐ to ask for the NFE Exchange newsletter
2 ☐ to ask for other NFE publications of Michigan State University
3 ☐ to ask for a specific paper or document mentioned in the NFE Exchange or a bibliography of the Center
4 ☐ to ask for materials on a particular topic
5 ☐ to ask about other groups working in your field of interest
6 ☐ to request publications from the Center for someone else
7 ☐ to send information about your own organization or program in non-formal education
8 ☐ to ask that something be included in the NFE Exchange newsletter
9 ☐ to ask about Michigan State University's education or training programs in non-formal education
10 ☐ to get professional encouragement in your work
11 ☐ other (describe: _____)
8. Were the responses of the NFE Information Center to you satisfactory?
- 1 ☐ very satisfactory 2 ☐ satisfactory 3 ☐ not satisfactory
9. How would you characterize the responses which you have received from the NFE Information Center in each of the following areas?
- a. speed: 1 ☐ prompt reply 2 ☐ medium-speed reply 3 ☐ slow reply
b. relevance: 1 ☐ very appropriate response 2 ☐ appropriate response 3 ☐ inappropriate response
10. The NFE Information Center provides information (including the NFE Exchange newsletter, special bibliographies, and referrals to other persons and organizations), and responses to inquiries about matters concerning non-formal education and development.
- Overall, how useful have any of the above services been to you in your work?
- 1 ☐ very useful 2 ☐ useful 3 ☐ not useful 4 ☐ no basis for response
- Comments: _____

(1-4)

(5)

(6)

(7)

(8)

(9-10)

(11)

(12)

(13-23)

(24)

(25-26)

(27)

(DO NOT
WRITE HERE)

11. Are there services in your country similar to those provided by the NFE Information Center?

1 ☐ yes, similar services are provided in _____ by _____
(name of country)

(name of information center)

2 ☐ no, I do not know of similar services in _____
(name of country)

If "no", do you think such services should be provided? 1 ☐ yes 2 ☐ no
Why?

12. Does any of your work or study concern non-formal education or development?

1 ☐ yes 2 ☐ no

If "no", please explain why you receive the NFE Exchange newsletter and then return the questionnaire which you have completed to this point.

13. To help you in your work in non-formal education and/or development, what kinds of resources do you find most useful? (Check one or two items.)

- 1 ☐ theoretical materials concerning ideas and issues
2 ☐ practical materials like manuals and guides
3 ☐ case studies and project descriptions
4 ☐ annotated bibliographies
5 ☐ other (describe: _____)

14. Are you involved with education programs?

1 ☐ yes 2 ☐ no

If "yes", have you ever used the information you received from the NFE Information Center to make changes or do something new? (Check all items that apply.)

- 1 ☐ no
2 ☐ yes, to propose or plan a new program
3 ☐ yes, to begin a new program
4 ☐ yes, to suggest a new design or new guidelines for an existing program
5 ☐ yes, to write a report or position paper
6 ☐ yes, to use different kinds of training (instructional) materials or approaches
7 ☐ other (describe: _____)

Comments:

15. If the NFE Information Center were going to reprint only two of the NFE Exchange newsletters listed below, which two would you like to see reprinted?

- | | |
|---|---|
| 1 ☐ NFE and the Rural Poor, no. 5 | 5 ☐ Skills Training for Adults, no. 11 |
| 2 ☐ NFE Information Center, no. 6 | 6 ☐ NFE and Entertainment, no. 12 |
| 3 ☐ Front-line Development Workers, no. 7/8 | 7 ☐ Women in Development, no. 13 |
| 4 ☐ Mobilizing Youth for Development, no. 9/10 | 8 ☐ Training for Development, no. 14 |

16. What topics would you like to see treated in future issues of the NFE Exchange newsletter? _____

17. Which parts of the NFE Exchange do you find most useful? (Put a "1" next to the most useful part and a "2" next to the second most useful part.)

- | | |
|---|---|
| 1 ☐ Main article | 4 ☐ Special listings (of organizations, periodicals, etc.) |
| 2 ☐ Project highlights | 5 ☐ Readers/news/notes |
| 3 ☐ Bibliography | |

Page 4

(DO NOT
WRITE HERE)

18. About how many people, including yourself, have read at least part of your copy of the last issue of the NFE Exchange newsletter?

19. Please indicate whether you have done any of the following things with the NFE Exchange newsletter:

- a. placed in a library: 1 ☐ often 2 ☐ occasionally 3 ☐ never
- b. have reproduced sections to send to others: 1 ☐ often 2 ☐ occasionally 3 ☐ never
- c. have passed on to planners or policymakers: 1 ☐ often 2 ☐ occasionally 3 ☐ never
- d. have passed on to field-workers or trainers: 1 ☐ often 2 ☐ occasionally 3 ☐ never
- e. have suggested that others write to the NFE Information Center for a copy: 1 ☐ often 2 ☐ occasionally 3 ☐ never

20. Overall, how would you evaluate the usefulness of the NFE Exchange newsletter to you?

- 1 ☐ very useful 3 ☐ not very useful
- 2 ☐ moderately useful 4 ☐ no basis for response

Comments:

21. The NFE Information Center identifies persons and organizations who work and produce materials in the field of non-formal education for development. This information is shared with others through the NFE Exchange newsletter, correspondence and special bibliographies.

a. Have you ever requested materials or further information from persons or organizations identified in the Center's newsletter, correspondence or bibliographies?

