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NON-FORMAL EDUCATION:  
ASSESSMENT AT THE NATIONAL LEVEL

by

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## PREFACE

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The author regrets any and all omissions of national level studies of NFE, and requests that persons aware of such work contact her and send copies of the works for inclusion in future writings:

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## I. INTRODUCTION

Within the vast field of development education, which in recent years has included emphasis upon both formal and non-formal education, we may discern a set of major stages in the evolution of analytical thinking on the part of educational policy-makers and planners. These stages have had a direct impact upon the ways in which decisionmakers in national governments and private institutions:

- conceive of educational policies;
- develop educational plans;
- allocate educational budgets;
- design educational programs; and
- assess, monitor and evaluate those programs.

### Stage One

During the 1960s, priority concern was given to the economic return of education, with a consonant emphasis upon diversified secondary education, the injection of skills training into basic education, and the development of youth and adult vocational training. The emergence, in the late 1960s, of a new interest in potential economic returns from out-of-school education led, in part, to the development of a nascent field called "non-formal education" (NFE).

### Stage Two

In the early '70s, disappointing results from studies on social mobility and the actual economic return of education to the poor, as well as concerns over continuing socioeconomic inequalities in many nation-states, led to an emphasis upon educational equity and heated discussions about the limitations of education as a technical means for achieving significant and permanent socioeconomic change. At this point, some policy-planners decided to focus mainly on other sectors or fields considered to have a greater potential impact in terms of the promotion of socioeconomic development, such as rural and agricultural development, urban planning, transportation and related infrastructure, etc. Other decisionmakers, not wanting to de-emphasize NFE, noted its potential utility, citing case studies of successful NFE projects, descriptions of some main national-level programs and the writings of a few educational philosophers.

### Stage Three

The tension between the two preceding stages has led, in turn, to some newer conceptualizations about the importance of the social well-being in terms of human development: physical, mental and emotional, and in some writings, spiritual. Community evolution and group development within the context of the empowerment of peoples has also been emphasized. From this new perspective, the economic rate of return of education is not the only major point of concern, but also national standards of well-being and social group development. Several countries, beginning in the late 1970s, have sought to define and develop criteria for evaluating social development and the role of education in that development. And it is in this larger context of the evolution of thought, planning and action in education, that non-formal education, viewed especially as supplementary to formal education, has at last found its valid role in the national-level policy-planning and assessment of education. Non-formal education, thus, may be best considered within the context of both social and economic development.

The main tasks of this paper are to:

- 1) examine the goals and purposes, contents, methods, strengths and limitations of different approaches to the identification, inventorying, assessment and evaluation of NFE in varying national settings;
- 2) provide brief reviews of national NFE assessments conducted or in-progress; and
- 3) advance a set of guidelines including generic types and prototypical elements for conducting national assessment efforts.

In Chapter II, conceptual considerations basic to any national-level NFE assessment are discussed, with special attention given to certain theoretical constructs hitherto little circulated in international publications. In Chapter III, the scope of NFE is reviewed in terms of topic areas, sectors, organizations, coverage and institutional interrelationships. For those readers who have not been directly involved in NFE work, it may be advisable to read Chapter III first in order to gain an understanding of some of the basic parameters of NFE. Various types of NFE assessments are critiqued in Chapter IV, in terms of their purposes and goals, contents, methods, strengths and limitations. In Chapter V, brief reviews of several NFE assessments are provided with emphasis given to methods utilized. In Chapter VI guidelines for conducting national assessments are provided. Generic types of assessment and prototypical elements, culled from previous

work, are presented along with the framework of the guidelines.

This study was prepared with the goal of stimulating discussion, research and policy-planning leading to improvement of the quality and extension of the benefits of NFE. Assessment endeavors should be viewed as stepping stones within larger policy-planning and programming efforts, which lie beyond the scope of this paper. Should this study assist, if only indirectly, to create new learning opportunities for some peoples, it will have achieved its true objective.

## II. CONCEPTUAL CONSIDERATIONS

Before discussing the identification, inventorying, assessment and analysis of non-formal education, it is useful to review the development of the main definitions and theoretical constructs which have guided work in this field. Admittedly, this is not an easy task. Virtually all specialists and analysts in the field have their own working definitions concerning non-formal education. That these mental constructs largely coincide at major points enables all involved in NFE to communicate in a general way, but when national assessment work is under consideration, the varying and often contradictory definitions held by many specialists emerge to wreak havoc in planning sessions.

Let us, then, review briefly the history of the development of the term non-formal education, and subsequently, consider some of the analyses of field data which have permitted the construction of tentative theoretical frameworks. It is likely that these or similar frameworks could guide ongoing and future assessments far better than the simple definitions provided at the inception of work on NFE in the late sixties and early seventies.

It is not surprising that there has been great confusion with respect to the definition and conceptual bases of non-formal education. In essence, it is impossible to establish clear distinctions and boundaries between formal and non-formal education, for they are in fact inseparable in an epistemological sense. In educational development, we are concerned with continuous educational processes found at the individual, social group and sociocultural levels, which provide the settings -- or contexts -- for cultural transmission, elaboration and creativity (Vargas Adams, 1975; Toro, 1975). Thus, any and all sets of definitions, classifications, typologies or paradigms, of necessity, are arbitrary and must be regarded simply as heuristic devices to assist us in dealing with fluid phenomena. If a

definition or construct proves to be distorting reality or insufficient to describe the complex phenomena with which we must grapple, then clearly, it must be altered or discarded.

Historically, the term "non-formal education" came into view at the international level in the mid-1960s in an attempt to group a disparate array of programs under one comprehensive label, e.g., out-of-school youth education, adult education, post-secondary education, nutrition and health education, basic education, infant and pre-school education, vocational training, community education, etc. One of the basic reasons for this was that it was found to be extremely difficult to understand, much less plan for and service, these many types of overlapping programs and projects. It was believed that these programs had many common processes, goals, needs and problems. Research has borne this out, and furthermore, cross-fertilization between and among NFE programs has had fruitful results, even where main topic areas have differed. NFE was also emphasized as a separate, comprehensive area, in order to emphasize the potential roles of NFE in meeting the learning needs of vast populations throughout the world. Special attention was given to NFE as the limitations of formal education, both quantitatively and qualitatively, became increasingly apparent to educational policy-planners.

Parallel to the international NFE movement, UNESCO began to champion the dissemination of the concept of "life-long education (LLE) (Lengrand, 1970). Life-long education work was to include the assessment of all learning opportunities, resources, needs and demands in a selected population area, and subsequently, the planning of educational programs to meet all major learning needs from birth to death. Although the early formulations of LLE were highly theoretical, the arguments of various specialists were sufficiently persuasive to create major international pressure on many nation-states to consider, if not the development of full systems of life-long education, at least the provision of more funding for existing out-of-school efforts and the institution of new non-formal education programs.

In the late sixties and early seventies, the understanding of the need for NFE moved faster than did work on the conceptualization of the field. It became apparent at that time, that the ideologies of educational change had not considered fully the necessity to explain and delimit the term NFE. Subsequently, a series of hurried attempts were made to define and create typologies of NFE in order to describe its major dimensions. Unfortunately,

many of these early efforts were so simplistic or clearly distorted existing realities, that some educational specialists abandoned the field or dismissed it as a passing fad. In some instances NFE was proposed as an opposing force to FE, and planners deeply involved in the struggle to improve FE were reluctant to accept this perspective which they perceived as being very limited. Thus, basically because of deficient initial conceptualizations of the term itself, in the eyes of some specialists, NFE became unacceptable.

Since the late sixties and early seventies, through research on NFE, it has become apparent that thousands of programs and projects which would generally be labelled as NFE exist in most countries, and that the out-of-school, as well as in-school learning needs of vast sectors of populations are indeed worthy of attention and study. Further, work on the conceptualization of NFE has proceeded especially in those countries where research teams have been grappling with its realities. Since most of this work has been published in local languages for national, and sometimes, regional dissemination, by and large, it has not been readily available for study and use by the international community of educational policy-planners.

Let us now review salient aspects of the history of the conceptualization of the term NFE and consider some of the newer approaches derived from field research on NFE in developing countries.

The first attempts at the definition of NFE emphasized the dichotomy implicit in the terms "formal education" and "non-formal education." Generally, the positing of a dichotomy led to the literal acceptance of the terms as though they were polar opposites. The following schema mirrors the initial thinking of many specialists in this regard:

	<u>Formal Education</u>	<u>Non-Formal Education</u>
<u>origin</u>	school-based	non-school based
<u>locale</u>	school, college, etc.	other (workshops, churches, community centers)
<u>objectives</u>	precise, behavioral	vague, general
<u>administration</u>	structured	flexible
<u>methods</u>	rigid, didactic	flexible, participatory,
<u>accreditation</u>	diploma, certificate	no certification
<u>personnel</u>	teachers	non-teachers

This listing can be extended, and it is presented here not as a reflection of any one contrast set, but as a suggestion of the types of dichotomies



Realizing that the above types of dichotomies, typologies and unilinear continua were not adequate descriptors of the phenomena, some Colombian researchers decided to explore the development and utilization of multiple continua which would correspond to the basic elements of existing NFE programs and projects, in and of themselves (Velandia and Vargas Adams, 1973).

First, the design of a National Study of NFE in Colombia was based on a project development process approach. This framework had many advantages. It permitted the study of programs covering many different topic areas (from agricultural to infant education). It also enabled the researchers to explore the many stages of those processes in actual NFE projects in order to discover their contents. The chart on page 8 describes the basic process phases covered by the Colombian project (Velandia, Vargas Adams and Bello, 1975). Other project information was also obtained.

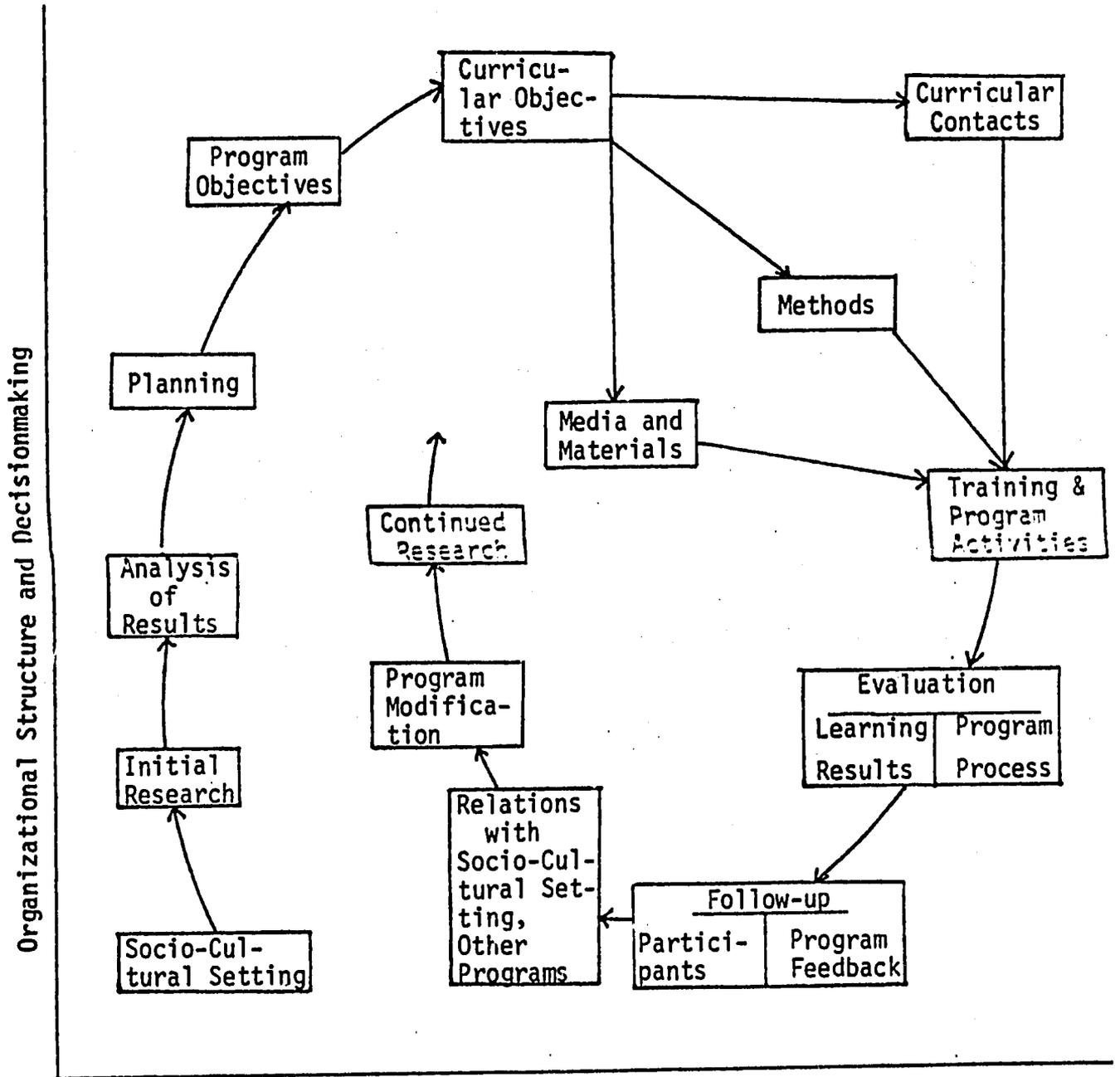
In this Chart, 1) organizational structure and decisionmaking, and 2) the characteristics, coverage and participation of learners are considered at various points throughout the process. The socio-cultural and economic setting in which NFE programs are embedded are especially considered at the beginning and feedback stages, as are relationships with other programs. The spiral graphic description is used to emphasize the point that project development processes are cyclical and repetitive.

The authors of this initial chart were aware that not all project processes are complete, e.g., include all phases listed or that those phases are well-developed. One of the objectives of the study was to ascertain "how complete" different types of programs and projects were, in fact. Also, they were aware that each phase could be broken down into other parts and that some phases were not specifically mentioned. Rather, they attempted to highlight those phases which appeared to be the most crucial to successful program development and useful for purposes of their study.

The elements of this chart served as the basis for the construction of an interview questionnaire format applied to the directors of NFE programs. The data analyses which resulted from this study permitted, amongst other points:

- an understanding of the utility of taking a project development process approach, irrespective of the main topic areas of NFE programs;
- a description of the many types of interrelationships between FE and NFE, and their expected frequency of occurrence;

CHART I  
Project Development Process



Characteristics, Coverage and Participation of Learners

- the specification of ranges of criteria for each of the phases in project development processes; and
- the development of sets of continua pertaining to each of the phases, and other aspects of NFE programs identified as crucial (Velandia, Vargas Adams and Bello, 1975).

Thus, it was found that unilinear continua were not adequate to describe the "placement" of programs considered to fall into the realm of NFE. Further, each NFE program was a composite of many elements which permitted their description through the use of multilinear continua. Given that precise distinctions between FE and NFE could not be found, the researchers and their colleagues decided to develop an alternative theoretical framework. This conceptual tool has proved to be far more powerful than pre-existing ones in terms of description and understanding, and it promised to be useful for predicting program results.

The theoretical framework which emerged has been given the title of the Learning Contexts Profile (Alvarez, Hauzeur and Toro, 1975; Velandia, 1977; Vargas Adams, 1980). The Profile has a processual framework and includes a matrix which permits the description of several essential elements of any educational program, whether considered to be mainly "formal" or "non-formal." Using a holistic approach, programs in the realm of both FE and NFE can be analyzed, disaggregated into their constituent parts and described succinctly through the use of "Program or Project Profiles." Thus, the Profile is a useful heuristic device, derived from the "reality" of projects, which does not require that essential elements of their composition be distorted to fit a non-existing contrast between NFE and FE.

Since the Learning Contexts Profile has previously been available only in Spanish, following is a brief synopsis of its basic constituent parts. This presentation contains several structural and content modifications from the original Profile developed by Benjamin Alvarez and Jose Bernardo Toro of the Center for the Development of Non-Formal Education (CEDEN) in Colombia; however, the author's alterations do not significantly change its basic framework or applications.

