This monograph is the summary report of the "Education and the Rural-Urban Transformation" (ERUT) portion of the United States Office of Education research contract concerning "Content and Instructional Methods of Education for the Economic-Political-Social Development of Nations." The ERUT team conducted a continuing seminar throughout the three-year period, for purposes of reviewing relevant literature, discussing conceptual frameworks, setting priorities among research needs, and helping individual researchers develop their own research plans and designs. In this manner a total of nine monographs were planned, each to be written by a member of the seminar group. Eight of these nine are "country case studies" involving empirical fieldwork focusing on a particular ERUC-type problem in a Third World country. The ninth is a conceptual and theoretical monograph. The findings of three completed monographs, and the scope and design of the remaining six are summarized here. The completed studies were conducted in Thailand, Turkey, and the Philippines. Included among those to be completed are an additional study in Thailand, two more in the Phillipines, and one each in Sarawak and Uganda. (Author/SLD)
SUMMARY OF RESEARCH ON EDUCATION AND THE RURAL-URBAN TRANSFORMATION

ERUT - 10
FINAL REPORT

BY
ROBERT B. TEXTOR
FRANK J. MOORE
GEORGE W. PARKYN
WITH THE COLLABORATION OF
DENNIS C. SIMS
RICHARD L. KIMBALL

The research reported herein was performed pursuant to a contract titled "The Content and Instructional Methods of Education for the Economic-Political-Social Development of Nations" (Contract Number OEC-4-7-062597-1654) with the Office of Education, U.S. Department of Health, Education, and Welfare, which supported the publication of this case study.

Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

Stanford International Development Education Center (SIDEIC)
School of Education
Stanford University
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SIDEC STUDIES ON CONTENT AND METHODS OF EDUCATION FOR DEVELOPMENT

Sub-series on Occupational Education and Training


OET-6. Factors Associated with the Migration of High-Level Persons from the Philippines to the U.S.A., by Josefina R. Cortés.


Sub-series on Education and the Formation of Social and Civic Attitudes


Sub-series on Education and the Rural-Urban Transformation


This monograph is the summary report of the "Education and the Rural-Urban Transformation" (ERUT) portion of the U.S. Office of Education-Stanford International Development Education Center, Research Contract concerning "Content and Instructional Methods of Education for the Economic-Political-Social Development of Nations" (No. OEC-4-7-062597-1654). At the Stanford International Development Education Center (SIDEC), work on "ERUT" research began shortly after the contract was signed on December 14, 1966, under the immediate direction of Robert B. Textor, Professor of Education and Anthropology. Dr. Textor was responsible in a general way to Paul R. Harna, Lee Jacks Professor of Child Education, and more specifically to Eugene Staley, Professor of Education. Later, the responsibilities of Professors Hanna and Staley were assumed by Arthur P. Coladarci, Professor of Education and Psychology, and Director of SIDEC. To Professors Hanna, Staley, and Coladarci go our thanks for leadership and support.

Dr. Textor, a cultural anthropologist by training, was joined in 1968 by Frank J. Moore, Lecturer in Education, an economist; and the following year by George W. Parkyn, Visiting Margaret Jacks Professor of Education. Dr. Parkyn, an educationist-psychologist with some decades of experience in educational research and assessment, started his career in 1933 as a teacher in a one-room schoolhouse in rural New Zealand. Dr. Moore, with 15 years of field experience in Thailand, Iran, Nepal, and Nigeria with the Ford Foundation, AID, and similar agencies, brought to the team a concern for the economic and cost aspects of decision-making with respect to economic allocations to education, as well as a background in the agricultural economics aspects of ERUT-type "outputs." Dr. Textor, with a background of two years as a civilian educator in occupied Japan and six years as an anthropological fieldworker in Southeast Asia, made his contribution mainly in terms of sociocultural analysis.

The ERUT team conducted a continuing seminar throughout the three-year period, for purposes of reviewing relevant literature, discussing conceptual frameworks, setting priorities among research needs, and helping individual researchers develop their own research plans and designs. In this manner a total of nine monographs was planned, each to be written by a member of the seminar group. Eight of these nine are "country case studies" involving empirical fieldwork focusing on a particular ERUT-type problem in a Third World country. The ninth is a conceptual and theoretical monograph.
A variety of constraints made it impossible to coordinate and plan the research quite as fully as had been hoped. As matters worked out, five of the eight case study researchers were not available to undertake their field research at an early point in the three-year research period; their studies will not be published until after October 14, 1970, the deadline set by USOE for submission of this report. Accordingly, the present monograph will summarize the findings of the three completed monographs, and will discuss the scope and design of the remaining five, relating all eight to each other and to the ninth monograph, which deals with theory.

The three country case study monographs already available have been written by the following authors:

DR. PINYO SATORN, currently Professor of Education at Chulalongkorn University, Bangkok whose monograph, The Provincial School Superintendent in Thailand: A Study of Role Perceptions and Expectations, is included in this series as ERUT Monograph No. 1. Professor Satorn's study focuses on certain attitudinal norms of Thai provincial school superintendents, provincial governors, and senior central government officials concerned with educational policy, relevant to the place of education in fostering development.

DR. HAROLD F. CARPENTER, currently a member of the Ford Foundation staff, Jakarta, whose Adult Education and the Transformation of Rural Society in Turkey is ERUT Monograph No. 2. Dr. Carpenter's monograph is a close-up study of the outcomes of a rural adult education program in a district in west central Turkey.