1 ☐ yes

2 ☐ no If "no", please go to question 22.

b. About how many persons or organizations have you asked to send a paper, publication or further project information after their work was mentioned in the Center's newsletter?

c. Please give examples of the types of persons or organizations you wrote to and the reasons for writing to them:

Names of Persons or Organizations

Reasons for Writing to Them

22. a. Has one of your projects, papers or publications ever been mentioned in the NFE Exchange newsletter?

1 ☐ yes

2 ☐ no

3 ☐ not certain

If "no" or "not certain", go to 23.

b. If "yes", about how many persons or organizations have asked you to send a paper or further project information after it was mentioned in the Center's newsletter?

c. Please give examples of the types of persons or organizations who contacted you and their reasons for doing so.

Names of Persons or Organizations

Reasons for Contacting You

23. The NFE Information Center links together nearly 4000 people in 131 countries who are interested in non-formal education.

Through your contacts with the NFE Center do you feel a sense of commonality with others who share your interests?

1 ☐ yes

2 ☐ not certain

3 ☐ no

(51-52)

(53)

(54)

(55)

(56)

(57)

(58)

(59)

(60-61)

(62)

(63-64)

(65)

24. Have you had any unexpected benefits as a result of your contact with the NYE Information Center?

1 ☐ yes If "yes", please explain or give example(s). 2 ☐ no

(66)

(END

CHD 1:

END IN

CHD 2)

DUP

COLS 1-4

2

(3)

(6)

The next series of items (questions 25 - 32) focuses upon the work you may do which is carried out for the goal of development. Then follows a series of items (questions 33 - 40) asking about any work you do which concerns the method of non-formal education.

25. Does your work (or study) concern development? (Development is here defined as activities which are designed to improve production, standards of living, and social and economic opportunities, particularly of less advantaged peoples. These activities could, for example, be in agriculture, health and nutrition, family planning, community development, income-generating projects, public works and related fields, and formal and non-formal education which is oriented toward the goals of development.)

1 ☐ yes 2 ☐ no If "no", omit items 26 - 32 and continue with question 33.

26. a. In what field(s) of development do you work (or study)? (Check all items that apply.)

- 1 ☐ integrated rural development (comprehensive programs including, for example, new technology, social services, income-generating activities, production, marketing, credit arrangements)
- 2 ☐ agriculture
- 3 ☐ literacy and/or basic education
- 4 ☐ health
- 5 ☐ nutrition
- 6 ☐ family planning
- 7 ☐ extension
- 8 ☐ vocational skills programs
- 9 ☐ management consultation
- 10 ☐ business or manufacturing or commerce
- 11 ☐ communication and media
- 12 ☐ education or training of others to work in development (training of trainers or change agents)
- 13 ☐ general non-formal education
- 14 ☐ higher education
- 15 ☐ other formal education
- 16 ☐ urban settlements
- 17 ☐ the servicing of development (for example, keeping accounts, management of libraries, provision of in-house support services)
- 18 ☐ other (describe: _____)

- b. Of these fields you checked above, please circle the one field representing your primary area of work.

(7-24)

(25)

27. a. With what kinds of development activities are you involved? (Check all items that apply.)

- 1 ☐ administration
- 2 ☐ planning or program design
- 3 ☐ policy making
- 4 ☐ community-level field work
- 5 ☐ teaching or training
- 6 ☐ study
- 7 ☐ research or evaluation
- 8 ☐ documentation or information services
- 9 ☐ other support services (for example, accounting, arrangements)
- 10 ☐ other (describe: _____)

- b. Of these you checked above, please circle the one area in which you spend the most time.

(26-35)

(35)

Page 6

28. Approximately how many years have you been involved in development work? _____
29. a. From where do you get information, resources and ideas about development? (Check all items that apply.)
- 1 _____ from your work associates
 - 2 _____ from your instructors and courses
 - 3 _____ from people for whom the development projects are intended
 - 4 _____ from development projects with which you are personally familiar
 - 5 _____ from organizations, advisors or specialists in development with whom you have direct, face-to-face communication
 - 6 _____ from persons or organizations with whom you have indirect communication--via correspondence, for example
 - 7 _____ from publications
 - 8 _____ from radio or other non-print materials
 - 9 _____ other (describe: _____)
- b. Of those you checked above, please circle the two sources that you rely on the most or that are most useful to you.
30. Please list organizations and publications from which you get information about development which is most useful to you.
- Organizations and their locations: _____
- _____
- Publications (give titles if possible): _____
- _____
31. How important is the NTZ Information Center to you as a source for ideas, contacts, or resources about development?
- 1 _____ the most important source
 - 2 _____ one of the most important sources
 - 3 _____ of average importance as a source
 - 4 _____ rarely important as a source
 - 5 _____ never an important source
32. If you could go anywhere you wished to learn more about development, where would you like to go?
33. Does your work (or study) concern non-formal education? (Non-formal education is defined here as educational and training activities organized in a pattern different from that of the formal school system. Non-formal education may be used for the goals of development or for some other goals.)
- 1 _____ yes
 - 2 _____ no If "no", omit items 34 - 40 and continue with question 41.
34. a. In what field(s) of non-formal education do you work (or study)? (Check all items that apply.)
- 1 _____ basic needs education
 - 2 _____ vocational skill training or upgrading
 - 3 _____ professional skill upgrading
 - 4 _____ enrichment education
 - 5 _____ other (describe: _____)
- b. Of those items that you checked, please circle the one field representing your primary area of work.
35. a. With what kinds of activities are you involved in non-formal education? (Check all items that apply.)
- 1 _____ administration
 - 2 _____ program design
 - 3 _____ curriculum development
 - 4 _____ instruction
 - 5 _____ research and evaluation
 - 6 _____ support services (for example, documentation, accounting)
 - 7 _____ other (describe: _____)
- b. Of those items that you checked, please circle the one area in which you spend the most time.