Essentially, the Profile is composed of 14 variables grouped into four main dimensions (see attached Learning Contexts Profile Chart). Each of the variables has four values covering gradations from more formal to informal education. More gradations are possible, and the values can be altered, depending upon the degree of detail desired by researchers.

CHART II  
Learning Contexts Profile

Variables		Values			
		1	2	3	4
Internal Structure	A. Physical Space	o		x	
	B. Institutional Setting	o		x	
	C. Scheduling	o		x	
	D. Learning Processes			x	
Intentionality	E. Primary Elements of Stimulation			x	
	F. Orientation of Learning Goals			x	
	G. Formulation of Learning Goals	x			
Loci of Control	H. Structure of Rewards				x
	I. Control of Planning		x		
	J. Control of Operations			x	
Consti- tency	K. Control of Evaluation			x	
	L. Homogeneity/Heterogeneity		x		
	M. Collectivization/Individualization			x	
	N. Organizational Dependence/Independence			x	

Program "o" = mainly considered to be a formal education program

Program "x" = mainly considered to be a non-formal education program

Suggested values for each of the variables are as follows:

I. Internal Structure

A. Physical Space

1. Enclosed space specifically constructed for learning.
2. Enclosed space not specifically constructed for learning, but rather for communication (churches, theatres, etc.).
3. Enclosed space with other goals (workshops, homes, etc.).
4. Open spaces

B. Institutional Setting

1. Institutions and their extension programs recognized by society as dedicated to systematic instruction (schools, colleges, universities, etc.).
2. Institutions not recognized as basically instructional, but where instruction occurs as a means for other ends (industries, banks, etc.).

3. Institutions dedicated to goals which do not require instruction, but in which instruction sometimes occurs (social clubs, unions, associations, etc.).
4. No institutional framework pre-determined. Spontaneous study or learning occurs.

### C. Scheduling

1. Rigid scheduling which theoretically requires a full-time dedication (traditional students).
2. Rigid scheduling which requires part-time study (part-time students, T.V. courses, etc.).
3. Flexible scheduling allowing learner to structure his own learning times within certain limits (guided study, guided activities, etc.).
4. Flexible scheduling entirely designed by learner (open learning center, correspondence study, independent reading, conversations/discussions, etc.).

### D. Learning Processes

1. Predetermined teaching/learning processes. Student waits passively. Generally deductive learning process.
2. Student collaborates in the planning and execution of learning process.
3. Open, but guided learning processes. Generally inductive learning.
4. Unpredictable processes depending entirely upon the learner.

### E. Primary Elements of Stimulation

1. Mainly primary source of stimulation. Highly directed. Immediate physical presence of teacher.
2. Mainly secondary source of stimulation. Highly directed (audio-visual media: T.V., films, slide/cassettes, etc.).
3. Mainly secondary source of stimulation. More open-ended (written materials, posters, computer consoles, radio, cassettes, demonstration/practice, educational games, etc.).
4. Totally open-ended. The use of the environment as a resource.

## II. Intentionality

### F. Orientation of Learning Goals

1. Learning context goals are integrated into long-term learning goals. Full process requires several years of study.
2. Although long-term goals exist, the goals of the learning context can be ends in themselves (modules, units, etc.).
3. Flexible goals which are short-term.
4. No orientation in terms of goals is specified and the process is open-ended.

### G. Formulation of Learning Goals

1. Goals are established in a very specific manner (e.g., behavioral objectives).
2. Goals are established and formulated in more general terms, but are still sufficiently detailed to guide a learning process.
3. Goals as formulated are very general and flexible.
4. No formulation of goals.

### H. Structure of Rewards

1. Deferred rewards through symbolic accreditation or inferred practical gain (titles, certification for employment).
2. Immediate, but symbolic rewards (diplomas, short-course certification).
3. Immediate and real rewards (practical applications, money earned, raise in status, etc.).
4. No system for rewards. Individual participates on basis of his perception of value of learning process.

## III. Loci of Control

### I. Control of Planning

1. Basic planning decisions made by persons outside of learning context and/or persons who are not learners within that learning setting.
2. Basic planning decisions made jointly by persons outside and/or inside the learning context plus the learner.
3. Basic planning decisions made by the learners.
4. No previous planning decisions made about the operation of the learning context.

### J. Control of Operations

1. Control of operations of learning context is in the hands of persons outside of the learning setting and/or by persons who are not learners within the learning context.
2. Control is conducted by the above plus the learners.
3. Learners control the operations of the learning context.
4. No control is exercised purposefully.

### K. Control of Evaluation

1. The control of evaluation is exercised by persons who are outside of the learning context and/or persons who are not learners within the learning setting.
2. The above plus the learners.
3. Self-evaluation plus the learners.
4. No evaluation process exists.

#### IV. Constituency

##### L. Homogeneity/Heterogeneity

1. Learning group composed of individuals fulfilling a set of prior requirements (level of studies, examinations, age, etc.). Previous selection required. Group highly homogeneous.
2. Only a similar level of preparation or interest required. Selection process used. Group is less homogeneous.
3. Any individual may enter in a specific learning process. Application or notification of interest requested. Greater heterogeneity occurs.
4. No requirements for entry to learning exist. Full heterogeneity occurs.

##### M. Collectivization/Individualization

1. The learning group shares student life as its principal occupation.
2. Learners unite as a group fairly continuously, but have other occupations or activities, as well.
3. Learners may have occasional group experiences, but also individualized learning. Other occupations or activities are undertaken.
4. Learning occurs in an individualized manner only.

##### N. Organizational Dependence/Independence

1. Learning group in its context depends entirely upon its sponsoring institution.
2. Learning group in its context depends partially upon its sponsoring institution.
3. The learner or learning group is independent, but receives support or guidance from the sponsoring program.
4. The learner is fully independent.

The profiles of two educational programs recently conducted by the author demonstrate the way to delineate differing programs. Program "o" is a course in educational anthropology located within the graduate school of a university. Although clearly a formal education course, various elements of its learning context are more flexible or participatory than usually found in such settings. Such "deviations" are not unusual, especially in non-U.S. universities, or where NFE concepts have begun to influence FE learning contexts. Program "x" is a home-based and flexible group session program in infant stimulation and parent education in a Mexican-American barrio of Austin, Texas. It has elements of structured FE and informal learning, as well as NFE. This degree of variation in an NFE program is not unusual.

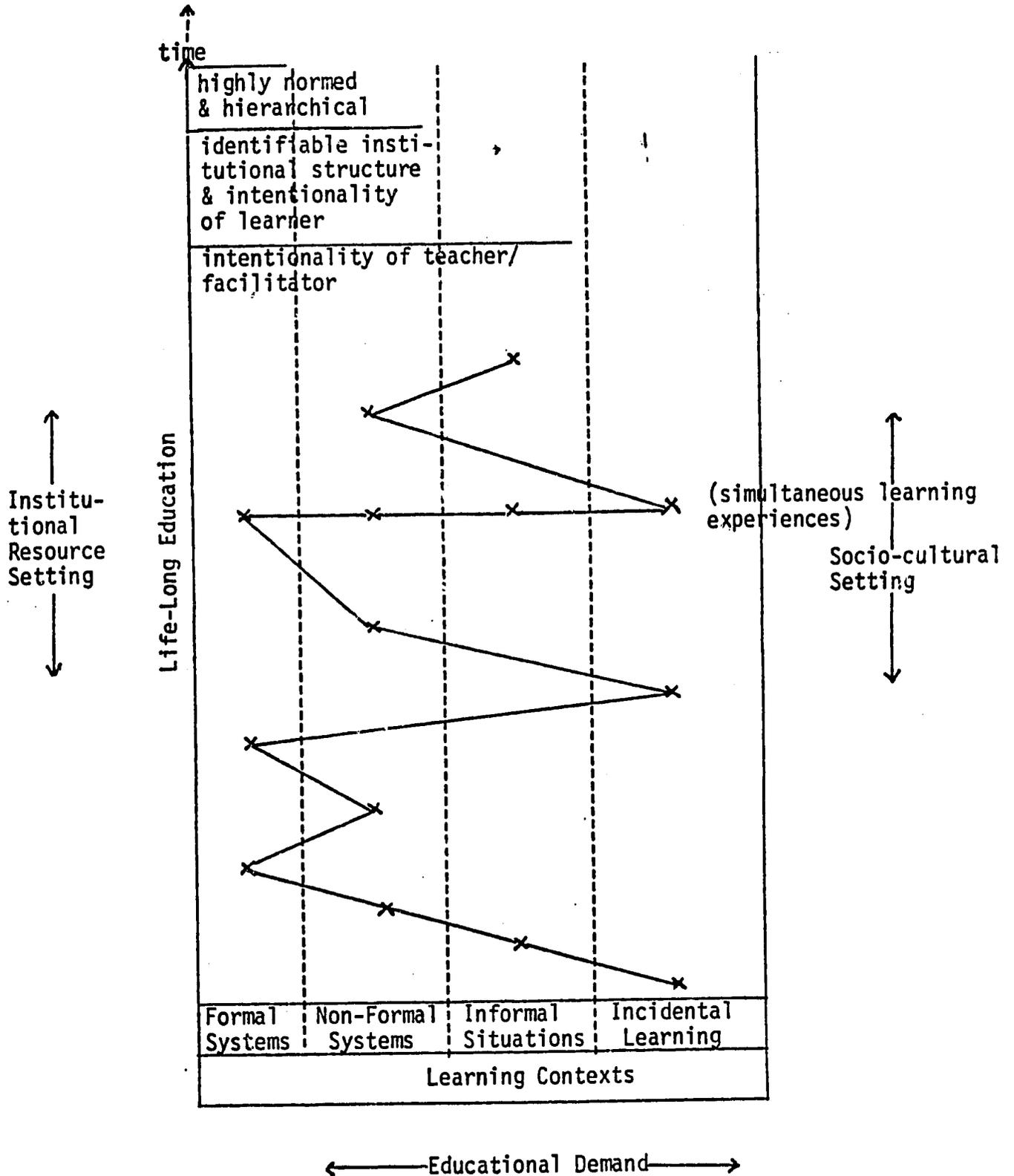
The Learning Context Profile holds promise for national policy-planning, assessment and program development since it provides useful information on the internal and external organization, scheduling, methods, objectives, intentionalities, processes, control mechanisms, and constituency of NFE programs. Program profiles can be compared for deriving prototypical elements in any socio-cultural setting. Since NFE programs are usually considered to be very diverse, complex and, to some observers, even chaotic, this tool becomes especially useful for central planners and decisionmakers who wish to reinforce their efforts for the assessment and development of NFE. At present, this framework is being used in addition to other elements, in the National Study of Non-Formal Education in Lesotho, begun in November, 1979, and it is hoped that the data derived will help to provide bases for effective policy-planning (Vargas Adams, 1979).

The Profile has the potential additional element of being predictive in that, when united with evaluation data, certain typical project profiles will be shown to have greater efficiency or positive impact in terms of learning outcomes, participation, and practical applications. Thus, incremental investments in projects with certain types of profiles, could well, if administered judiciously, result in increased benefits, as specified by planners.

Another theoretical framework which emerged from the careful study of NFE programs at the national level is the Life-Long Education Continuum which centers on a profile of personal learning experiences (see attached chart). This model returns, in part, to a continuum composed of gradations from highly formal to non-formal and informal to incidental educational activities; however, it is dynamic in that the profile of an individual's life path in these various types of education is traced over time (Velandia, 1977). Within a socioeconomic framework of educational demand, FE systems are regarded as highly normative and hierarchical, and both FE and NFE have identifiable organizational structures. In FE, NFE and informal education, intentionality on the part of the "teacher," monitor or facilitator is evidenced. Intentionality on the part of the student or participant is found in FE and NFE. Incidental education is conceived as having no identifiable structure or intentionality, although this author believes that such learning may, nonetheless, be "culturally patterned behavior."

This framework requires more elaboration, especially with regard to the major variables relating to learning contexts. Nonetheless, potentially it

**CHART III**  
Life-Long Education Continuum:  
Profile of Personal Learning Experiences



could become particularly useful when considering the planning of educational opportunities to meet national, intra-country regional or local demands for education. It could also be used to assess the impact of NFE and FE in any one region, especially for understanding the degree to which existing educational programming meets basic and essential learning needs.

In summary, the choice of conceptual constructs regarding NFE is of crucial importance in developing any national NFE assessment effort. Although our analysis would appear to question the utility of continuing to use the term NFE, given the greater relevance of the learning context approach, it is germane here to review several of the main reasons for continuing to place emphasis upon NFE:

1. It is important to give adequate attention to all types of out-of-school education, especially in countries with limited formal education. Where formal education is quantitatively limited or qualitatively deficient, NFE is crucial to providing additional educational opportunities (Velandia, Vargas Adams and Bello, 1975).

2. NFE, taken as a whole, provides a way, potentially, to meet the training and learning goals not only in the education sector of development plans, but also in other sectors, such as agriculture, industrial development, etc. If carefully planned and managed, NFE can help to meet national learning and training goals more quickly than through the slow process of altering FE systems (Ahmed, 1975).

3. It is important to consider many types of NFE as supplementary or complementary to FE. Some commentators have emphasized the potential for confrontation between FE and NFE. In actual fact, most NFE work has been developed to cover areas not included in FE (Evans and Smith, 1972; Evans, 1979; Vargas Adams, 1975; Velandia, 1977).

4. In certain countries where there is a culturally, socially, or economically subordinated population, educational alternatives and opportunities are urgently needed. NFE can be a useful vehicle for providing such alternatives (Freire, 1971).

5. When the introduction of new teaching and learning processes is emphasized, NFE, taken as a global approach, can provide modalities for developing flexible, participatory and innovative methods for meeting local needs (Alvarez, 1975).

6. Non-formal education can provide a way to ensure the local development of curricula, methods and materials with cultural and linguistic rele-

vance for subcultural groups in many countries (Vargas-Baron, 1971).

For these and many other reasons relating to ensuring educational opportunities for all peoples, non-formal education as a field has played an important role in drawing attention to and helping to fulfil learning needs.

The task of identifying, assessing, assisting, monitoring and evaluating NFE is, of necessity, very complex. In order to gain a further understanding of the range and types of such programs, it is important to review the scope of NFE programs, as found in various countries.

### III. SCOPE OF NFE

The scope of NFE differs from country to country: antecedent historical, socio-cultural, political, economic, educational, infrastructural and other factors shape the goals, types, quantity and quality of NFE in each nation. In this section, we shall review some of the major parameters of the scope of NFE while emphasizing that in any one country, certain of the attributes listed below may not be present, or even considered. Briefly we shall cover:

1. Topic areas of NFE.
2. Public/private sectors of NFE.
3. Classification of organizations.
4. Geographical coverage of NFE.
5. Interrelationships between NFE organizations.

#### 1. Topic Areas of NFE

It is important to observe at the outset that NFE covers many topic areas in addition to the ones traditionally included in FE in any given country. As noted in the Introduction, major concern has been evinced by many development specialists with regard to the intersection of NFE with skills training and productive employment; however, many other areas, only indirectly related to economics are also the subject matter of NFE. Various partial typologies of topic areas have been constructed, as well as the UNESCO ISCED international classification of educational topics. (Examples of these are not presented here due to their length.) The latter, although useful, is far from complete, and it is oriented mainly toward vocational training at levels higher than those included in many NFE programs. Most typologies constructed

in various countries have been incomplete, since specialists either wanted to specify a certain sub-sector of NFE for policy or funding reasons, or they had not identified well all of the types of NFE in existence.

To provide an idea of the range and typical contents of NFE it is useful to review a listing of topics commonly found in national settings. The following typology of major topic headings was constructed on the basis of the study of NFE in various countries of Latin America and Africa (Vargas Adams, 1979). There is also a detailed typology of subsets for each major heading, not presented here due to its length. The exact topics, their order of importance and their subsets necessarily vary from country to country.