(DO NOT
WRITE HERE)

(37-38)

(39-47)

(48-49)

(50)

(51)

(52-56)

(57)

(58-64)

(65)

(DO NOT
WRITE HERE)

36. Approximately how many years have you been working in non-formal education? _____
37. a. From where do you get information, resources and ideas about non-formal education? (Check all items that apply.)
- 1 _____ from your work associates
 - 2 _____ from your instructors and courses
 - 3 _____ from people for whom the NFE programs are intended
 - 4 _____ from NFE programs with which you are personally familiar
 - 5 _____ from organizations, advisors or specialists in NFE with whom you have direct, face-to-face communication
 - 6 _____ from persons or organizations with whom you have indirect communication--via correspondence, for example
 - 7 _____ from publications
 - 8 _____ from radio or other non-print materials
 - 9 _____ other (describe: _____)
- b. Of those items that you checked, circle the two sources that you rely on the most or that are most useful to you.
38. Please list the organizations and publications from which you get information and materials about non-formal education which are most useful to you:
- Organizations and their locations: _____
- _____
- Publications (give titles if possible): _____
- _____
39. How important is the NFE Information Center to you as a source for ideas, contacts, and resources about non-formal education?
- 1 _____ the most important source
 - 2 _____ one of the most important sources
 - 3 _____ of average importance as a source
 - 4 _____ rarely important as a source
 - 5 _____ never an important source
40. If you could go anyplace you wished to learn more about non-formal education, where would you like to go?
41. Do you use non-formal education as a method to carry out development programs or goals?
- 1 _____ yes
 - 2 _____ no If "no", please go to question 43.
42. a. What have you found to be the greatest obstacles in carrying out development programs involving non-formal education? (Check all items that apply.)
- 1 _____ participants not sufficiently involved in the design and management of the NFE program
 - 2 _____ program conflicts with certain cultural values and norms
 - 3 _____ local resources (people and organizations) not sufficiently involved in the program
 - 4 _____ development workers or specialists not adequately trained for the task
 - 5 _____ insufficient numbers of trained local people to provide needed services
 - 6 _____ lack of integration and coordination among ministries or local service agencies
 - 7 _____ lack of interest or support among the local people
 - 8 _____ lack of supplies or other resources when needed
 - 9 _____ lack of adequate financial resources
 - 10 _____ other (describe: _____)
- b. From your own personal experience, which obstacles do you think are most important? _____
43. Are you employed for wages or salary with an organization?
- 1 _____ yes
 - 2 _____ no If "no", omit questions 44 - 45 and continue with question 46.

(56-57)

(64-76)

(77-78)

(79)

(END
CRD 2;
PBO 14
CRD 3)DUP
COLS 1-4

3

(5)

(6)

(7-16)

(17-19)

(20)

Page 8

(DO NOT
WRITE HERE)

44. a. Give the full name of the primary organization which employs you. (NOTE: If you work for more than one organization, see also question 45 below.) _____
- b. What is the title of your position? _____
- c. What kind of organization is this?
- | | |
|--|---|
| 1 _____ government: international organization or agency | 5 _____ private, voluntary organization |
| 2 _____ government: national organization or agency | 6 _____ religious organization |
| 3 _____ government: local organization | 7 _____ academic training institution |
| 4 _____ other public organization (describe: _____) | 8 _____ foundation |
| | 9 _____ business, industry or commerce |
| | 10 _____ other (describe: _____) |
- d. Is it in connection with this organization that you are involved in non-formal education and/or development?
- 1 _____ yes 2 _____ no If "no", please go to question 45.
- e. What do you do in non-formal education and/or development through this organization? _____
- _____
- _____
- _____
45. a. Do you have a second paid employment?
- 1 _____ yes 2 _____ no If "no", please go to question 46.
- b. Give the full name of the second organization which employs you: _____
- c. What is the title of your position? _____
- d. What kind of organization is this?
- | | |
|--|---|
| 1 _____ government: international organization or agency | 5 _____ private, voluntary organization |
| 2 _____ government: national organization or agency | 6 _____ religious organization |
| 3 _____ government: local organization | 7 _____ academic/training institution |
| 4 _____ other public organization (describe: _____) | 8 _____ foundation |
| | 9 _____ business, industry or commerce |
| | 10 _____ other (describe: _____) |
- e. Is it in connection with this organization that you are involved in non-formal education and/or development?
- 1 _____ yes 2 _____ no If "no", please go to question 46.
- f. What do you do in non-formal education and/or development through this organization? _____
- _____
- _____
- _____
46. a. Are you working as a volunteer for an organization involved in non-formal education and/or development?
- 1 _____ yes 2 _____ no If "no", please go to question 47.
- b. Give the full name of the organization for which you work as a volunteer: _____
- c. What is the title of your position? _____

(21)

(22)

(23)

(24)

(25)

(26)

(DO NOT
WRITE HERE)

d. What kind of organization is this?

- | | |
|--|--|
| 1 ☐ government: international
organization or agency | 5 ☐ private, voluntary organization |
| 2 ☐ government: national
organization or agency | 6 ☐ religious organization |
| 3 ☐ government: local organization | 7 ☐ academic training institution |
| 4 ☐ other public organization
(describe: _____) | 8 ☐ foundation |
| | 9 ☐ business, industry or commerce |
| | 10 ☐ other (describe: _____) |

e. What do you do in non-formal education and/or development through this organization?

47. a. Are you involved in other activities in non-formal education and/or development independently, or outside of those organizations already listed?

- 1 ☐ yes 2 ☐ no If "no", please go to question 48.

b. Do you perform these activities as a volunteer or are you paid to do them?

- 1 ☐ volunteer 2 ☐ paid

c. What is the nature of these activities in non-formal education and/or development?

48. a. In your work in non-formal education and/or development, in which of the following locations do you usually carry on your activities? (Check all items that apply.)

- | | |
|---|---|
| 1 ☐ capital city | 4 ☐ rural villages |
| 2 ☐ other cities | 5 ☐ countryside |
| 3 ☐ towns | |

b. Of these items you have checked above, please circle the one area which you spend the most time.49. Toward what part(s) of the population is your work in non-formal education and/or development primarily directed; that is, what groups are you trying to have an effect on? (Check all items that apply.)

- 1 ☐ men
2 ☐ women
3 ☐ old people
4 ☐ adults
5 ☐ youth
6 ☐ children
7 ☐ families
8 ☐ relatively wealthy people
9 ☐ people in the middle classes
10 ☐ poor people
11 ☐ policy makers
12 ☐ planners
13 ☐ high-level officials
14 ☐ mid-level officials
15 ☐ local leaders
16 ☐ urban people
17 ☐ rural people
18 ☐ students
19 ☐ trainers or teachers
20 ☐ development workers
21 ☐ whole population
22 ☐ foreigners
23 ☐ other (describe: _____)

(28)

(29)

(30-34)

(35)

(36-58)

Page 10

(DO NOT
WRITE HERE)50. a. In your work, what kinds of people do you usually work with directly? (Check all items that apply.)

- 1 ☐ men
 2 ☐ women
 3 ☐ old people
 4 ☐ adults
 5 ☐ youth
 6 ☐ children
 7 ☐ families
 8 ☐ relatively wealthy people
 9 ☐ people in the middle classes
 10 ☐ poor people
 11 ☐ policy makers
 12 ☐ planners
 13 ☐ high-level officials
 14 ☐ mid-level officials
 15 ☐ local leaders
 16 ☐ urban leaders
 17 ☐ rural people
 18 ☐ students
 19 ☐ trainers or teachers
 20 ☐ development workers
 21 ☐ foreigners
 22 ☐ other (describe: _____)

b. Of those you checked above, please circle the two or three groups with which you spend the most time.

51. In terms of your work in non-formal education and/or development, what are the principal things which you would like to accomplish?

Short-term goals: _____

Long-term goals: _____

52. What are your greatest needs in terms of your work in non-formal education and/or development?

53. Please describe the position you held (as a paid employee, a volunteer, or a student) before the present position(s) you have already described:

(1) title: _____

(2) name of organization: _____

(3) location: _____

(4) kind of organization: _____

- | | |
|--|---|
| 1 ☐ government: international | 6 ☐ religious organization |
| 2 ☐ government: national | 7 ☐ academic/training institution |
| 3 ☐ government: local | 8 ☐ foundation |
| 4 ☐ other public organization | 9 ☐ business, industry or commerce |
| 5 ☐ private, voluntary organization | 10 ☐ other (describe: _____) |

(5) Did this position involve non-formal education or development:

- 1 ☐ yes 2 ☐ no

(END
CRD 3;
BEGIN
CRD 4)

DUP
COLS 1-4

4
(5)

(6-A)

(9)

(10)

(6) Has the position been a help to you in your present work in non-formal education and/or development?

1 ☐ yes

2 ☐ no

If "yes", please explain how it has helped you in your NFE or development work:

(11)

How did you become involved in your present activities in non-formal education and/or development?
(Check all items that apply.)

1 ☐ I have been working in this field for several years.

2 ☐ I received an assignment in NFE or development from the organization that I was working for.

3 ☐ I am committed to working to help poor people and that led me to this work.

4 ☐ I looked for a job in the field of non-formal education and/or development.

5 ☐ I was asked to work in this field because I have certain skills that are needed. (Please describe these skills:

(12-17)

6 ☐ I have had experiences in the past which made me want to work in non-formal education and/or development. (Please describe these experiences:

What kind of work would you like to be doing five years from now?

(18)

Your sex: 1 ☐ male 2 ☐ female

(19)

Your age: years

What is your country of citizenship?

(20-21)

In what country are you currently working or studying?