- 1.1 Agriculture
- 1.2 Animal husbandry
- 1.3 Community development
- 1.4 Cooperatives
- 1.5 Crafts
- 1.6 Factory and construction skills
- 1.7 Commercial, office and other work-related skills
- 1.8 Migrant education
- 1.9 Literacy
- 1.10 Numeracy
- 1.11 Basic education
- 1.12 Nutrition
- 1.13 Health, hygiene and sanitation
- 1.14 Family life education and family planning
- 1.15 Infant/pre-school education
- 1.16 Home economics
- 1.17 Recreation and sports
- 1.18 Cultural or religious education
- 1.19 Other

In each country, it is important to conduct a quick inventory of the types of NFE in order to discover all of the main categories and their subsets for purposes of subsequently inventorying and assessing NFE programs and projects in depth. By beginning with a widely-based set of topic areas, rather than a restrictive list limited to one sector of NFE such as agricultural or factory skills, a global view of NFE in a nation may be attained.

It should be understood that in any one NFE program or project, several main content areas may be found. For example, often a basic education program will also have objectives and contents related to agriculture, health, nutrition, or some other topic. A home economics program may include child care, home sanitation, crafts and community development skills. Thus, the main topic or sub-topic areas may overlap within the scope of any one project.

It is important to underline that NFE is not restricted only to the education sector, but is usually also found in several sectors of a country: e.g., agriculture, health, etc. Also, many areas which are only indirectly related to income-production or short or longer-term economic improvement, are included within the purview of NFE. Major investments often have been made in many nations in technical/vocational and urban-based educational work, but in order to achieve social well-being, especially in terms of the improvement of the standard of living of the poor and the achievement of equal educational opportunities, increased investment is needed in areas of NFE less directly related to economic development per se, e.g., health and nutrition education, community learning resource centers, infant development and parent education, etc.

## 2. Public and Private Sectors of NFE

Virtually all of the research on NFE to date has been conducted in countries in which both the public and private sectors are involved in teaching/learning processes. In socialist countries, many programs of education which lie beyond the framework of FE systems may be classified as NFE (e.g., service agency educational programs in health, road maintenance, adult basic education, etc.). Although some of these NFE programs are so decentralized and locally-conducted that they appear to belong to a "private sector;" nonetheless, technically they must be grouped under the public sector. Clearly, studies of NFE in socialist political systems are needed.

Since most countries evidence a mixed scenario of public and private involvement in NFE, the following remarks pertain to such complex settings.

In the public sector of most countries, various ministries, decentralized public agencies, and semi-autonomous (mixed public/private) agencies are involved in NFE. Often, one or more NFE programs can be found directly under the Presidency, Prime Minister's or other Head of State's office. Presidential favor, and political gain, protection, plus perceived needs for direct assistance, are usually the main reasons for, or results of, such arrangements.

Within the public sector, it is usually difficult to promulgate cohesive and comprehensive NFE policies and develop and implement adequate levels of plans and programs since many levels of agencies are usually involved in various aspects of NFE.

With regard to the private sector, which is composed of multiple levels of organizations with different orientations, policy planners in education are often unable to perceive how best to proceed.

In many countries, statistics show that often over half of the existing NFE programs have originated in and/or pertain to the private sector. Any attempt to work only with the public sector would mean the neglect of many worthy and responsive programs in the private sector. Thus, although complex, it is important that NFE in the private sector, as well as the public sector, be assessed well in order that comprehensive policy-planning may proceed.

### 3. Classification of Organizations in NFE

Any one program in which NFE is found may be devoted entirely, or only partially, to NFE. Thus, to focus only on organizations considered to be "educational institutions" would result in overlooking many important programs which include NFE components. Each country has its own unique set of types of organizations involved in NFE activities. The following classification of organizations is only suggestive of "what to look for" in any one country. As a checklist, it is useful as a guide to make sure that most, if not all, organizations are contacted for the existence of NFE teaching/learning programs:

- 3.1 Governmental Organizations (Public Sector)
  - 3.1.1 National-Level: Ministerial or Head of State's Office
  - 3.1.2 National-Level: Semi-Autonomous Organizations
  - 3.1.3 Regional, District, State or Departmental-Level Organizations
  - 3.1.4 City, Town or Village Level Organizations
- 3.2 Non-Governmental Organizations (Private Sector)
  - 3.2.1 Agricultural Institutions
  - 3.2.2 Community Development Organizations
  - 3.2.3 Trade and Crafts Organizations and Groups
  - 3.2.4 Commercial or Industrial Organizations
  - 3.2.5 Health and Nutrition Organizations
  - 3.2.6 Child Development Organizations
  - 3.2.7 Women's Organizations
  - 3.2.8 Religious Organizations
  - 3.2.9 Volunteer Organizations, Youth Groups
  - 3.2.10 Other Organizations and Groups

Under each of these major rubrics, long lists of organizations may be compiled. They usually tend to group under sub-headings, thus facilitating exploratory work.

In any case, it is important for planners and researchers not to underestimate the quantity of programs by focusing preferentially (often by default) on only a limited subset of organizations, e.g., rural development, trade schools, etc. Also, the power of the private sector in NFE should be assessed, and thus, care should be given to survey fully those programs which pertain to the private sector.

#### 4. Geographical Coverage of NFE

Although NFE in most countries is mainly concentrated in urban settings where there is easier access to funding and other human, infrastructural and material resources, it is important to note that significant programs can always be found in rural sectors, small towns and villages. Many of the latter are either autochthonous local programs begun to meet learning needs or local expressions of national or intracountry regional programs.<sup>1</sup>

The coverage of NFE programs in terms of participation by topic area and geographical zones served has proved most illusive. On the one hand, for many reasons, national and intracountry-regional programs have often kept only limited records of their coverage. And on the other hand, local programs often go unnoticed by any but those leading or participating in them. Happy is the researcher who encounters good statistics on NFE coverage. Usually, personal visits and the review of program files are needed to gather data on coverage.

We now consider it possible to map coverage in terms of participants and geographical zones per program, type of program and/or per topic area. It is clear that this effort is highly complex, but these dimensions of the scope of NFE are crucial for policy-planning.

#### 5. Interrelationships Between NFE Organizations

This area has been covered in a very desultory way until recently. In the past, it has been stated on many occasions by several researchers of NFE processes, including the author, that there is very little interaction or networking between NFE programs due to a variety of reasons: a lack of knowledge of other NFE programs on the part of NFE leaders, limited possibilities for networking, interinstitutional jealousies, few enunciated

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<sup>1</sup>"Autochthonous" is used to refer to those programs which literally have arisen spontaneously as a result of local community concerns about the learning needs of its population.

reasons for sharing ideas, personnel, or materials, perceived differences in educational philosophy, methods or contents, etc. However, since those early observations were made, it has become abundantly clear that prolific networking is occurring amongst NFE programs in certain situations in some countries. In those settings where one or more of the following conditions pertain, there are many interrelationships among programs as yet unstudied:

- funding has been provided to a service agency in order that it may assist and interrelate other NFE programs
- sociocultural settings wherein interinstitutional collaboration is viewed as a positive good and a necessity.
- clear leadership has been given formally, or informally, to central NFE organizations (central node concept) to build collaborative processes with other NFE organizations or groups.
- clusters of researchers or evaluators have encouraged interrelationships amongst organizations in an effective manner.
- attempts have been made to group a set of organizations under local or regional leadership, in order to maximize on available resources.
- leadership has been taken at the national level to interrelate NFE organizations in conjunction with policies, development plans, and/or program strategies.

It must be underlined that much of the above has occurred because of significant attempts by policy-planners in the past decade to emphasize the improvement of NFE as a low-cost means for attaining substantial socio-economic benefit.

Given the amounts and types of collaborative NFE activities, it is possible to consider the creation of network analyses and theories regarding interrelations between and amongst NFE programs. This type of study clearly falls within the scope of NFE, since through planning based on network analyses, informed decisions may be made to improve the quality, increase the coverage, and even consolidate and introduce new NFE programs.

#### IV. TYPES OF NATIONAL-LEVEL ASSESSMENTS OF NON-FORMAL EDUCATION

This chapter first will cover the availability of documents resulting from national efforts to inventory, survey, analyze and otherwise study NFE.

Secondly, an overview of work conducted to date is presented. Thirdly, a review of the major types of studies undertaken or in progress is offered. Fourthly, the main types of institutions which have conducted studies will be presented in relation to the types of studies carried out. Fifthly, brief analytic summaries of institutional approaches and country-level studies will be presented. Finally, some of the major prototypical elements of those studies will be highlighted through a discussion of the main generic types of national NFE assessment efforts: inventories, sub-sector studies, national surveys or studies and national evaluations. The uses and purposes, methods, major variables, needed resources, strengths and limitations of the generic types will be reviewed.

### 1. Documentation

Only a small part of the documentation necessary to prepare this section is currently available. Certain sub-sectoral assessments of NFE have been identified, but unfortunately are not available. In a sense, this is not crucial since from what is available, we are able to discern the general range, types and methods of national-level studies on NFE undertaken to date. On the other hand, the documentation pertaining to several of the national studies lacks adequate details, especially regarding methods, contents and applications. Only general summaries of assessment reports or data files were presented in several sectoral assessment documents, and separate reports either were not compiled and/or circulated, or the original data languishes in institutional files "somewhere."

A truly thorough study of national level assessments of NFE would entail:

1. An indepth review of country-level files in several multilateral and bilateral funding institutions and various specialized institutes;
2. Careful bibliographical searches in the organs of several international documentation centers and journals (see Appendix II);
3. Visits to all of the countries where assessments have been conducted in order to speak with planners, researchers, statisticians and others involved directly in the studies, regarding not only the studies, but also their results, uses, impact, strengths and limitations.
4. Reviews in each of those nations of all of the existing files on the assessments conducted up to the present time.

Nonetheless, in addition to experiences of the author and many colleagues in research on NFE, what we have compiled in the way of documentation represents a significant information base upon which to begin to work.

## 2. An Overview

It is clear from the review of relevant studies of NFE at the national level, that only very partial inventories, surveys or other studies have been conducted, with the exception of work in Colombia and current activities in Lesotho. Before initiating this effort, the author was under the impression that the work in several countries had been more fully developed conceptually, extensive, thorough and methodologically varied; however, the documentation at hand reveals that this is not the case.

The basic reason for this situation appears to be that limited conceptual frameworks were utilized when the studies were designed. In many instances, authors note the apparent "chaos" of non-formal education: its variety of types, its geographical dispersion, institutional complexity, and its internal and external differentiation in terms of ethnic groups, varying philosophies, methods and techniques, etc. Several specialists also were overwhelmed by time/cost factors in embarking upon their national level assessments, which in turn further restricted their conceptualization of how to design coherent, comprehensive studies. For example, several authors referred to having only a few weeks to gather data. Others noted that they lacked sufficient trained personnel, research materials, sources of primary data, etc. These problems definitely do limit the scope, and hence the value, of assessment efforts. Adequate investment in assessment work in terms of time, personnel, materials and infrastructural support is clearly necessary.

Just as important is the availability of project planners who understand how to conduct full NFE assessments. In Parts II and III, processual schema, theoretical frameworks typologies and definitions were discussed which enable the planner or researcher to reduce the apparent chaos of NFE to understandable units for purposes of analysis, comparison, evaluation and projection. That such conceptual frameworks have not been widely circulated, explicated and discussed, appears to be part of the reason for the existence of the many limited studies of NFE found in the literature.

Another order of problems apparently has been the inability of multi-lateral and bilateral organizations to assist national-level leaders to

locate adequate institutional frameworks in which to engender continuous procedures for project design, data gathering, analysis, interpretation and the dissemination and utilization of results. It is important to note that in the one case where a national-level private center conceptualized, designed, conducted, analyzed, interpreted and disseminated its work, a continuous process of action/analysis was created (Velandia, Vargas Adams and Bello, 1975). The latter may be conceived of as an "NFE movement," not simply a set of comprehensive studies.

There is some question as to whether Bureaus of Statistics, public planning agencies or ministerial-level planning units are the best "institutional places" to conduct NFE assessments, if the main goal is the development of continuous assessment intimately linked with program planning in both the public and private sectors. Clearly, adequate research and analytic capabilities are needed, linked with dissemination, programming and servicing capacities. Good interinstitutional relationships are also of crucial importance in carrying out extensive surveys and studies on NFE.

Various of the studies reviewed below cover only subsectoral or intersectoral topics within NFE. In some cases, this was dictated by the funding interests of international agencies; in other cases, by the definition of NFE as relating mainly to economic development. Researchers became confused, however, when they discovered that many of their supposed vocational training programs also included content areas relating to literacy, nutrition and other social objectives. There arose a tendency to try to group the latter especially under "prevocational" or "basic education" topic areas. These overlaps further muddied the already turgid waters.

Perhaps one of the most fundamental reasons for the promotion of the partial survey attempts and subsectoral studies has been the use of conceptual frameworks provided by several specialists on the staffs of international funding agencies. This situation is particularly understandable since many such specialists are working within the policy-guidelines of agencies which often obviate more global attempts to study existing NFE phenomena. Also, at the outset of setting up their policy frameworks, several international agencies looked to university scholars of "developed" countries (or "developing" country specialists trained in "developed" country universities), who had never actually worked in, studied or

analyzed NFE phenomena before. This lack of knowledge concerning the "actual dimensions" of NFE phenomena led to the production of many idealized schemata, which bore little resemblance to actual program development processes and contents.

Laced throughout the documents reviewed are many caveats regarding the oversimplified nature, limitations and restrictive utility of the partial assessments. Such problems typically have included: the study of only large-scale national programs which overshadow important and innovative local level initiatives; the error of focussing mainly on public sector projects to the later detriment of collaborative efforts with private sector programs; the necessity of altering or abandoning mistaken typologies; the difficulties encountered in planning on the basis of fragmentary information; etc.

It would appear that many researchers, educational specialists and planners are now aware that more holistic approaches, with useful and flexible theoretical frameworks, are necessary in order to provide the analyses needed for adequate policy-planning and programming in NFE.

### 3. Types of Studies Conducted on NFE Phenomena at the National Level

Following is a list of the various types of studies conducted to date, derived not from "what ought to be," but rather from "what has been done." It is important to make this distinction, especially since both the content and the order of the following list would be different when planning a comprehensive national program of research and analysis on NFE. The main types of studies encountered include:

- A. The project profile
- B. The case study
- C. The partial national inventory
- D. The national inventory
- E. The partial subsectoral survey or study
- F. The extensive national survey or study
- G. The complete national survey or study and mapping
- H. NFE network analysis
- I. NFE demand, needs or usage study (level of participants)
- J. NFE educational facilitators or leadership study
- K. National evaluation of NFE

This listing of national NFE assessments may be regrouped into the following four generic types:

1. The Inventory;
2. The National Survey or Study;
3. The Subsectoral Survey; and
4. The Evaluation Study.

In Chapter VI, a review of these generic types will be presented within the context of guidelines for conducting national assessments.

In order to review facets of the various types of national NFE assessments conducted to date, a discussion of each one is presented below, in terms of their:

- goals, purposes and uses
- main types of content categories (variables)
- methods
- applicability or resources needed
- strengths and
- limitations.

#### A. The Project Profile

Project profiles, or quick descriptive lists of the basic elements of selected NFE projects, have been prepared in several countries. In our list of countries, El Salvador, Ethiopia and Paraguay are cited, but many other project profiles have been prepared in other nations. The latter, though, did not, to our knowledge, form part of a national assessment effort.

The basic goal of project profiles has been to provide an overview of the contents, ranges of types and methodological approaches of selected NFE programs as a basis for the planning of more extensive assessment and planning efforts.

Project profiles typically include very few topic headings, e.g., objectives, program organization, funding types of participants, staffing, and teaching methods and activities.

With regard to methods, initially basic information on NFE programs is obtained through discussions with in-country education specialists and the review of the files or documentation of international or national organizations. In order to obtain more information, brief visits are made usually with the directors of some programs. From this rather haphazard and limited pool of information, a profile, or short description, of each

program reviewed is prepared. In some instances, an interpretation regarding the scope and nature of NFE in the country is offered.

Clearly, the preparation of profiles is not very time-consuming and only one or two specialists are needed. Materials and travel requirements are minimal, and there is no need for data processing in a computer center.

Profiles are useful in that they inform various publics, draw attention to the general accomplishments and needs of NFE programs, are easily read and understood and serve as a way to prepare for more planning and assessment work. They are severely limited in that they are not in-depth case studies and, due to the shallow research conducted to prepare them, can be in error on basic points. Further, they can lead planners into mistaken conclusions regarding the nature, scope, content, methods, utility, effectiveness, etc. of NFE in their countries. Finally, they have sometimes been used to substitute for other more in-depth, but time-consuming and costly assessment activities. This is to be lamented, especially since they are clearly very limited in scope and utility and often mislead policy-planners.