In what country did you grow up? (If more than one, give the country where you spent most of your time before you were 18.)

(22) (23) (24)

In what kind of area did you grow up?

(25) (26) (27)

1 ☐ capital city

4 ☐ rural village

(28) (29) (30)

2 ☐ other city

5 ☐ countryside

3 ☐ town

Please indicate where you have lived, worked or studied since you were 18.

Africa: 1 ☐ no 2 ☐ yes, less than 6 months

3 ☐ yes, more than 6 months
Countries:

(32)

Asia: 1 ☐ no 2 ☐ yes, less than 6 months

3 ☐ yes, more than 6 months
Countries:

(33)

Europe: 1 ☐ no 2 ☐ yes, less than 6 months

3 ☐ yes, more than 6 months
Countries:

(34)

Latin America: 1 ☐ no 2 ☐ yes, less than 6 months

3 ☐ yes, more than 6 months
Countries:

(35)

North America: 1 ☐ no 2 ☐ yes, less than 6 months

3 ☐ yes, more than 6 months
Countries:

(36)

Oceania and the Pacific: 1 ☐ no 2 ☐ yes, less than 6 months

3 ☐ yes, more than 6 months
Countries:

(37)

Would you be kind enough to indicate the highest level of formal schooling you have received (including the highest degree received, if applicable):

(38)

1. Have you received any formal schooling outside your country of citizenship?

1 ☐ no 2 ☐ yes If "yes", please indicate the level of study and the country
where it took place.

Level

Institution

Country

(39)

3. In your formal schooling, was your concentration in general studies or in some specialty?

1 ☐ general studies/liberal arts

8 ☐ law

2 ☐ philosophy/humanities

9 ☐ nursing

3 ☐ social sciences

10 ☐ medicine

4 ☐ agriculture

11 ☐ social work

5 ☐ education

12 ☐ other (describe: _____)

6 ☐ biological sciences

13 ☐ not applicable

7 ☐ physical sciences

(40-42)

(43-44)

4. Are you currently a student:

1 ☐ yes 2 ☐ no

If "yes", what are you studying? _____

Where are you a student (name of institution and country in which located)? _____

(45)

(46-47)

5. Have you participated in any education or training programs on non-formal education?
(Check as many items as apply.)

1 ☐ no

2 ☐ yes, participated in a formal degree program in non-formal education. Name of institution
and country: _____

3 ☐ yes, took one or more academic courses in non-formal education. Name of institution and
country: _____

4 ☐ yes, participated in a workshop, training session, or conference at a local level

5 ☐ yes, participated in a workshop, training session, or conference at a national level

6 ☐ yes, participated in an international workshop, training session or conference

7 ☐ other (describe: _____)

(48-50)

6. a. What languages do you speak or read?

1 _____

3 _____

5 _____

2 _____

4 _____

6 _____

b. Which was your first language? _____

c. Which of these languages do you use in your work in non-formal education and/or development?

(51-57)

(58)

(59)

d. In your work in non-formal education and/or development, do you sometimes use a translator to
help you communicate with the people you are working with?

1 ☐ no

2 ☐ yes

If "yes", please explain:

(60)

7. Is there anything else you would like to say about your activities in non-formal education and/or
development which we have not asked about?

BIBLIOGRAPHY

BIBLIOGRAPHY

- Adams, Donald. "Development Education." Comparative Education Review 21(Nos. 2/3, 1977): 296-310.
- Ahmed, Manzoor and Philip H. Coombs, eds. Education for Rural Development: Case Studies for Planners. Essex, Connecticut: International Council for Educational Development, 1975.
- Altbach, Philip G. "The Distribution of Knowledge in the Third World: A Case Study in Neocolonialism." Education and Colonialism, by Altbach and Kelly, pp. 301-330. New York: Longman, 1978.
- Altbach, Philip G. "Literary Colonialism: Books in the Third World." Harvard Educational Review 15(May 1975): 226-236.
- Apple, Michael W. "The New Sociology of Education: Analyzing Cultural and Economic Reproduction." Harvard Educational Review 48(November 1978): 495-503.
- Arnové, Robert F. "Comparative Education and World-Systems Analysis." Comparative Education Review 24(February 1980): 48-62.
- Axinn, George and Nancy Axinn. Non Formal Education and Rural Development. Supplementary Paper No. 7. Program of Studies in Non-Formal Education. Institute for International Studies in Education. East Lansing: Michigan State University, 1976.
- Berman, Edward H. "Foundations, United States Foreign Policy, and African Education, 1945-1975." Harvard Educational Review 49(May 1979): 145-179.
- Boissevain, Jeremy and J. Clyde Mitchell, eds. Network Analysis: Studies in Human Interaction. The Hague: Mouton and Company, 1973.
- Bourdieu, Pierre. "Cultural Reproduction and Social Reproduction." In Knowledge, Education, and Cultural Change, edited by Richard Brown, pp. 71-112. London: Tavistock Publications, 1973.
- Bourdieu, Pierre and Jean-Claude Passeron. Reproduction in Education, Society and Culture. English edition. Sage Studies in Social and Educational Change. Volume 5. London and Beverly Hills: Sage Publications, 1977.
- Bowles, Samuel and Herbert Gintis. Schooling in Capitalist