#### B. The Case Study

Case studies of major NFE programs and projects have been conducted in various countries, sometimes in conjunction with national or sectoral surveys. Notable case study work includes the UNICEF/ICED, Ethiopian and Colombian studies.

One of the main goals of case studies is to study a few selected projects believed to represent certain major NFE tendencies, foci or methods. It is usually further specified that they be successful examples of NFE programming for purposes of generalization within a country, region or across regions. Finally, some researchers believed that the comparative case study approach would provide crucial elements for the development of strategies for national policy-planning in NFE.

The case studies usually cover all of the important aspects of an NFE program and also often attempt to deal with cost/benefit, effectiveness and related impact questions.

The methods used to conduct case studies have been as varied as the background training of their authors. Usually, qualitative research methods, including on-site observations and interviews, have been used, and sometimes written questionnaire formats have been utilized.

Thorough case studies tend to be very time-consuming, especially when several are undertaken and a set of research methodologies including participant-observation are used. Experienced field researchers are needed, and funds for materials, travel, and sometimes data analysis are required. The cost of case studies in terms of time, personnel and other resources can often approximate that of a national inventory of NFE, and in a small country, a global national assessment. Given this fact, and the far greater yield from national assessments in terms of data for careful policy-planning, it is advisable to forego case studies at the outset.

Clearly, case studies of NFE are needed, but it appears to be preferable to conduct them once other stages in a country's analytic effort in NFE have been accomplished. Case studies are very useful for conducting in-depth analyses of the cost-effectiveness of NFE and for undertaking specific intersectoral research on the impact of NFE on agriculture, nutrition, health, etc.

Case studies have proven to be of very little utility for assisting with the initial assessment of NFE at the national level. Nonetheless, many have attempted to use them for this purpose. After going to the effort of conducting the studies, several authors have underlined the need for broadly-based national surveys in order to demonstrate that certain tendencies observed in one or more programs were in fact generally found in other programs.

It is interesting to note that a survey assessment of NFE in a country approximates the obtaining of many case studies, since the information collected on each program is quite thorough. Finally, it is valuable to incorporate as many of the strengths of the case study approach as possible into national assessments of NFE, depending upon the constraints of the human and infrastructural resources which can be committed to research efforts.

### C. The Partial National Inventory

Inventories of NFE programs covering mainly quantitative data have been conducted in several countries: The Dominican Republic, Ecuador, Ethiopia, Ghana, Guatemala, Paraguay and Zaire. In addition, several other countries inventoried using the UNESCO/ISCED guidelines (described in V, 2, A) would be included in this list.

Typically the main purpose and goal of such inventories is to gather basic statistical information concerning specific subsectors of NFE in order to provide a general review of such NFE work for planning purposes. Usually subsectoral inventories have been conducted with the intent of following up with surveys of studies in greater depth. This has not always occurred, and consequently, fragmentary information has either been made the basis for policy-planning or the data base was recognized as insufficient and not used for that purpose.

The content categories of partial national inventories typically have included:

- organizational level, address, contact persons and other basic information
- types of program topics
- schedules and contact hours
- admission requirements
- enrollment and coverage
- types of teaching methods
- staffing and
- funding.

The methods used for conducting inventories have included mailed, written questionnaires, reviews of institutional files and documents, telephone calls and some personal interviews. Since only summary quantitative data were needed, attempts have rarely been made to obtain qualitative or evaluative information.

Depending upon the size of the country and the staff available, as well as the thoroughness of the identification of all programs in a subsector, a partial inventory can require from two months to a year's time. Usually, a small team of researchers, or a researcher plus assisting statisticians, have been used to carry out such projects. The cost for such an effort is related to extent of personnel, materials, and data processing needs. The total cost is usually somewhat less than that of a full national inventory or assessment/study.

These partial subsectoral inventories are useful in that they bring to light aspects of the range and complexities of NFE, but they are very misleading since they often reflect only one major aspect of NFE in a country. Further, their usual concentration on areas related directly to

economic development has led, in some nations, to an identification of NFE only with those subsectors. Thereby, important topics of NFE related to social development needs, certain age ranges and specific population groups have tended to be neglected.

Finally, these inventories have served as the major source of information for "education sector assessments." Such assessments covering FE and, to a lesser degree NFE, often have had to use these existing partial inventories as the only sources of data on NFE in each country. This has been a cause of frustration for many assessment teams, who for a variety of reasons, either lacked the mandate or the time/resources to conduct true national inventories or assessments of NFE. It is hoped that this situation will be remedied in the future, in part by building into such sectoral studies, requirements for carrying out national NFE assessments.

#### D. The National Inventory

Only one global national inventory of NFE has been conducted, and it is in the small, but educationally progressive, Kingdom of Lesotho. The goal of the inventory is the establishment of base-line information and data on all NFE programs in Lesotho for purposes of subsequently conducting a full national assessment of NFE.

This inventory covers fewer categories than some of the partial inventories discussed above since the national assessment study is being conducted:

- organizational level, address, contact persons and other basic information
- types of program topics
- geographical coverage
- staffing
- types of participants
- approximate numbers of participants.

This information is being utilized not only to identify all existing programs, but also to ascertain what are the actual, separate NFE programs, according to a set of pre-established criteria.

The methods being used to conduct the Lesotho inventory include reviews of the existing proto-inventories, files and documents, interviews both with major and smaller NFE program directors and personnel, telephone calls, and field visits to rural programs. "Scouting" to identify hitherto

unidentified programs in remote areas has also been conducted. The latter is necessary in all country settings since always many NFE programs are found to be isolated from central decisionmaking and organizational activities. Such local-level programs can form the basis for national efforts to expand and enrich NFE.

The costs of conducting national inventories are directly related to the size of the country, the personnel involved (usually a small team) and the materials and infrastructure required. Usually, if a limited number of categories are covered, data processing is not necessary. In a small country, this task can be completed in a two month period. In larger countries, up to six months and more staff, often involved on a regional basis, may well be necessary.

The strengths of a national inventory include the provision of a simple data base and the development of files for further work. However, they are severely limited in that the range and quality of data obtained do not permit actual policy-planning activities to proceed on a sound basis. They are a pre-requisite for further studies, but not an end in themselves.

#### E. The Partial Sub-Sectoral Survey or Study

In order to collect more information on NFE programs and projects, partial subsectoral surveys or studies have been undertaken principally in The Dominican Republic, El Salvador, Guatemala, Paraguay and Zaire. Numerous other such studies have been conducted on specific sectors by World Bank teams.

The main goal of such studies is to provide adequate elements for subsectoral planning and program development. These studies have been successful in guiding investment into certain types of projects, principally in vocational/technical training, agricultural development and, on occasion, national health programs. Decisions regarding such studies have often been guided by national policy directives or the requirements of external funding agencies. Subsectoral studies or surveys have been the second most frequently conducted type of assessment work in NFE.

Some researchers have argued that the subsectoral survey is the only way to reduce the complexity and size of the assessment task to manageable proportions. On the one hand, given the time restrictions of many external assessment missions, the subsectoral approach would appear to be the best way for them to approach the task. If, on the other hand, national

policymakers were to make the commitment to conduct true global national assessments with realistic timelines, then the data base and analyses conducted by the government would be more than adequate to guide such visiting missions.

The typical content categories (variables) of subsectoral surveys and studies have included:

- the structure and organization of educational activities in the chosen subsector in relation to the relevant sector, e.g., agriculture
- types of programs, topics and activities
- staffing
- scheduling
- educational methods and technologies employed or needed
- types of participants, enrollments and related coverage statistics
- planning processes
- budgets and funding

Additionally, some studies have reviewed:

- some aspects of impact in terms of efficiency, effectiveness
- areas for program development or investment in the improvement of the quality or quantity of NFE.

Methods which have been employed to conduct subsectoral studies or surveys of NFE have included checklists for the review of documents and conducting open-ended interviews with NFE leaders and program directors (World Bank), written questionnaires and interview guides, and on-site visitation of some programs including unstructured observations of teaching/learning activities. On the whole, these subsectoral studies have been unsystematic and quite open-ended. As a result, major gaps in the data base may be discerned in various reports, as will be noted below when the country or agency studies are covered.

Since subsectoral studies usually are designed to have certain parameters, they tend not to be very extensive. On the average, they appear to have been completed in two to four months time. Usually a team of about four researchers or educational specialists are required. Adequate funds are needed for materials, travel and, sometimes, limited data processing, usually of existing data sets. On the whole, they are less costly in terms of personnel, materials and infrastructural resources than full national assessments of NFE.

Since subsectoral studies and surveys have been the accepted format for World Bank, AID and other sources of funding for NFE in developing countries, it is clear that they have been effective to some degree in enabling investment in this area. However, such investment has been very limited, especially in comparison with funding for higher technical/vocational, formal education and other development sectors, e.g, transportation, urban development, etc. Many representatives of funding agencies are well aware of the need to have more comprehensive data bases and analyses of NFE in order to be able to proceed with the consideration of alternative strategies which would enable increased investment in NFE.

#### F. The Extensive National Survey or Study

As yet, it appears that the Colombian extensive national survey and study has been the only one of its type conducted thus far.

The Colombian study had various goals:

- to cover as representative a sample of NFE programs as possible in order to discover the nature, types, and needs of NFE programs;
- to create a data base which could serve as a resource for policy-planning for both the public and private sectors;
- to address specific research questions dealing with the relationship of NFE to:
  - levels of socio-economic development;
  - urban/rural realities,
  - the formal systems of education;
  - innovation processes; and
  - participatory processes;
- to develop a core group of researchers and educational specialists who could conduct further research, advise, train, implement innovation projects and disseminate information, and
- to build an NFE movement in Colombia reflecting the realities and needs of NFE.

On the whole, all of these goals were met to a greater or lesser degree.

In Colombia, 432 NFE programs or projects were surveyed through the use of an extensive questionnaire. Four major cultural zones (Departments) were chosen, and in each a stratified random sample of countries and towns or cities were selected, according to a set of criteria dealing with levels of socio-economic development. In each place, all (universe) of the NFE

programs were surveyed, except in the capitol city where only a random sample of the over 1,000 separate projects identified were included.

The questionnaire was constructed to cover all of the stages considered to be essential in any NFE project development process. Many questions were open-ended, allowing for the post-codification of responses. Due to this extensive work, it is now much easier to construct questionnaires with a higher degree of pre-codification.

The questionnaire was applied to the directors of NFE programs and projects, and/or the next most knowledgeable individual. Project data files, reports, documents and other sources of information were used to obtain or verify information, as needed.

Rather than present the categories (variables) included in this study, at this point, an improved list used for the Lesotho study will be discussed below.

The Colombian study extended over a two-year period including preparatory design and inventory work (four months), field work (six months), post-codification (three months), data entry, cleaning, processing and analysis (six months, due to very difficult conditions and program mounting problems) and interpretation and writing (five months). Having accomplished this process, it is the author's belief that a significantly larger and global national study can be designed, implemented and completed within one year's time. Personnel needs include one to two major researchers, at least one research assistant, several well-trained interviewers and a data analyst. The size of such a team would be directly related to the size of the country.

The strengths of this study are that, through the method of stratified random sampling, tendencies in the data were discerned, and subsequently, they were used for policy-planning by representatives of both the public and private sectors. Major conceptual and descriptive advances were made with regard to the nature of NFE and its relationship to FE. Not only a research group, but the Centro para el Desarrollo de la Educacion No-Formal (CEDEN) was formed for the promotion and servicing of NFE in both the public and private sectors. This center now has regional extensions throughout the Americas.

The main limitation of the study was that it was very time-consuming, due to a variety of factors not the least of which was its exploratory

nature. Further, although it shows major tendencies, it is decidedly not a global national-level study. Colombia is still in need of such national assessment effort. From a re-study of many of the projects originally included in the 432 surveyed, it is clear that in the absence of adequate funding and servicing, some effective but small local autochthonous projects have dwindled and/or died. A national survey with adequate follow-up funding for limited investment in networking and servicing for such programs would help to address this crucial problem. The study was also limited in that, although some evaluative data were gathered, a full range of information on participant's needs, cost-effectiveness, and long-term impact was not obtained. Subsequent studies conducted by the CEDEN team have helped to cover these needs, but much more remains to be done. Finally, for historical reasons, this study was not inserted fully into all on-going development planning at the national level. Subsequently, in large part this has occurred, but at the inception of the project, the government was in the process of reformulating educational and other national goals. It is advisable that major assessment efforts in NFE be consonant, insofar as possible, with national policy-planning in educational, agricultural, health and other sectors.

#### G. The Complete National Survey or Study

One global national assessment of NFE is underway in the Kingdom of Lesotho, and at least two more are in the designing stage. Results from the major Lesotho endeavor should be available in early 1981.

The main goals of the Lesotho National Study of Non-Formal Education are:

- to provide full descriptive information and analyses on all NFE programs and projects in Lesotho for purposes of policy-planning in both the public and private sectors;
- to build a set of strategies for servicing all programs adequately;
- to create a continuous and easy-access data base for on-going policy-planning and programming;
- to identify all available human resources for work in NFE;
- to map the geographical coverage of NFE in terms of participants and topic areas, in order to discover gaps and needs;
- to study networking between and amongst NFE programs in order to build on those networks for servicing;

- to create learning context profiles of programs and projects, as a basis for continuing evaluative activities;
- to develop a set of complementary evaluative studies on participant's learning needs, program cost-effectiveness and outcomes, and needs for staff training for paid and volunteer NFE personnel, etc.;
- to reinforce the NFE team in the Lesotho Distance Teaching Centre through experiences related to conducting this project; and
- to produce prototypical elements useful for other national assessments of NFE.

The Lesotho study is modelled in part on the Colombian experience, although several new elements have been added. A modified project development process approach is being used, but elements of the Learning Contexts Profile have been added, as have more detail on geographical coverage and networking.

The major groupings of variables utilized in the Lesotho study include:

- General project information
- History of the program
- Prior research or needs studies
- Specification of objectives
- Educational topics covered
- Methods, materials and media
- Organization and staff
- Participants, geographical coverage and facilities
- Evaluation and "follow-up" of program participants
- Program evaluation and research
- Relationships to other organizations and general program considerations
- Finances and budgets

An extensive, largely pre-coded interview questionnaire has been prepared and is currently being applied to NFE project directors throughout Lesotho. A second brief questionnaire has been prepared for specialists in NFE. Two other questionnaires have been drafted for group interviews of NFE project participants and for a study of NFE leaders and facilitators. They will be applied after the main assessment effort is completed.

The Lesotho study is scheduled to be completed in one year. It has co-directors, one in charge of research and the other, of field operations

and project administration. The senior staff of the LDTC are conducting the interviews and several research assistants are available to assist with the general effort. Resource of requirements include office supplies, printing, local travel, data processing (national computing center has SPSS mounted) and minimal local and international advisory assistance.

The strengths of this approach are many. For the first time, a complete on-going and easy-access data base on NFE programs will be created for purposes of policy-planning, programming and servicing. Also mapping, networking and Learning Context Profiles will be available for special assessments. This project will provide core elements for subsequent evaluative work necessary for a thorough assessment of NFE in any national context.

The limitations of this approach are inherent in its global nature. Finely-grained qualitative research using the field techniques of educational anthropology (such as descriptive interviewing, structured cognitive domain research and event analyses and other observations) are not possible when covering hundreds of separate projects. Further, given the inherent sensitivity of program directors, it is rarely possible to derive the degree of detail desirable regarding program financing and costs. Also, since program personnel rarely evaluate adequately the long-term impact of their programs, follow-up data tends to be sketchy at best. For all of these reasons and others, complementary, evaluative studies are necessary to provide truly sophisticated and fully adequate assessments of NFE at the national level. Nonetheless, Lesotho has embarked on an important and very useful exploratory process which will provide many sound elements for policy-planning and program development.

#### H. NFE Network Analyses

This type of study was mentioned above, but it also forms, potentially, another major type of assessment methods for NFE at the national level. Such studies also may be conducted subsequent to a global national assessment, as a part of other evaluative processes.

Two types of network analysis have proceeded independent of one another, and a third type is underway in Lesotho. An outgrowth of the Colombian project, networking was studied as a basis for an "Informatica" information exchange program which included training and dissemination work. No sophisticated "central place" or connectivity analyses were conducted,

but elements for them were present. In Zaire an unsystematic, but very creative, attempt at network analysis was conducted (Barbedette, 1977). Networking in Zaire was studied at both community and organizational levels. It is clear from Barbedette's observations that a great deal of networking is occurring in NFE in Zaire at multiple points in time and space with varying sets of actors.

In Lesotho, a more systematic, but still highly exploratory attempt at studying networking is underway. It is hoped that the data gathered will enable the location of "central nodes" of networking in terms of servicing, receiving assistance and of joint, collaborative endeavors. Further, connectivity analyses should be possible, thus rendering planners a set of tools for making decisions with respect to the best servicing channels available. Further, when connectivity analyses are related to other data emanating from the study regarding the topics, methods, media, materials, types of staff training most desired or perceived as needed by program directors, program servicing plans can be prepared with comparative ease.

The main strength of this approach is the analysis of actual data on networking, as opposed to relying upon the general impressions of researchers or others. The major weakness is that the researcher is dependent upon the accuracy of the data provided by program directors regarding their interrelationships with other NFE programs. Clearly, the use of additional research methodologies, including participant-observation and event/analyses, would be desirable, and it is hoped that future research in this area will include such qualitative evaluation research on NFE networking.

#### I. NFE Demand, Needs or Usage Study (Level of Participants)

Important attempts to assess the demands and needs for NFE and the differential usage of NFE programs have been made in El Salvador, Kenya and Zaire, and are planned for Lesotho, as a part of the national assessment effort.

The major goals of such studies are to provide crucial information on perceived needs or demands for learning opportunities and to trace the learning history of individuals or specific population groups. It is efficient to combine the two types of studies, although they can be conducted separately.

The contents of such studies usually include a range of variables relating to socio-cultural and economic status, sets of learning need areas, preferred methods, materials and media, and past participation in structured teaching/learning processes.

The research methods employed have usually been either structured or open-ended interviews. It is the opinion of the author, that in many settings, group, participatory interviews can be just as effective, and further, they usually shorten the amount of field research required.

Usually, a small cohesive research team of approximately three specialists plus a part-time data processing assistant are required during a six to eight month period. Materials, travel and data processing costs must be calculated, as well.

Although some educational needs, demands and usage data can be obtained through the application of a national assessment questionnaire to project directors, this is not an adequate substitute for direct interviews with actual or potential participants in NFE. A "hazard" in this approach is that it awakens hope for the provision of new or additional learning opportunities. Thus, it is important that such studies be linked with actual programming, financing and servicing plans.

These studies are limited in that, for reasons of extensive coverage, a modified survey/interview format is used. More indepth studies would include participant-observation, case histories, open-ended interviews, cognitive domain research and event analyses.

#### J. NFE Educational Facilitators or Leadership Study

Two studies on educational facilitators or leaders have been conducted in conjunction with national assessments: one in Colombia and another in Zaire. A third is planned for Lesotho. Educational facilitators include paid and volunteer educators leading or guiding learning activities in NFE programs. They are variously called promoters, educational agents, monitors, teachers, guides, animators, etc.

The main goal of such studies is to provide additional assessment information about the socio-cultural origins, personal history, goals, training, concerns and needs of both paid and volunteer facilitators. One such highly structured and useful study has been conducted in Colombia (Aristizabal, 1978). This study was useful not only for planning training programs in general, but also for assisting major NFE program directors to

prepare in-service training efforts. The Zaire study was less systematic, but clearly assisted with the training of NFE trainers.

The main methods employed for such extensive research include structured and unstructured interviews. A small research team with access to data processing facilities suffices for such work, and depending upon the size of the project, six to eight months are needed.

Systematic studies of educational facilitators are of direct utility in NFE assessment efforts for programming specific types of in-service training. These survey-interview studies are limited in that participant-observation, unstructured and cognitive domain interviews would yield data of higher quality. Nonetheless, they are very useful for training, and should be undertaken in conjunction with global assessment efforts.

#### K. National Evaluation of NFE

Although several evaluative elements have been included in the Colombian and Lesotho studies, nonetheless, national evaluations of NFE are necessary in order to obtain adequate information on program effectiveness, efficiency and impact. Usually, in-depth evaluation work should be undertaken after the national assessment has been completely analyzed. It should be recognized that the evaluation of various aspects of NFE requires a longer-term continuous process.

As yet, no true national evaluation of NFE has been conducted. For such an evaluation, a basic national assessment survey, including mapping and networking, should have been made. The evaluation would include a needs and demand study, an educational agent's study and a careful evaluation of differential program impact, including: cost/benefit and effectiveness analyses, follow-up studies on participants, participant profiles and other results attributable to NFE programs. The adequacy of projects themselves should be evaluated in terms especially of completeness of project development processes, the variety and utility of methods employed, adequacy of contents, and the quality of programming and coverage.

Clues for national level evaluations, using a stratified random sample, can be gleaned from the methodology used in the successful national evaluation of the large and well-known NFE radio system, Accion Cultural Popular, in Colombia (Morgan, Muhlman and Masoner, 1979).

In such evaluation studies care must be taken to address those questions, problems and topics which are perceived to be of direct relevance to policy-planning and programming. The temptation to undertake studies of

sole interest to researchers must be resisted.

Having reviewed the main types of national NFE assessments, it is important to describe in more detail some of the national studies conducted or currently underway.

## V. BRIEF REVIEWS OF NATIONAL NFE ASSESSMENTS

In this chapter, the main types of sponsoring institutions which have conducted national NFE assessments are briefly presented. Secondly, a series of national studies are reviewed.

### 1. Types of Institutions Which Have Conducted National-Level NFE Studies

Three major types of institutions have sponsored or conducted national-level NFE studies: multilateral agencies, bilateral agencies and one private national center, which is now a regional center for Latin America.

#### A. Multilateral Agencies

Within the framework of life-long education (Lengrand, 1970; Gelpi, 1979), adult education under Paul Bertelsen's guidance and mass communications in education led by Henri Cassirer, UNESCO pioneered in the early conceptualization of NFE (Faure 1972; Vargas-Baron, 1971). Subsequently, emphases were placed mainly upon concrete program development through the World Bank, the United Nations Development Programme and UNICEF. UNESCO also has assisted greatly with the dissemination of information through a variety of expert meetings and international and regional journals (see Appendix II). The Statistics Department of UNESCO, in collaboration with international specialists in adult education, prepared the ISCED Classification Scheme. The latter, which has been one of the main activities of UNESCO in national level studies of NFE, will be described below.

The World Bank has made some major investments in NFE, and guidelines for sub-sectoral studies have been developed.

UNICEF's main contribution to national-level NFE studies has been the funding of a series of case studies of NFE programs, conducted by the International Council for Educational Development.

## B. Bilateral Agency: United States Agency for International Development (USAID)

Due to the leadership of educational specialists in USAID, a series of "sectoral assessments of education," which include reviews of NFE, have been conducted in a set of countries. Typically, the sectoral studies were team efforts including national and international specialists, and usually they were woven into longer-term policy-planning processes, to the extent possible. Depending upon the institutional setting, objectives and capacities of these specialists and the breadth of their mandates, the results have varied, especially in terms of coverage, quality and utility. USAID-funded assessments in Ethiopia, Ghana, Ecuador, Zaire and Lesotho covered only NFE. The assessments in the Dominican Republic, Guatemala, El Salvador, Kenya and Paraguay included both FE and NFE. Of those countries where NFE was the focus of interest, only in Lesotho and Zaire were global assessments contemplated, the former within the framework of policy-planning and servicing, and the latter as a feasibility cum preparatory study for training educational agents in Zaire. Clearly, the more a sectoral assessment is focussed on NFE itself, the greater the possibility for in-depth studies.

Without visiting each country, it is difficult to discern to what extent the inventorying, surveys and research on NFE were conducted upon the initiative of national leaders or the international funding agency, including its major subcontractors (AED, CIE, Harvard, Michigan State, or others).

It is striking to note that, of the many bilateral funding agencies working in educational development, only USAID appears to have sponsored national studies of NFE. The reasons for the lack of such efforts by other agencies are not clear as of this writing.<sup>1</sup>

## C. Private National Center

The Centro para el Desarrollo de la Educacion No-Formal (CEDEN), now a regional center for educational research and development in the Americas, was begun in 1973 by the Fundacion para la Educacion Permanente en Colombia (FEPEC). FEPEC/CEDEN grew out of the extensive national study of NFE conducted in Colombia in 1973-1975. This private center represents a unique attempt at the national level to study and service NFE, although the public sector has been intimately involved in the center's NFE activities.

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<sup>1</sup>The author believes that visits with the specialists of other bilateral funding agencies might reveal other important initiatives.

The level of participation of many institutions in various continuing CEDEN studies has been notable, and this contrasts with more limited, one-time assessment efforts in many other countries. The alternative of utilizing a private research and development center for NFE assessment studies should be considered for similar endeavors in other nations.

## 2. Brief Reviews of Studies Conducted or In-Progress

In the following section, brief reviews of a set of national NFE assessments are offered. The attached chart presents the studies, arrayed by type of institution and type of study.

### A. UNESCO/ISCED

The UNESCO/International Standard Classification of Education (ISCED) scheme was prepared by UNESCO officials with selected experts in adult education, for the purpose of obtaining summary statistics regarding both FE and NFE adult or out-of-school education. It contains breakdowns covering many levels and fields of education, as well as types of "courses" offered (ISCED, 1974; Manual, 1975; Statistics, 1978). Among the countries where such inventories have been conducted are Bolivia, Ecuador, Peru, and Libya.

The inventory includes:

- Basic information
- Types of programs
- Admission requirements
- Schedules
- Duration and contact hours
- Certification
- Level of program
- Sex of participants
- Program participation figures
- Operating income by source
- Mode of education
- Total teaching staff
- Total number of teaching or broadcast hours

Two relatively brief questionnaires requesting summary statistics are employed to obtain data. They are to be mailed out annually to all adult

CHART IV  
Types of National NFE Assessments

Institutions	Type of Study	Some project profiles	Some case studies	Partial national inventory	National inventory	Partial sub-sectoral survey or study	Extensive national survey or study	Complete national survey or study, mapping of NFE coverage	NFE network analyses (program interrelationships)	NFE demand, needs or usage study (level of participants)	NFE educational facilitators or leadership study	National evaluation of NFE
<u>Multilateral Agencies</u>												
UNESCO-ISCED				x								
IBRD						x						
UNICEF-ICED			x									
<u>Bilateral Agency with National Government (USAID)</u>												
Dominican Republic				x		x						
Ecuador				x								
El Salvador	x					x				x		
Ethiopia	x	x	x	x								
Ghana				x								
Guatemala				x		x						
Kenya										x		
Lesotho					x			(x)	(x)	(x)	(x)	(x)
Paraguay	x			x		x						
Zaire				x		x			x	x	x	
<u>National Center (private)</u>												
Colombia/CEDEN			x	x			x		x		x	

Code: conducted = x  
in progress = (x)

education programs in a country. It is estimated that one year is required to complete the inventory. Careful instructions on how to carry out the inventory have been prepared for governmental planning and/or statistical units.

The strength of this approach is that general statistical data on many types of adult education are obtained.

The several limitations of the inventory should be noted. With regard to NFE, it only covers out-of-school programs for adults and youth who are, 1) employed full-time, and 2) not enrolled in FE. Clearly, these requirements restrict both the kinds of topic areas and types of program participants. Many NFE programs are for the unemployed, for families and children, and others include topics which are not directly for adult training. Also, persons in many NFE programs are also enrolled in some form of FE. Thus, the set of NFE programs included in an ISCED inventory would be quite limited.

Other problems pertain to the type of information requested, such as "enrollments." Since some NFE programs have very flexible formats, enrollments per se may not be kept.

We strongly urge that the ISCED classification scheme and questionnaire be revised to enable the development of global national inventories of NFE.

### B. The World Bank

The World Bank has sponsored many missions to countries to review existing literature and conduct partial surveys of subsectors of NFE (World Bank, 1979, 1978, 1974). In consonance with Bank guidelines for funding and sectoral studies in education and training, various types of documents have been prepared by Bank specialists and missions:

1. National sectoral studies on FE, sometimes including sections on aspects of NFE.
2. Sub-sectoral studies on selected topics in NFE, usually focussing on agricultural or vocational training, but sometimes covering health, women or community development.
3. Internal memoranda on leading rationale related to sub-sectors, and
4. Appraisal reports on NFE components and programs.

The surveys are usually conducted by various international specialists in collaboration with in-country specialists. No particular framework is

provided since the studies are considered to require a diverse set of specialized capacities. As a result, the sub-sectoral studies vary in quality, comprehensiveness and utility, and they are largely non-comparable between countries. Also, as internal documents of the Bank they are not readily accessible to others who need to obtain or analyze data regarding NFE in any one country.

Finally, the sub-sectoral studies are generally oriented by a broadly-based case study approach and usually lack a conceptual framework regarding the nature of NFE. Educational specialists in the Bank have expressed interest in considering alternative orientations. Certainly, given the investment potential of the Bank in NFE, it could well be expected that it will play a leading role, in combination with other agencies and institutions, in the development of global national NFE studies for purposes of policy-planning in several countries.

### C. UNICEF/ICED

UNICEF commissioned a series of case studies conducted by the International Center for Educational Development, founded by Philip Coombs, the first Director of the International Institute for Educational Planning in Paris, France. A team of educational researchers in ICED reviewed outstanding NFE programs in various countries (Ahmed, 1975; Coombs, 1973; ICED, 1972). In some instances the case studies shed light on the basic processes and contents of NFE (Ahmed, 1975), but they did not provide much solid information on the national context of NFE in which they were embedded. The case study approach was also used by several other specialists (Bernal, 1975, 1978; Bello, 1973; Niehoff and Wilder, 1974; Sheffield and Diejomach, 1971).

Although case studies do not replace national assessments, it must be emphasized that they are of crucial importance, especially in the later stages of coordinated NFE research programs at the national level.

### D. Dominican Republic

In the Dominican Republic, a partial national inventory and a partial national survey were conducted within the framework of the Ministry of Education, Fine Arts and Cultures. A "typology of activities" was used, covering pre-employment, in-service training, production and basic education. The major overlap in the areas and the difficulty encountered in

placing any one program in only one area made it difficult to analyze results.

The survey of 28 programs, with 14 more identified in the inventory, covered location, sectors, organizational structure, teaching methods and techniques, financing, enrollment, and to some extent costs and impact. From the results as presented, it would appear that some elements of the Colombian study of NFE were used; however, the basic constructs which guided the latter were not utilized.

Some impressionistic characterizations of the possible national context of NFE are also presented, although concern is evinced for developing a longer-term research and planning effort, as well as creating a Department of NFE within the Ministry.

#### E. Ecuador

In Ecuador a partial national inventory was conducted by the Center for International Education of the University of Massachusetts, under a USAID contract. The author was unable to obtain a copy of the inventory. It is generally acknowledged that it was useful for subsequent program development work in NFE, which in turn led to focussing government attention on NFE and "adult education."

#### F. El Salvador

A set of documents on NFE were prepared as a part of the long-term study process of the education sector of El Salvador (USAID, 1974; Diebold, 1978). In a useful review, various of the documents were synthesized, and possible alternative and additional approaches to national NFE efforts were presented (Velandia, 1977). Regarding the documents themselves, NFE is considered within the framework of an economic analysis of education (Apergis, 1975), and two other studies provide more information on sub-sectors of NFE. In the El Salvador work, a total of 21 NFE public sector programs were surveyed (Arciniegas, 1975; Mendez, 1975). Two studies on educational demand and participant (or audience) needs and interests were also conducted (Bond, 1975; USAID, 1978).

It is unfortunate that no global national inventory or survey was undertaken, given the magnitude of the investment made in educational research in El Salvador. Clearly, educational projections were hampered by this, and the heavy focus on mainly public sector programs relating to

vocational training or rural skills training meant that other types of NFE were neglected.