- America. New York: Basic Books, 1976.
- Brembeck, Cole S. Formal Education, Non-Formal Education, and Expanded Conceptions of Development. Occasional Paper No. 1. Non-Formal Education Information Center, Institute for International Studies in Education. East Lansing: Michigan State University, 1978.
- Brembeck, Cole S. "The Strategic Uses of Comparative Learning Environments." In Non-Formal Education as an Alternative to Schooling, pp. 1-7. Program of Studies in Non-Formal Education, Institute for International Studies in Education. East Lansing: Michigan State University, 1974.
- Brembeck, Cole S. "The Strategic Uses of Formal and Nonformal Education." In New Strategies for Educational Development, by Brembeck and Thompson, pp. 53-63. Lexington, Massachusetts: Lexington Books, 1973.
- Brown, Richard, ed. Knowledge, Education, and Cultural Change. London: Tavistock Publication, 1973.
- Cano, Jairo. "Formation of Human Resources for Agricultural Research in Latin America, and Participation in Research Networks: Training Researchers at CIAT." PhD dissertation, Michigan State University, 1981.
- Carnoy, Martin. Education as Cultural Imperialism. New York: David McKay Co., 1974.
- Carnoy, Martin. The Limits of Educational Reform. New York: David McKay Co., 1976.
- Case, Harry L. and Richard O. Niehoff. Educational Alternatives in National Development: Suggestions for Policy Makers. Supplementary Paper No. 4. Program of Studies in Non-Formal Education, Institute for International Studies in Education. East Lansing: Michigan State University, 1976.
- Claffey, Joan M., Valerie Auserehl Kelly, Mary Joy Pigozzi, and Ruth Hill Useem. An Analysis of Inquiries Regarding Women in Development as Directed to the Non-Formal Education Information Center by Development Planners, Practitioners, and Researchers. The Non-Formal Education Information Center. East Lansing: Michigan State University, 1981.
- Coombs, Philip H., ed. Meeting the Basic Needs of the Rural Poor: the Integrated, Community-Based Approach. Essex,

- Connecticut: International Council for Educational Development, 1980.
- Coombs, Philip H. New Paths to Learning for Rural Children and Youth. New York: International Council for Educational Development, 1973.
- Coombs, Philip H. The World Educational Crisis: A Systems Analysis. New York: The Oxford University Press, 1968.
- Coombs, Philip H. and Manzoor Ahmed. Attacking Rural Poverty: How Nonformal Education Can Help. Essex, Connecticut: International Council for Educational Development, 1974.
- Crane, Diana. Invisible Colleges: Diffusion of Knowledge in Scientific Communities. Chicago: The University of Chicago Press, 1972.
- Crane, Diana. "Social Structure in a Group of Scientists: A Test of the 'Invisible College' Hypothesis." American Sociological Review 34(1969): 335-352.
- Davies, Ioan. "Knowledge, Education, and Power." In Knowledge, Education and Cultural Change, edited by Richard Brown, pp. 317-337. London: Tavistock Publications, 1973.
- Derryck, Vivian Lowery. The Comparative Functionality of Formal and Non-Formal Education for Women: Final Report. Washington, D.C.: Agency for International Development, Office of Women in Development, 1979.
- Dixon, Ruth B. Rural Women at Work: Strategies for Development in South Asia. Baltimore: John Hopkins University Press, 1978.
- Epskamp, C. P. and A. J. J. M. Boeren. Education and Communication: A Conceptual Framework. Verhandeling no. 18. The Hague, The Netherlands: Centre for the Study of Education in Developing Countries, July 1979.
- Esman, Milton J., Royal Colle, Norman Uphoff, and Ellen Taylor. Paraprofessionals in Rural Development. Rural Development Committee, Center for International Studies. Ithaca, New York: Cornell University, 1980.
- Etling, Arlen Wayne. Characteristics of Facilitators: The Ecuador Project and Beyond. Center for International Education. Amherst, Massachusetts: University of Massachusetts, 1975.

- Foley, Douglas. "Colonialism and Schooling in the Philippines from 1898 to 1970." In Education and Colonialism, by Altbach and Kelly, pp. 69-95. New York: Longman, 1978.
- Freire, Paulo. Cultural Action for Freedom. Harmondsworth, Middlesex, England: Penguin Books Ltd., 1972.
- Freire, Paulo. Pedagogy of the Oppressed. New York: Herder and Herder, 1971.
- Galaskiewicz, Joseph. Exchange Networks and Community Politics. Beverly Hills, California: Sage Publications, 1979.
- Galtung, Johan. "On the Structure and Function of Transnational Universities." Prospects 10:369-378, No. 4, 1980.
- Gillette, Arthur Lavery. Beyond the Nonformal Fashion: Toward Educational Revolution in Tanzania. Center for International Education. Amherst, Massachusetts: University of Massachusetts, 1977.
- Goulet, Denis. The Cruel Choice: A New Concept in the Theory of Development. New York: Atheneum, 1977.
- Goulet, Denis. A New Moral Order: Studies in Development Ethics and Liberation Theology. Maryknoll, New York: Orbis Books, 1974.
- Goulet, Denis. The Uncertain Promise: Value Conflicts in Technology Transfer. New York: IDOC/North America, 1977.
- Grandstaff, Marvin. Alternatives in Education: A Summary View of Research and Analysis on the Concept of Non-Formal Education. Program of Studies in Non-Formal Education, Institute for International Studies in Education. East Lansing: Michigan State University, 1974a.
- Grandstaff, Marvin. "Are Formal Schools the Best Place to Educate?" In New Strategies for Educational Development, by Brembeck and Thompson, pp. 41-52. Lexington, Massachusetts: Lexington Books, 1973.
- Grandstaff, Marvin. Historical Perspectives on Non-Formal Education. Program of Studies in Non-Formal Education. East Lansing: Michigan State University, 1974b.
- Grandstaff, Marvin. Non-Formal Education and an Expanded