### G. Ethiopia

In Ethiopia, a team from Michigan State University (Niehoff and Wilder, 1974) sought to assist educational planners during the last days of the former Empire. The specialists reviewed 35 NFE organizations through literature reviews and a survey, including site visits. Case studies and profiles were developed, as well as several reports for planners. They were successful in inserting concerns for NFE within public sector institutions. Although they did not meet all of their objectives, they did provide some interesting schema. To relate NFE to developmental problems, programs were listed by the following breakdown of sectors:

1. human resource development in the modern sector;
2. problems of the rural sector;
3. literacy programs;
4. programs in the planning stage, and
5. miscellaneous: social service women's programs, mass media and NFE and programs sponsored by FE.

This typology was useful to explicate the case studies conducted, but has proven to be limited for other, more broadly-based national studies of NFE. No instruments for research were reported to have been developed.

### H. Ghana

As a preparation for an innovative NFE program in Ghana, CIE again conducted a partial inventory of NFE programs at the local level within the context of major national efforts. Little is reported on the methods, results and utility of this inquiry (Kinsey and Bing, 1978).

### I. Guatemala

In 1978, NFE was reviewed as a part of the Education Sector Assessment. Data used was gleaned from a study carried out in 1973 for the National Educational Plan for 1975-1979, wherein some NFE programs of both the public and private sectors were inventoried with respect to their type, coverage and costs. Results were also used from a 1975 survey which dealt with rural-oriented institutions (Lourie, 1975). That survey covered NFE programs in administration, cooperative education, agriculture, domestic

arts, health, work apprenticeship, literacy and basic education, and for each program, its activities, coverage, costs and budgets were specified.

The inventory and survey covered only a limited set of programs, topic areas and aspects of project development processes. They did not provide adequate bases for policy-planning and assessment. Nonetheless, a pyramidal structure for decision-making and coordination composed of representatives of public sector institutions was set up within the government. Regarding this institutional arrangement, it was noted that, "the centralization of decision-enforcing power often leads to bureaucratic bottlenecks because decisions are channeled upwards usually delaying, and often distorting, implementation."<sup>1</sup> And further, "One of the goals, active community involvement, is inconsistent with the pyramid model of authority, and so far the organizational structure does not encourage active community participation."<sup>2</sup> Finally, it is observed that institutional coordination has not worked well, "Initial response from a few of the board members indicated little acceptance of the idea of cooperation."<sup>3</sup>

Although such problems cannot be prevented by having an adequate data base and comprehensive analyses of NFE, it is clear that policy-planning is more difficult in their absence, leading often to misunderstandings and the development of institutional formulae not well-adapted to NFE phenomena.

#### J. Kenya

Within the USAID/Kenyan Education Sector Analysis, little emphasis has been placed on NFE (Kenya, 1980), but an interesting "NFE Module" was included within the Integrated Rural Survey IV (1978-1979). This household survey in rural sectors has the goal of gathering information on differential attainment in FE in relation to the usage of NFE. Radio listening is also reviewed in relation to FE. It is hoped that this sub-sectoral study will yield clues with regard to the potential impact of NFE upon individuals

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<sup>1</sup>USAID, 1978, p. 175.

<sup>2</sup>Op sit., p. 177.

<sup>3</sup>Op sit., p. 178.

with varying exposure to FE. Though partial in nature, this type of study is useful when combined with prior, wider national assessments of NFE.

#### K. Lesotho

The Lesotho Distance Teaching Centre's (LDTC) National Study of NFE in Lesotho began in November, 1979 (Vargas Adams, 1979). (Also see Chapter IV, D and G.) A national inventory of NFE programs has been completed. The study itself contains the following elements:

(a) A survey questionnaire has been prepared, covering complete project development processes, for administration in interviews with the directors of all NFE programs in Lesotho.

(b) The questionnaire contains the requisite elements for preparing project profiles, within the theoretical construct concerning Learning Contexts.

(c) Also included are variables which will provide the data necessary for mapping geographical coverage in terms of participation and topic areas.

(d) The questionnaire also contains items relating to networking in NFE.

Further, parallel to the survey, information is being gathered on human resources in NFE in order to create an on-going human resources file, and studies on differential learning needs and demands, as well as on educational facilitators and leaders will be conducted. From the foregoing, an evaluation of NFE in Lesotho will be possible, and it is hoped that participant follow-up and cost/benefit studies will also be conducted to enrich the evaluative process.

All the above are being planned within the context of the continuous up-dating of files in order to aid policy-planning processes and to provide sensitive, participatory servicing to NFE programs.

#### L. Paraguay

The USAID/Paraguay Education Assessment report included a section on NFE in which it was noted that there was a lack of an adequate informational base (Moseley, 1977, p. 32). Descriptive profiles were compiled from data gathered in a 1976 survey of 31 NFE institutions conducted by the Ministry of Justice and Labor in conjunction with Latin American Development Associates. That survey was based on an inventory conducted in 1973 by the National Council for Social Progress. The existence of a

survey of 32 institutions involved in agriculture and vocational training is also mentioned.

For the profiles, instructions were categorized, once again, according to the following rubrics:

- (a) pre-employment training
- (b) in-service training
- (c) production training
- (d) basic education

Again, the overlaps in this typology were noted, bringing its utility into serious doubt. The profiles covered: total number of participants, global cost, objectives, methodology, type of training, target population, starting date and some general additional information on programs, locations, funding, courses or activities, and coverage to date.

The assessment specialists concluded that a national data base on NFE was needed, which would have adequate instrumentation, in-depth surveys and other studies. Since no administrative framework had been designated as yet for such endeavors, the authors of the assessment urge that such be considered.

### M. Zaire

A feasibility study for an NFE training project in Zaire led to a strikingly participatory effort resembling, in subtle ways, work in Colombia and Lesotho (Barbedette, 1977). This USAID/Interdisciplinary Center for the Development of Lifetime Education (CIDEP) project surveyed NFE resources in an active, participatory manner. It included a fascinating review of actual and perceived program objectives and a survey of networks and overlapping structures, as viewed by villagers and by educational facilitators. Further, seven public and four private major NFE organizations were surveyed, as well as five "support organisms" in vocational training, social organization, adult education and educational research. The sectors of agriculture, health, social services and adult basic education were touched upon, and survey topics included personnel, organization, principal activities, participants and training needs.

While not a global national survey of NFE and relatively unsystematic in its methods, nonetheless the Barbedette approach is noteworthy for its participatory methodology. In this, the use of an "NFE methodology" to NFE research and planning, so helpful in Colombia, appears to have been most successful in Zaire.

## N. Colombia

The planning of the extensive national survey of NFE in Colombia led to the beginning of a participatory national movement which, through interinstitutional networking, has now become a regional effort. (See also Chapter IV, F.) Begun by a team of Colombian researchers and educational specialists, CEDEN has not only conducted the national study, but also several other important research projects on NFE.

The national survey included the following basic elements (Velandia, Vargas Adams and Bello, 1975):

(a) A complete project development process approach was used to frame the open-ended questionnaire/interview format. Post-codifications were developed from data collected in the study.

(b) A stratified random sample of 432 NFE programs and projects were surveyed, using a statistical method for ascertaining levels of socio-economic development in urban and rural areas.

(c) Although an initial theoretical framework was advanced (Velandia and Vargas Adams, 1973), it was revised and further elaborated especially by Benjamin Alvarez and Jose Bernardo Toro (Alvarez, Hauzeur and Toro, 1975), members of the CEDEN team.

(d) Case studies of particularly notable NFE programs were also conducted (Bello, 1973).

(e) A national seminar was held to share project results with all major NFE specialists of both the public and private sectors, and to develop further collaborative mechanisms.

Further, continuing research on NFE phenomena at the national level has been conducted. Notable among the several CEDEN studies are ones on educational agents (Aristizabal, 1978) and network exchange (Report, 1978). Several other sub-sectoral studies and innovation efforts have also been conducted. The existence of an extensive and participatory national study, and the momentum it generated, enabled the continuous development of NFE research, programming and servicing in Colombia. It is also important to note that CEDEN as a private center was able to serve and draw upon the knowledge of specialists from both the public and private sectors, thereby bypassing the "bottlenecks" encountered so often in NFE ventures originated in the public sector.

Thus, these multiple forms of national NFE assessments have served to "break the ground" in studying NFE phenomena.

In the next chapter, generic types of national NFE assessments, derived from experiences to date, will be presented.

#### IV. GUIDELINES FOR NATIONAL ASSESSMENTS OF NFE, INCLUDING DISCUSSIONS OF GENERIC TYPES AND PROTOTYPICAL ELEMENTS

The challenges of conducting national NFE assessments are many and diverse. They are manageable, however, when careful planning and project implementation techniques are used.

In this chapter, tentative guidelines for conducting such an assessment are offered. They are presented in the spirit of mutual exploration and study, and therefore, the author welcomes the suggestions, comments and amendments of colleagues similarly concerned with the development of NFE.

In addition, discussions regarding the four main generic types of NFE assessments will be woven into the narrative, as well as many prototypical elements culled from the sets of studies conducted to date. The generic types include:

1. The Inventory;
2. The National Survey or Study;
3. The Subsectoral Survey or Study; and
4. The National Evaluation.

Each of the generic types has its goals and purposes, content categories, methods, resource requirements, strengths and limitations.

In a sense, they represent stages for the development of a national program of assessment, although it is the opinion of the author that the Subsectoral Survey/Study can be deleted, if not necessary for reasons of policy-planning or funding requirements.

To develop a national assessment program, staging is necessary. A strategy of building the component parts of an assessment is required in order to avoid confusions and needless losses of time, which can paralyze survey research efforts. A suggested set of stages and their contents will be presented below, after some initial considerations.

## 1. Initial Considerations

### A. A Participatory Approach

In order to plan and develop a useful and well-accepted assessment program, a participatory approach is essential. If continuity across stages and dedicated teamwork are internal goals of an assessment effort, project design and implementation activities should be conducted in a participatory manner. Indeed, in order to ensure a truly national-level assessment, NFE programs pertaining to both the public and private sectors must be involved in the project. Initiatives solely of the public sector and/or international funding agencies, appear to have been quite limited, not only in scope, but also in terms of long-range impact and utility. Those assessment teams which truly involved representatives of many organizations of both sectors and NFE program directors at all levels in the assessment, have attained their basic goals, as well as additional ones promoting NFE, not envisaged at the outset, e.g., the development of innovation projects, subsequent focussed studies, new types of collaboration between NFE programs, etc.

### B. Institutional Setting

The importance of selecting carefully the best "institutional place" for conducting national assessments cannot be overstated. Not only do the requisite human, infrastructural and material resources have to be present, but also their relationship to policy-planning mechanisms should be defined as clearly as possible. With knowledge comes power, and with NFE the potential for developing various types of social and educational movements is also always present. A combined public/private, semiautonomous, decentralized institute is often ideal, as well as a private center which has close linkages with the public sector.

Given the autonomy or near-autonomy of many NFE programs of both public and private sectors, a non-threatening, participatory stance is not only advisable, but often necessary for generating continuous action and collaborative efforts favoring the development of NFE.

### C. The Conceptual Framework

As discussed in the preceding sections, it is necessary that a conceptual framework be selected or developed to guide national NFE studies.

It must be emphasized that even for conducting a national inventory, a review of conceptual frameworks and existing typologies is necessary.

As noted in earlier chapters, most of the typologies used for inventories or sectoral assessments have been partial, oriented to only one or a few subsectors, overlapping, confusing or otherwise inappropriate. Clearly, if a heuristic device does not function well, it should be abandoned. Instead, in the absence of adequate discussion and dissemination of information on alternative typologies, inappropriate ones have been used repeatedly, always with commentaries about their limitations.

Some tentative typologies for topic areas and organizational breakdowns were presented in Chapter III. Behind these general classification schemes lie greater specifications which are highly variable according to the setting of NFE in each country. (Examples of national listings are available from the author.) Since they were derived from extensive sets of field data, it has been found that they have a remarkable level of validity for various country settings in different world regions. We suggest that they be further tested and refined.

The selection of theoretical frameworks for conducting national surveys is of crucial importance. Far from representing chaos, certain regularities in NFE can be discerned: NFE programs and projects usually include certain phases within the framework of project development processes (see Chapter II). These phases can be identified, defined and used as a basis for questionnaire construction. In this way, surveys can obtain comparable sets of data on apparently diverse projects covering different content areas. Thus, the projects may be compared and contrasted with regard to the contents of those phases and the relative completeness of their development processes.

Secondly, since many (if not most) NFE programs have elements of FE in them in one respect or another, it is necessary to take a more comprehensive view of NFE than thought to date by many educational specialists. Through focusing on the concept of learning contexts, and by including the basic elements of the Learning Contexts Profile in the study questionnaire, project profiles may be constructed covering the major elements of teaching/learning programs (see Chapter II). This approach can lead not only to greater precision in later policy-planning processes, but also to obtaining basic data for a subsequent national evaluation of NFE.

For purposes of the national evaluation, a life-long learning framework potentially could also be useful in guiding studies on educational demands and needs. Similarly, theories relating to innovation processes and change agents are useful when addressing the study of NFE facilitators.

In summary, our appeal is not for the strict use of any one theoretical tendency, but rather for the exploration, development and testing of a wide range of educational and change process theories in order to orient well costly future NFE assessment efforts. Opportunities for researchers to share and discuss their conceptual orientations to NFE need to be provided on a continuous basis. Indeed, it would be eminently worthwhile to encourage the development of international seminars and workshops on this subject.

#### D. Objectives Setting

Policy-planning in NFE should be intimately related to a variety of national policies and plans dealing not only with the education sector, but also with all other sectors which have or could include NFE programming, e.g., agriculture, health, nutrition, urban development, transportation, culture and the arts, natural resources, etc. Relevant national policies and plans should be reviewed carefully with the goal of identifying the first set of basic objectives for the national NFE assessment. If any sectoral policy-planning processes are underway, the assessment should be informed by and seek to complement those activities.

It is important to note that NFE assessments, on the whole, have not been fully integrated into national policy-planning efforts. Rather, they have tended to be supplementary. One of the main reasons for this may well be that the data base has been lacking in many cases. Further, the educational specialists and researchers involved in the assessments did not demonstrate how to use their data. It may well be necessary that NFE specialists demonstrate how to develop relevant policies and implement planning mechanisms using the results of their assessments. With this view in mind, it may be advisable to include at least one policy-planner in the assessment team.

The initial objectives for the assessment must be clearly stated, and as specific as possible at the outset. This list should be discussed with representatives of all sectors concerned and with a broad spectrum

of NFE program directors of both the public and private sectors. In some instances, these discussions will be very helpful in discovering needed information, re-orienting the assessment objectives and plans and discovering supportive assistance. In other instances, the discussions will tend more to inform and transmit basic concepts relating to the effort, and will help to build a network for collaboration.

Clearly, survey research needs and limitations will also have to be taken into account at each step of objectives setting. The temptation to include topics not centrally related to basic goals and objectives must be resisted throughout the efforts, in order to have a manageable assessment program. Thus, the statement of objectives is always related to differing national capacities for carrying out assessment efforts.

#### E. Differing National Capacities

While ideally all countries should be equipped to conduct full sectoral assessments of NFE, the review of work to date would indicate that some are not prepared as yet to do so:

- With regard to conceptual development, in some nations in-country seminars and advisory assistance would be advisable (preferably from developing country specialists who have worked extensively in the field).
- Human resources, especially in terms of research teams, may be limited or greatly overextended with other work requirements. In such cases, in-service training or advisory assistance may be needed.
- Computer centers are, as yet, inadequate to the task in some countries. In such cases, local centers should be upgraded, the SPSS program installed, and programmers and data processing specialists trained. The alternative of taking data elsewhere for analysis should be resisted in favor of using the assessment as a vehicle for national capacity building.
- An adequate and advisable "institutional place" may not have been selected -- or may not exist. Or those encharged with the assessment may not be adequately prepared, interested or methodologically able to conduct national NFE assessments. (Statistics bureaus have been chosen in some settings, for example, and often they are not the best place for assessment work.) If at all possible, a careful

reconsideration of alternative settings should be undertaken.

Dedication to the assessment effort is crucial in ensuring its successful completion. If no adequate institutional place can be found, it is possible to create one, if absolutely necessary.

- Sufficient funding, and/or material resources may not be available. In such instances, international assistance should be sought.
- Time may be a crucial limiting factor when researchers and specialists are already overburdened with other duties. Policy decisions at policy-planning and/or institutional levels are then needed in this regard. Completion dates must be realistic, given the size of the task. PERT and other scheduling charts are useful in this regard.
- In some countries, certain policy-planners may not be interested in placing emphasis on NFE, for a variety of reasons, e.g., given their commitment to other goals, lack of knowledge of NFE, interest in promoting one or a set of major programs' solely, etc. In such cases, alternative routes for developing critical national capacities and research bases for improving and servicing NFE may well be advisable. Institutions of the private sector or decentralized institutes are often more committed to NFE at the outset.
- The size of a country may well appear to inhibit global sectoral assessments. Although small countries are often, but not always, limited in human and material resources, they are manifestly easier to survey. Large countries with multiple geographic and/or ethnic regions pose more complex problems. These problems are manageable, though, through careful planning and the use of a decentralized implementation model (to be discussed below). In such settings the temptation to emphasize large, well-known NFE programs or sectoral approaches should be resisted, since as noted in previous chapters, such work is very misleading for purposes of policy-planning, and further, can result in a distortion of NFE efforts in a country.

This list relating to differing national capacities could be longer, but it is clear that limitations in terms of training, funding, material resources, scheduling, institutional capacities, level of dedication to NFE, socio-cultural groupings and geographical extension, must be taken

carefully into account at the outset. A nation's capabilities and limitations must be woven into the objectives and strategy for carrying out the various stages of an NFE assessment effort.

#### F. Decisions on the Stages of Assessment

The strategy for elaborating the stages for a national NFE assessment should be established at the outset. The recommended order of the stages is:

1. Identification of the types of categories of NFE programs found in the country
2. Identification of NFE programs and projects with a parallel Inventory of them
3. National NFE Assessment Study or Survey
4. Sub-Sectoral Study or Survey, as needed (based on the above)
5. National NFE Evaluation and related studies

In a specific country, it may be decided to delete one or more of the above stages; however, it is important that all options be considered thoroughly before doing so. The strengths and limitations of each approach will be reviewed below, and this discussion could serve as a basis for national reviews concerning the creation of an assessment strategy.

#### 2. Identification of Program Types

The first stage in an assessment effort should be the identification of all of the types of NFE programs found in a country. This listing is needed in order to develop an adequate typology of types of NFE programs for use in all later assessment stages. If this is not done, the team entrusted with the assessment effort runs the risk of overlooking whole sectors of programs.

A suggested typology of main program categories is presented in Chapter III. This is a useful guide for developing an adequate typology, with many sub-headings under each main topic. At the sub-heading level there tends to be great variation from country to country, depending especially upon the socio-cultural setting, level of industrial development, urbanization and the type of ecology.

This effort usually requires only one or two persons who consult files and visit a few centrally-placed offices dealing with NFE in both the

public and private sectors. The entire operation should entail as little as two weeks, and at the most one month, if work proceeds expeditiously. No data processing is required, of course.

The typology should be presented in the form of a listing of headings and sub-headings with, in some instances, sub-sub-headings, e.g.,

### 1. Agriculture

#### 1.1 Animal husbandry

##### 1.1.1 Cattle breeding.

The third level of disaggregation is dictated by perceived needs for that degree of detail. The typology should be widely circulated in order to revise its contents and add suggested categories.

This typology will be a crucial guide for developing the inventory, since researchers will be alert to seeking programs under each main heading and sub-heading.

At no point, however, should this typology be looked upon as an end in itself or as a substitute for an assessment. It is a useful guide for policy-planners to be sure that they are including all types of NFE within purview of their work, but it does not provide data regarding the actual programs or their contents.

### 3. Identification of NFE Programs and the Inventory

Since these two efforts can easily be combined into one field activity in order to save time, they are presented together. However, the contents of each type of sub-activity will be dealt with in turn, in order to focus on their basic constituent parts. Nonetheless, temporally, they may be conducted in a parallel fashion.

#### A. Identification of NFE Programs

The identification of all NFE programs in a country is a sine qua non for conducting the inventory and the assessment study or survey. This effort has three main aspects in addition to the typology discussed above:

- i. reviews of all relevant literature and information sources on NFE in the country;
- ii. the elaboration of criteria regarding what is a separate NFE program or project; and
- iii. methods for seeking and identifying all NFE programs in the country.

### i. Review of Literature and Files

It is crucial at the outset that all relevant established data bases, files, documents and other literature be reviewed for the purposes of elaborating criteria regarding "program separateness" and of the locating all NFE programs and projects. Large filing cards are useful for this purpose, enabling an easy ordering and re-ordering of organizations and their programs and projects. Since such information sources always have major gaps and usually focus on one or a few sub-sectors, it is important for researchers to view their initial card file as tentative at best, since there is no substitute for site visits to discover what are often major programs, hitherto unidentified at the national level.

### ii. Criteria Regarding "Program Separateness"

The problem of identifying within a country, what is a truly separate NFE program, is not a simple issue. It is important to identify a set of criteria in order to form guidelines which enable later inventorying and assessment work to proceed without confusion.

At first blush, it would appear that each organization would be a separate program, but lamentably, such is not the case. Criteria which have been used to differentiate between and amongst programs include:

- type of program
- institutional or organizational base
- differentiation of local expressions from national or regional offices (geographical coverage)
- staff activities
- type of participant.

Of the above list, only one has proven to be a reliable indicator of "program separateness." Let us review an example: A national Ministry of Health has several health education efforts, some under a health education unit and some under other units, e.g., community sanitation, a nutrition unit, and others. Within the health education unit, there are six staff members each involved in five types of health education: 1) dental education for mothers, 2) child health for mothers (same geographical area), 3) retraining for midwives, 4) retraining for traditional curers, and 5) radio education on general health. Clearly, all activities of the health unit deal with health, and thus, "type of program" will not suffice. The

"institutional base" is the same. Further, the programs have a high "geographical coverage," but to conduct an inventory or survey questionnaire in each health center or clinic would mean needless repetition, and program contents would vary little. "Staff activities" as a criterion do not help since all personnel are involved in some way in all of the programs. Thus, the only criterion which truly distinguishes between programs is "type of participant." In this case, within the unit, there are four programs, one with two content (or topic) areas:

1. health education for mothers (dental and child care)
2. health education for midwives
3. health education for traditional curers
4. health education by radio (general coverage where radio signals are received).

If dental education for mothers covered a geographic zone different from that for child care, they would be considered to be two separate programs (e.g., different participants would be covered). An inventory questionnaire would be applied to the main director of each of the above programs.

In some cases, an additional criteria can be considered regarding the form of educational methods used. However, this can lead to conducting unnecessary extra work. Many NFE programs cover several content areas, include several different teaching/learning methods, materials and media. All of this detail can be gathered easily through the use of the assessment questionnaire.

It should be borne in mind, that each country has its own institutional setting and complexities. The criteria regarding program separateness must conform to this. Although type of participant has proved to be the most useful criterion of separateness to date, it could prove to be unwieldy or inappropriate in some settings. In any case, a thorough discussion of program criteria should be undertaken at the outset of any inventorying or assessment effort in order to avoid later confusion.

### iii. Methods for Seeking and Identifying all NFE Programs

It is important to identify as many separate NFE programs as possible, at the beginning of any inventorying or assessment effort. As mentioned above, a file and literature review is a necessary, but not sufficient base of information. From this, an initial card file, with cross-references, should be set up. This file will be continuously revised, and

will be described in greater detail below in relation to the inventory.

Secondly, exploratory visits should be made to all ministries, decentralized agencies, regional or district offices and all major private sector programs containing or suspected to have NFE activities. Such visits usually uncover a wealth of suggestions about other places to look for NFE programs. Careful notes should be made of all leads, and a separate "leads file" created. The inventory (described below) can be carried out at this time, as well.

Thirdly, an expeditious use of telephone calls can result in many leads for subsequent follow-up in more distant, rural areas. In countries with a limited communications capacity, carefully scheduled local visits will be necessary.

The results of local visits are often both gratifying and surprising. Notable, innovative and highly replicable NFE programs have been found in all countries. They have originated in certain locales, usually under the leadership of one person or a small group of dedicated citizens seeking to respond to local needs. Since they are local, or common only to a small sub-region, and often belong to the private sector, they tend to be overlooked by national and regional decisionmakers. The potential of these programs should not be underestimated since it is often from such local origins that major national programs have arisen. Further, frequently they are the most successful NFE programs in terms of participation and learning, mainly because they are truly locally-relevant. Their cost is usually strikingly low, though they always have needs for training, materials, media and funding assistance. Finally, they represent points in a potential network for servicing local NFE programs in an effective manner.

Thus, although the temptation to avoid extensive travel is often found in assessment efforts, it is important that a travel schedule be elaborated and adhered to.

In seeking to find local-level NFE efforts, it is useful to contact local civic leaders, school-related personnel, major shopkeepers, cafe/restaurant managers/owners, postal clerks and others who usually know what transpires in a locale. At first, this seems like a time-consuming process, but interviewers become skilled at it, and with practice, can cover several sites each day. Not only are exciting "new" programs found, but great local interest in the inventory effort is often generated. (All

interviewed should receive a copy of the final inventory, if at all possible.)

### B. The National NFE Inventory

A National NFE Inventory is useful for obtaining basic information and some statistical data on all NFE programs in a country. The temptation to request extensive statistical information should be resisted, since often if the inventory is conducted all or in part by mail, it will not be forthcoming, and furthermore, every data item will slow down the entire identification process. Most inventories have requested little more than basic information and a few items enabling survey teams to distinguish which programs are truly separate endeavors (i.e., especially which different types of participants are served). The main purpose of an inventory is to be a stepping stone, rather than an end in itself.

The basic steps for conducting an inventory include:

1. The precise objectives for the inventory effort should be specified in relation to the objectives of the larger assessment effort.
2. The general content of the inventory should be blocked out.
3. The methods for administering the questionnaire should be selected, e.g., written and mailed, an interview or both.

The methods of inventorying have varied, but a combination of written questionnaire and interview formats would appear to be the most productive. Clearly, many program directors will not respond to written questionnaires and a brief interview by telephone, in person or at a meeting will be necessary. Further, many of the NFE programs have to be identified on a first-hand basis. This means that scouting efforts will be necessary to find programs and interview their directors.

4. The content of individual questions or matrices for statistical information should be decided upon.

The content items in inventories have ranged from basic information to fairly extensive requests for statistics (ISCED) or program information (Ethiopia). Taking the middle ground, the following list of items would appear to suffice:

- Basic information: name of program, sponsoring organization(s), address, telephone number, Director, other contact persons
- Type of organization: use classification of organizations list
- Type of program: use classification of topic areas list

-General types of participants: age range, sex, main identifying criteria (such as occupation, life role, participation as community groups, families, individuals, radio listeners, etc.)

-Types of main methods used

-Geographical coverage

-Staffing

(Funding sources might be added)

5. The form of responses to each data item should be decided upon, and pre-coded to the extent possible.

6. A first review should have the goal of restricting the number of questions and data items to the minimum possible. The order of the questions should be decided upon.

7. Once the first draft of the questionnaire/interview format is prepared, all responses should be coded, and the draft reviewed fully by the research team.

8. Then a field test should be undertaken, including at least ten different types of programs from both the public and private sectors. The results should be reviewed, and the final draft and coding of the questionnaire prepared and mimeographed or printed.

9. An introductory letter including an explanation of the inventory and its purposes, should be prepared and duplicated. The interviewers should be selected and trained and a field schedule prepared.

10. All incoming questionnaires should be checked for completeness and accuracy and filed appropriately.

11. An easy-access filing system should be prepared with a cross-referenced card file. Each questionnaire designating a separate NFE program is assigned a code number. Cross-references might include the following items on the inventory instrument: type of organization, type of program topic(s), location, and type of participants. It is advisable to build into the filing system a method for continuously updating information. The code number used for the inventory can also be used for a subsequent assessment survey or study.

12. The information should be synthesized in order to discover the major parameters of NFE in the country. Every effort should be made to avoid having to undertake extensive data processing. The data should be susceptible of being tabulated by hand, and should be used subsequently for preparing the national NFE assessment.

13. The Inventory should be prepared also in the form of a listing with major program descriptors for purposes of general dissemination to all programs inventoried and all interested national and international organizations. (In a few rare instances, it might not be wise to disseminate a full listing. In such cases, program types might be presented with summary statistics, and it can be suggested that, for further information, the research institution housing the inventory files be contacted.)

The resources needed to carry out a national NFE inventory will vary depending upon the size of the country and the amount of NFE programs present. Usually one inventory director, an assistant or two, plus a team of trained interviewers will suffice. If the country is large, regional interview teams under the national director will be needed. Often volunteer organizations can be found to help with this effort, if kept limited in scope. A national inventory should not be costly: mimeographed questionnaires can be used; communications and travel can be well-planned and inexpensive; data processing can be avoided through the use of hand-tabulations, or kept to a minimum; etc. For a small country, two months is adequate, and in six to eight months, a large country should be thoroughly inventoried.

The advantages of conducting a preliminary inventory are obvious. All of the identification and classification work is completed quickly and thoroughly. The basic files for the assessment survey or study are formed and research personnel have become fully informed about the scope and range of NFE in their country. It must be understood, however, that the inventory cannot and should not be substituted for a national NFE assessment survey or study. Summary statistics derived from an inventory will be useful, but not adequate as a basis for policy-planning since much important information will be lacking (types of objectives, curricula, methods, media, staff, training, program evaluation, etc.).

#### 4. The National NFE Survey or Study

A global national assessment of NFE has as its basic goal the derivation of an adequate data base to enable sound policy-planning and programming. It should also have a set of other objectives, such as the further development of the easy-access file on NFE programs. The assessment should form the basis for a subsequent set of studies which should be designed in a

complementary manner, permitting a full national evaluation of NFE. Further, the assessment should be carried out by a research team located in an institutional setting where continuous research, planning and programming/servicing can be carried out. In short, conducting a national survey provides an opportunity to begin an NFE movement including training, innovation programs, information exchange, and servicing, as well as continued research and evaluation.

If the assessment is mainly an amplification of the inventory and the main goal of the effort is to obtain more base-line information, then it is usually denominated a "survey." If instead, it attempts to test a set of hypotheses relating to NFE, then it is usually called a "study" or "research program." Since both require approximately the same amount of field interviewing, it is usually advisable to pose some questions of the data to be gathered, in the form of hypotheses, and to include needed statistical manipulations of the data within the scope of the data analysis plan.

Various steps should be undertaken in order to conduct a national NFE assessment. The following list is not exhaustive, but rather suggestive of points which should be taken into account.

1. The relevant literature on national assessments in other countries should be obtained and reviewed. If no one on the research team has participated in such an effort, then a short-term advisor should be obtained to help to avoid potential pitfalls.

2. General and specific objectives for the assessment should be developed, as noted above, in a participatory, consultative manner.

3. The main conceptual orientations for possible use in the inventory should be discussed, thoroughly understood, and finally, selected according to the needs and orientations of the project directors and others.

4. All of the above should be discussed with leading policy-planners, and if possible, a policy-planner should participate directly in the assessment. Political, social or ethical constraints should be considered at this time also, e.g., possible political opposition, concerns on the part of ethnic minorities, linguistic problems, the ethical questions surrounding certain data items or the use of data. The consideration of a proto-dissemination plan for the use of the assessment results is often a wise move at this point, since many potentially troubling issues can be resolved early on if discussed openly at the outset.

5. A review of needed resources should also be undertaken. The "institutional placement" of the assessment may have to be changed from that of the inventory, although this should be avoided, in most instances if at all possible. It is often preferable to reinforce the first team, as needed. Usually co-directors are advisable for these large-scale efforts: one for directing research-related questions; the other for administrative work and field operations. Depending upon the size of the country and the amount of NFE programs found in the inventory, from one to six research assistants are needed to handle files, data entry, programming and analysis work. In addition, interviewers are needed. In a small country four or five will suffice, but in a large country, teams of four or five under regional supervisors will be required. Such interviewers should have had previous interview experience and should be paid for their work (usually a specified sum per interview completed and accepted, plus a travel budget and per diem).