- Conception of Development. Program of Studies in Non-Formal Education, Institute for International Studies in Education. East Lansing: Michigan State University, 1974c.
- Grandstaff, Marvin. "Systemic Capacity as a Problem in the Design of Alternatives to Formal Education." In Non-Formal Education as an Alternative to Schooling, pp. 8-25. Discussion Paper Number Four. Program of Studies in Non-Formal Education, Institute for International Studies in Education. East Lansing: Michigan State University, 1974d.
- Gunter, Jonathan F. Library and Information Services for Increasing International Understanding and Cooperation: A Discussion Guide. National Commission on Libraries and Information Services, 1979.
- Gunter, Jonathan F. and others. The United States and the Debate on the World "Information Order". Washington, D.C.: Academy for Educational Development, Inc., 1979.
- Hall, Budd L. "Knowledge as a Commodity and Participatory Research." Prospects 9:393-408, No. 4, 1979.
- Hamelink, Cees. "The NIIO: The Recognition of Many Different Worlds." Media Development 27(1980):3-6.
- Hessler, Richard M., Peter Kong-Ming New and J. Thomas May. "Power, Exchange, and the Research-Development Link." Human Organization 38(Winter 1979):334-342.
- Hoxeng, James. Let Jorge Do It: An Approach to Rural Non-Formal Education. Center for International Education. Amherst, Massachusetts: University of Massachusetts, 1973.
- Hudson, Barclay M. "Knowledge Networks for Educational Planning: Strategies for the Better Use of University Resources." Report for the Agency for International Development. Urban Planning Program, University of California, Los Angeles, 1976.
- Huston, Perdita. Third World Women Speak Out: Interviews in Six Countries on Change, Development and Basic Needs. New York: Praeger Publishers, 1979.
- International Commission for the Study of Communication Problems. Many Voices, One World: Towards a New More Just and More Efficient World Information and Communication Order. Paris: Unesco, 1980.

- Jequier, Nicolas and Gerard Blanc. The World of Appropriate Technology: A Quantitative Analysis. Paris: Development Centre of the Organization for Economic Co-operation and Development, 1980.
- Karabel, Jerome and A. H. Halsey. "Educational Research: A Review and an Interpretation." In Power and Ideology in Education, edited by Jerome Karabel and A. H. Halsey, pp. 1-85. New York: Oxford University Press, 1977.
- Kazamias, Andreas M. and Karl Schwartz. "Intellectual and Ideological Perspectives in Comparative Education: An Interpretation." Comparative Education Review 21(Nos. 2/3, 1977): 153-176.
- Kelly, Gail P. and Philip Altbach. "Introduction." In Education and Colonialism, by Altbach and Kelly, pp. 1-49. New York: Longman, 1978.
- Kindervatter, Suzanne. Nonformal Education as an Empowering Process. Center for International Education. Amherst, Massachusetts: University of Massachusetts, 1979.
- King, Kenneth. The African Artisan. New York: Teachers College Press, Columbia University, 1977.
- Khan, Akhteer Hameed. Reflections on the Comilla Rural Development Projects. Washington, D.C.: American Council on Education, Overseas Liaison Committee, 1974.
- Kleis, Russell J., Charles L. Lang, John R. Mietus and Fia T. S. Tiapula. "Toward a Contextual Definition of Non-Formal Education." In Non-Formal Education: The Definitional Problem, pp. 1-7. Program of Studies in Non-Formal Education, Institute for International Studies in Education. East Lansing: Michigan State University, 1974.
- Krueger, Chris and Jeanne Moulton. A Retrospective Study of the DS/ED Nonformal Education Program 1970-1980. SF-147-PE-86. Washington, D.C.: Agency for International Development, S&T/ED, 1981.
- Kuhn, Thomas. The Structure of Scientific Revolutions (Second Edition). Chicago: The University of Chicago Press, 1970.
- Leinhardt, Samuel, ed. Social Networks: A Developing Paradigm. New York: Academic Press, 1977.
- Lele, Uma. The Design of Rural Development: Lessons from