Other resources which should be considered include: office supplies, document purchase, communications needs, duplication, printing, data processing and analysis, and general administration.

Of course, time constraints should be taken into account, and an initial schedule drawn up. An assessment in a small country can easily be completed in one year, if adequate resources are supplied and project schedules are adhered to carefully. A large country is more difficult in terms of the number of interviews to be conducted and the size of the set of data; however, if a regional interview approach is used, computer facilities are adequate to the task, and the project directors are well-organized, then little more than a year should be required to conduct the same effort. If resources or management capabilities are lacking, then the assessment effort could require up to two years.

6. A project PERT and a detailed schedule/timeline should be drawn up and altered only as absolutely necessary. This should be conducted at the same time that the detailed project design is prepared. As a result of this process, objectives are often reassessed, and other changes occur related to resource needs, etc.

7. Within the design, the content areas and basic research method should be selected. For the gathering of the most sensitive and accurate data possible, it has been found in various assessments that NFE program directors, and/or their most knowledgeable staff, should be interviewed

personally. This approach has the strength of gathering primary data on the spot from the person(s) who should be best informed. It has the limitation of depending upon that individual, or set of individuals, for complete, truthful and accurate information. Such is not always the case, and in some instances, program files must be reviewed, other persons interviewed to fill in information gaps and corroborate points considered to be doubtful. If it is impossible to do any of the above, then it is preferable either to hand in a partially completed questionnaire or to delete it entirely. Further, although it would greatly enrich the assessment effort to interview participants and a range of staff members, time and cost constraints generally prohibit this. Rather, such research may be undertaken through a sampling or case study approach at the time of the national evaluation of NFE.

Thus, the usual method chosen is a questionnaire interview for NFE program directors containing a series of items (variables). The items are stated in the form of questions or matrices, the latter to be filled out using information elicited by guided questions. To the extent possible, all answers should be pre-coded and arranged for easy data entry. "Other" categories should be included throughout, in order to develop post-codifications, if necessary.

The types of variables which have been most often chosen for assessment efforts include:

- a. General basic information (name of organization, program, address, contact person, etc.)
- b. History of NFE program (date, origin, type of originating program)
- c. Prior research or needs studies (if conducted, how, objectives)
- d. Specification of objectives (type of goals/objectives, statement of objectives, new objectives considered)
- e. Educational topics covered (listing, changes considered, additions wanted)
- f. Methods, materials and media (types, preferences, innovations desired, ones developed by program)
- g. Organization and staff (staff positions, types, numbers, levels of education/training, time dedication, duration, payment, types of training provided or desired (pre-service, in-service), program decisionmaking methods, content of decisions, interinstitutional decisionmaking)

- h. Participants, geographical coverage and facilities (urban/rural coverage, geographical coverage by topic and participants (number, form of participation, sex, age ranges, previous training, admission requirements, fees, attendance requirements, average duration of program, time commitments, etc.), types of time schedules, family income ranges, socio-economic characterization of families, main occupations of participants, characterization of participants (heterogeneity, learning clusters, relationship to program), types of facilities used, recruitment techniques and their effectiveness, incentives and compensation, new incentives considered)
- i. Evaluation and "follow-up" of program participants (type of evaluation, if any, method, timing, certification, recognition of program by FE, follow-up on participants (topics, interest in future follow-up work, reports, assistance received with evaluations)
- j. Program evaluation and research (types, methods, topics, assistance received, reports, interest in future evaluation, topics)
- k. Relationships with other organizations and general program considerations (networking, types, frequency, type of organization, interest in collaboration, relationship with FE (type of institution, type of relationship, types of interests in FE), program achievements, problems, needs, interests in servicing, program policies)
- l. Finances and budget (funding sources (by source, type, amounts per selected years), in-kind assistance (types, worth), budgets for selected years, total budgets for selected years, expenditures for main rubrics)

(Examples of types of questionnaires including pre-coded answers were too long to be presented here, and are available from the author.)

8. The actual content of each question and matrix should be determined, and the form and content of expected responses drawn up. All items should be reviewed and placed in an adequate sequence considering the interest level of respondents, as well as the necessity of obtaining certain basic information at the outset. Financial questions, being more delicate, are usually placed at the end. At this point the first draft of the questionnaire should be prepared.

9. National, regional and local maps and census zone lists should be collected for mapping and coverage items. It is very helpful to be able to

use national census or zoning codes to note geographical coverage in relation to participants and NFE topics. Such parameters should be used to alter the first draft, as necessary.

10. After a thorough review of all items, responses and their sequence, a second draft should be prepared, complete with pre-codifications. At this point, the project directors should personally field test the second draft with a set of cooperative NFE program directors from both the public and private sectors (at least five each). All completed questionnaires should be checked for the wording of questions, content of responses, adequacy of the sequence, utility of matrices, etc.

11. By this point, a detailed field strategy should have been prepared for conducting all interviews. Such a plan should include personnel needs, decentralized plans of action, precise schedules, anticipated transportation and communications needs and a plan for supervision.

12. After the final draft has been prepared, a detailed interviewers manual can be elaborated, usually on the basis of notes already drawn up. At a minimum, the manual should include definitions, procedures, reasons for each question and instructions on how to conduct interviews.

13. A training plan for interviewers is also needed, usually including a three to five day workshop where all major aspects of the project are discussed. The contents, methods and evaluation system for the training effort should be specified in the plan. It is crucial that practical training in interviewing be provided -- even for experienced interviewers.

14. Letters of introduction including a brief description of the assessment effort, will be needed by the interviewers to give to NFE program directors. A draft should be prepared, critiqued, revised and duplicated.

15. Interviews should then proceed according to project plans. Careful supervision is crucial throughout this process, especially in large countries where regional teams are used. Project directors should be prepared to change interviewers -- and even supervisors -- upon occasion. It is wise to train more persons than actually needed at first.

16. A coding manual is mandatory for data entry. It should be prepared as soon as the final draft of the questionnaire is ready, and extra space should be left throughout for any post-codifications which may be needed on certain items.

17. A detailed data analysis plan is also required. It should specify the computer facility to be used; the mode of data entry selected and the type(s) of statistical package(s) to be utilized. Usually, the SPSS is best, but the OSSYRIS or a set of smaller packages may be used. Procedures for data entry, cleaning, and related activities should be specified. Program steps and the contents of those steps should be provided carefully, in relation especially to policy-planning needs, lay interests and research concerns, including any hypotheses to be tested. Typical statistical analyses include:

- a. Basic frequencies and percentages
- b. Cross-tabulations (usually obviating the need to obtain a. first)
- c. Special statistical analyses, possibly including discriminant analyses, multiple classification analyses, coefficients of discrimination analyses, cluster (or factor) analyses, and others, as warranted, with respect to data collected and hypotheses posed.

Dummy tables should be prepared in order to test out, plan and prepare for programming capacity.

18. Plans for the checking of in-coming questionnaires should be made in order to ensure their completeness and accuracy, insofar as possible. In some instances, questionnaires will have to be applied a second time. Completed and checked questionnaires should be copied and filed in separate places, to protect the data against potential loss.

19. Data should then be entered, cleaned and analyzed, according to the data analysis plan. Once initial results are forthcoming, they should be reviewed, since usually additional analyses are needed.

20. Based upon earlier dissemination plans, a final dissemination plan should be prepared, specifying potential audiences, forms of dissemination, contents, schedules, etc. Outlines for each type of dissemination should be drafted, e.g., written reports, reviews for policy-planners, seminars, workshops. Both national and international dissemination should be considered.

21. The final interpretations of the statistical analyses should fit within the framework of the dissemination plan. The Learning Contexts Profiles, mapping and networking exercises should also be conducted in order to provide graphic reviews of typical program orientations, program coverage and inter-program connectivity. It is important that recommendations for policy-planners be provided by project researchers, given their intimate knowledge of NFE phenomena.

22. Elements for subsectoral studies and national NFE evaluation should also be derived from the assessment results. These activities mark the beginning of the continuing research effort on national NFE phenomena.

The strengths and limitations of this approach, which incorporates elements of several assessment efforts, were reviewed in Chapter IV.3.G. The author welcomes critical observations and suggestions regarding alternative assessment techniques.

### 5. The Subsectoral Survey/Study

Although subsectoral surveys and studies are not necessary for national NFE assessments, nonetheless, some international funding bodies interested in investing in, for example, NFE programs of the agricultural sector, may require that they be conducted. Such funding groups, sometimes relatively less-interested in a survey of all NFE programs in a country, may not encourage the carrying-out of national assessments, which are more of a direct need on the part of national educational planners and specialists.

If well-designed, carefully conducted and thorough, subsectoral studies covering NFE programs in both the private and public sectors can be very useful elements for large-scale national assessments. In other words, they can be used as parts or elements for global national surveys and studies of NFE, if they are conducted before a national assessment is undertaken. It is recommended, however, that they be conducted after national-level assessments have been completed, utilizing the data base acquired.

The content areas of subsectoral studies and surveys have varied greatly. Usually they should cover many or all of the variables included in global assessments. In addition they should describe how the NFE work relates to the larger sector (e.g., agriculture, transportation, health, etc.), and to specific, relevant national plans.

If conducted before a national assessment, the methods employed for carrying out such studies usually include a questionnaire survey of program directors using an interview format. In some cases documentation and other secondary sources are often notoriously weak and dated.

For a subsectoral assessment, a small research team and moderate resources should suffice. A subsectoral study can require from two to six months, depending upon the sector chosen for study and the size of the country. If the study is conducted subsequent to a global assessment, only a moderate amount of computing time or literature review and analysis may be needed.

The strengths of this approach are several: attention is given to a specific area of learning needs closely related to national development goals; the studies may be conducted relatively quickly, and representatives of the sector tend to become more aware of the potential utility of NFE approaches through attendance at project-related discussions.

The limitations of subsectoral studies include the tendency for some national leaders to identify NFE with the subsector studied; extrapolate from the results of subsectoral studies to characterize all of NFE, substitute these limited surveys and studies for global assessments, and to utilize the results of subsectoral studies for policy-planning in other topic areas of NFE, where they do not necessarily apply.

## 6. The National NFE Evaluation

Since, to our knowledge, no true evaluation of NFE at the national level has been undertaken, the following comments are purely exploratory. Indeed, subsectoral studies may well play a part in such evaluations.

Evaluations may be focussed on the variable impact of a servicing/networking program. They may have the goal of assessing the cost effectiveness, outcomes, socio-economic impact, etc. of NFE programs. They may attempt to evaluate the needs and demands for learning in relation to actual programming and coverage. Alternatively they may focus on leadership and training needs in relation to program improvement.

Given the many possible areas of evaluation, including many not mentioned above, it is clear that a participatory process of setting objectives for national evaluation efforts is required. In order to avoid a predominance of decisionmaking by researchers, policy-planners should be fully involved in objectives setting.

Although a national survey approach could be used for national assessments, it is clear that for in-depth studies, stratified random sampling will be needed, as well as case studies. These have been the approaches of national evaluation efforts on NFE facilitators and variable program outcomes in Colombia, and the results have proven to be very useful for planning, servicing and program development work.

In order to carry out a national NFE evaluation, a small team of researchers is required, usually including educational researchers, sociologists, anthropologists, and social psychologists. Core institutional

and project funding is required to sustain such efforts. It is valuable to locate research teams in the same "institutional place" chosen for the national NFE assessment, in order that the original data base may be used continuously. If located elsewhere, the data files should be made readily available.

The national evaluation effort should be conceived as a continuous, long-term and flexible process assisting a nation to meet its goals for promoting and improving non-formal education.

It cannot be overemphasized that the end goal of NFE inventories, assessments and evaluations is not the compilation of reports, but rather the fulfillment of the life-long learning needs of all peoples.

APPENDIX I  
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## APPENDIX II

Some Information Sources

Information sources which should be reviewed in future literature searches on national assessments of NFE.

I. Institutional Files

All World Bank sectoral and subsectoral studies concerning NFE.  
 International Institute for Educational Planning papers dealing with NFE, especially country studies and planning studies.  
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## APPENDIX II

Recommendations for the USAID Two-Country Study

It is planned that two types of countries will be assisted by USAID to design, conduct, and utilize results from a national assessment of NFE. At a minimum, such activities should include:

- A. An exploratory listing of NFE programs,
- B. A full inventory of NFE programs,
- C. A national survey assessment of those programs, including mapping and network analyses, and
- D. Other studies as possible and advisable, given funding, human resources and temporal limitations.

As noted, national capacities and objectives can vary greatly with regard to conducting such assessment efforts.

It would be important to specify criteria for the two countries at the outset instead of choosing in a less rigorous manner. Certain criteria should pertain to both countries, for example:

1. Both the public and private sectors should be involved in NFE (a socialistic state would not be included under this; however, hopefully a study of NFE in such a setting will be conducted soon).
2. Preliminary initial listings and inventories of NFE programs should have already been compiled, providing a basis for work to proceed.
3. The government should be thoroughly committed to a long-term effort for developing NFE in both the public and private sectors.
4. An appropriate "institutional place" should exist or could be specified for creating long-term, flexible and participatory research and programming processes.
5. At least minimal human resources should exist for conducting the research, plus opportunities for further training could be provided.
6. A computer installation must be fully available for data processing and analyses. The adequacy of the installation can vary.

Secondly, criteria for contrastive studies should be specified. Rather than focusing on infrastructural capacities for conducting studies as noted above, here the author would emphasize differing country settings.

The basic reason for this is that to try to carry out a national NFE assessment where one is not wanted or no infrastructure exists, foredooms the researchers to working in an unfavorable, negative setting when many other countries greatly want and need such work, and furthermore, possess the capacities to carry them out. To conduct an assessment for, rather than with, in-country specialists would lead to the sad repetition of the many analytic overlays conducted to date, unwoven into policy-planning processes. It is of crucial importance to engender a long-term, participatory process and a true dedication to the field through a partnership with policy-planning and educational specialists of the country.

Criteria for contrastive studies which could be considered include:

1. One small or medium-sized country with a relatively homogeneous sociocultural setting (population of 1 to 5 million persons).

The Kingdom of Lesotho is an example of this type of country. Although transportation and communications should be available, they are not necessarily limiting factors. Socioeconomic levels of development and the extent of FE need not be specified either. That there be an abundance of NFE is clearly important, but since this is virtually always the case, we do not need to mention it as a criterion.

2. One medium-sized country with more than one major sociocultural group (population of 5 to 20 million). Here we are not suggesting that vast nation-states be tackled, such as India, Brazil, etc. Rather, given the funding and temporal limitations of the proposed projects, a medium-sized country would be surveyed.

It is clear that the prototype methodologies, as discussed in this paper, are equal to the task of studying NFE in country type 1. However, for country type 2, methodological considerations regarding the magnitude of the problem come into play.

The strategy used in Colombia included the choice of four major regions, and then within those regions, selecting sites on the basis of stratified random sampling (stratification was conducted by denoting levels of comparative socioeconomic development, according to indicators derived from national censuses).

It is our belief that in a country the size of Colombia, universe is possible by means of a careful structuring of the research process.

First of all, criteria for what is a separate NFE program would have to be spelled out even more clearly than in 1972, when the project was designed. As noted in the guidelines, fast-paced interview teams would have to be trained and carefully monitored. Data processing requirements would have to be quite carefully outlined, and full access to adequate computer installations on the part of national researchers fully guaranteed. More researchers for data analysis work would be needed in country type 2. Clearly the costs in country 2 would be greater than in country 1.

Particular challenges for translation and inter-ethnic communication could arise, as well as others, affecting also the composition of the core research team and sets of interviewers.

Within a bicultural or multicultural nation, the interpretation of results would be more complex with regard to overlap, duplication, as well as in the provision of guidelines for policy-planning.

This type of challenge for a contrastive study is needed, especially since the great lament of many specialists has been the perceived impossibility of conducting national NFE assessments in multiethnic settings.

If a type 2 country can carry out a successful national NFE assessment, then very large nations can be surveyed on a region to region basis.

In enabling this process of enquiry, USAID would provide a full test of existing techniques, within the framework of national policy-planning.