- Africa. Washington: International Bank for Reconstruction and Development 1975.
- Meyer, John W. and Michael T. Hannan, eds. National Development and the World System: Educational, Economic, and Political Change, 1950-1970. Chicago: The University of Chicago Press, 1979.
- Moulton, Jeanne Marie. Animation Rurale: Education for Rural Development. Center for International Education. Amherst, Massachusetts: University of Massachusetts, 1977.
- Niehoff, Richard O. Educational Alternatives in National Development: Suggestions for Policy Makers. Supplementary Paper No. 4. Program of Studies in Non-Formal Education. Institute for International Studies in Education. East Lansing: Michigan State University, 1976.
- Niehoff, Richard O, ed. Report of Conference and Workshop on Non-Formal Education and the Rural Poor. Program of Studies in Non-Formal Education. Institute for International Studies in Education. East Lansing: Michigan State University, 1977.
- O'Gorman, Frances. Roles of Change Agents in Development. Occasional Paper No. 3. Non-Formal Education Information Center, Institute for International Studies in Education. East Lansing: Michigan State University, 1978.
- Overseas Liaison Committee. "An Evaluation of the Rural Development Network of the Overseas Liaison Committee: the Results of a Survey." Prepared for USAID-AFR/RA. Washington, D.C.: American Council on Education, 1978.
- Paulston, Rolland G. "Changing Educational Systems: A Review of Theory and Experience." Washington, D.C.: The World Bank, 1978.
- Paulston, Rolland G., ed. Non-Formal Education: An Annotated International Bibliography. New York: Praeger Publishers, 1972.
- Paulston, Rolland G. "Social and Educational Change: Conceptual Frameworks." Comparative Education Review 21(Nos. 2/3, 1977): 370-395.
- Postgate, Richmond, Peter M. Lewis and William A. Southwood. Low-Cost Communication Systems for Educational Development Purposes in Third World Countries. Paris:

Unesco, 1979.

Pritchard, Roger. Information Networks and Education: An Analytic Bibliography. Paris: Unesco, Division of Educational Policy and Planning, 1978.

Pritchard, Roger. "Organizing an International Information Network in Education: Processes and Problems." Prepared for Unesco Symposium on Future Programmes of Information and Communication in Educational Policy and Planning, Paris, 1977. Berkeley: University of California, Program in International Education Finance, 1977. (Mimeographed.)

Rogers, Everett M. "The Rise and Fall of the Dominant Paradigm." Journal of Communication 28(Winter 1978):64-69.

Rogers, Everett M. Communication of Innovations: A Cross-Cultural Approach. New York: The Free Press, 1971.

Rogers, Everett M. and D. Lawrence Kincaid. Communication Networks: Toward a New Paradigm for Research. New York: The Free Press, 1981.

Rogers, Everett M. and Douglas S. Solomon. Traditional Midwives as Family-Planning Communicators in Asia. Case Study No. 1. Honolulu: East West Center Communication Institute, n.d.

Sarason, Seymour B. and Elizabeth Lorentz. The Challenge of the Resource Exchange Network. San Francisco: Jossey-Bass Publishers, 1979.

Schramm, Wilbur and Daniel Lerner, eds. Communication and Change: the Last Ten Years -- and the Next. Honolulu: The University Press of Hawaii, 1976.

Sheffield, James R. and Victor R. Kiejomaoh. Non-Formal Education in African Development. New York: African American Institute, 1972.

Srinivasan, Lyra. Perspectives on Non-Formal Adult Learning. New York: World Education, 1977.

Swartz, David. "Pierre Bourdieu: The Cultural Transmission of Social Inequality." Harvard Educational Review 47(November 1977): 545-555.

Tehrani, Majid. "Development Theory and Communications Policy: The Changing Paradigm." In Progress in

- Communication Sciences Vol. 1, edited by Melvin J. Voight and Gerhard J. Hanneman, pp. 119-166. Norwood, New Jersey: ABLEX Publishing Corporation, 1979.
- Unesco. Consultation of Animators of Networks of Educational Innovation for Development, Final Report. Paris: Unesco, 1981.
- Unesco. Preliminary Study on the Need for and the Potential of a Regional Co-Operative Network for Educational Innovation for Development in Latin America and the Caribbean. Paris: Unesco, 1979.
- Useem, John, Ruth Hill Useem and Florence E. McCarthy. "Linkages between the Scientific Communities of Less Developed and Developed Nations: A Case Study of the Philippines." In Bonds without Bondage, edited by Krishna Kumar, pp. 33-61. Honolulu: The University Press of Hawaii, 1979.
- Useem, John, Ruth Hill Useem, Abu Hassan Othman and Florence E. McCarthy. "Transnational Networks and Related Third Cultures: A Comparison of Two Southeast Asian Scientific Communities." Research in Social Movements, Conflict and Change 4:283-316, 1981.
- Useem, John, Ruth Hill Useem, Abu Hassan Othman and Florence E. McCarthy. "Trans-Societal Linkages of Southeast Asian Academic Scientists: A Comparative Study of the Philippines and Malaysia." Paper prepared for Society for the Social Studies of Science, 1977.
- Van Rensburg, Patrick. Report from Swaneng Hill: Education and Employment in an African Country. Uppsala, Sweden: The Dag Hammarskjöld Foundation, 1974.
- Vielle, Jean-Pierre. "Red Nacional de Centros de Investigacion Educativa." Revista de Educacion e Investigacion 1(Octubre - Noviembre - Diciembre 1979):18-30.
- Weiss, Carol H. "Knowledge Creep and Decision Accretion." Knowledge, Diffusion, Utilization 1(March 1980):381-404.
- Willer, David, and Bo Anderson, eds. Networks, Exchange and Coercion. New York: Elsevier, 1981.
- World Bank. World Development Report, 1979. New York: Oxford University Press, 1979, 1980, 1981.