DR. DOUGLAS E. FOLEY, currently Assistant Professor of Education and Anthropology at the University of Texas, Austin, whose Culture, Politics, and Schools in Rural Philippines: An Ethnographic Study of Teacher Community Involvement is ERUT Monograph No. 3. This study examines the civic and developmental impact of rural teachers in a depressed area in Central Luzon.

The five scholars whose work will be published in the near future are:

CHALIO BURIPUGDI, who will contribute ERUT Monograph No. 4, a study of Thai farmers' progressiveness and productivity orientations as these relate to educationally reproducible experiences in rural Thailand. Mr. Buripugdi, who is currently carrying
out fieldwork and data analysis in Thailand, is a native of that country on leave from his regular position as a staff member at the Petburi Teacher Training Institute. Like Dr. Satora, Mr. Buripugdi grew up in a peasant village and knows at first hand what it is like to do farm work.

JAMES MADISON SEYMOUR, who is currently completing fieldwork on the developmental impact and implications of elementary education in selected Iban agricultural communities in Sarawak, East Malaysia. This monograph, which builds upon Mr. Seymour's earlier experiences as a Peace Corps teacher in rural Sarawak, will be ERUT Monograph No. 5.

RICHARD L. KIMBALL, who has recently completed fieldwork in Uganda, will contribute ERUT Monograph No. 6, a study of developmentally relevant outcomes of a variety of educational inputs in that country. Mr. Kimball has worked in various East African countries for a number of years, first as a teacher with the Columbia University Teachers for East Africa Program, and later as a curriculum development specialist for the Educational Development Center. Mr. Kimball has also done curriculum research and development in Colombia, and educational ethnography in Mexico. Because of his unusually valuable contribution to our Seminars we have included him as a collaborating co-author.

JOSE CONRADO BENITEZ, who has recently concluded a nationwide sample-based study of the impact upon rurally enculturated Filipino boys and girls of having been selected for, and educated in, the Philippine National Science High School in Manila. This unique national school selects deserving students from the entire nation on the basis of merit, and provides for them an education of highest quality in science and other subjects. Mr. Benitez has done previous research involving anthropological fieldwork among a "pagan" group in the highlands of Mindanao. His monograph will be ERUT Monograph No. 7.

RONALD B. HERRING, who will describe and analyze the extent to which American Peace Corps volunteers, teaching in collaboration with Filipino teachers in rural or semi-rural schools, succeed in altering Filipino teachers' attitudes toward work, achievement, and professional commitment. This will be ERUT Monograph No. 8. Mr. Herring is a former Peace Corps volunteer and volunteer leader in the Philippines, and was the associate director of the 1966 Stanford University Philippines Peace Corps Training Program. At present he is Associate Director of the Center for Research in International Studies at Stanford University.
In addition to the eight empirical "case studies," the ERUT Series includes as Monograph No. 9 a largely conceptual and theoretical work by Professor Dennis C. Sims, currently of Atlanta University. Dr. Sims is a general behavioral scientist with a broad interest in integrating theories of change at both the micro and macro levels. He was a frequent participant in the ERUT Seminar throughout its three-year existence. He thus influenced, and was influenced by, other members of the seminar. However, the manuscript of his monograph was not available until the other eight researchers had already commenced their research. While the formal impact of Sims' theoretical formulations on their research designs was thus less than it might have been if the timing had been otherwise, Sims' work nonetheless does provide a useful ex post basis for the systematic examination and evaluation of work already completed.

Even a cursory examination of Monograph No. 9 will reveal that it is an unusually ambitious undertaking in broad scale theory building. Like other efforts of this kind, it is likely to be controversial in some respects; indeed, the three of us are far from unanimous in our estimates of the relevance of particular parts of the Sims' Norm Set Theory to the planning of future ERUT research. Nonetheless, we consider the entire endeavor of sufficient interest and promise so that we have used it in this monograph as a theoretical benchmark, in an effort to bring a measure of commonality into our commentary on research already completed (Chapter Three), and on research soon to be completed (Chapter Four).

Monograph No. 9 is thus so directly related to the present summary that we urge the reader to study it before moving to the present Monograph No. 10. Despite the fact that it might prove to be difficult going for some readers, we feel that the reward will prove worth the effort, especially in Chapter Three, where Professor Sims presents his key concept of the "norm set." It should be noted, too, that Sims' Chapter Eight seeks briefly to apply his theoretical framework to practical ERUT-type problems involving the urban occupational adjustment of recently rural Chicano residents of Santa Clara County, California. Dr. Sims has confronted practical problems of this sort over the past few years in his capacity as Director of Research and Planning for the Santa Clara Skills Center, and this work was in turn based on earlier ethnographic fieldwork on the rural-urban transformation in the Oaxaca Valley of Mexico.

Because of Dr. Sims' contribution to the ERUT research program in general, and to our own thinking in particular, we are pleased to include him as a collaborating co-author of this Summary Monograph No. 10.

As the above varied list of research topics suggests, the ERUT field is an immensely broad one. Its breadth and complexity
defy an easy systematization, although the present series makes some efforts in this direction. The purpose of the present summary is simply to pull together some of these main systematizing efforts, and to present enough of the flavor of individual monographs so that the reader will be enticed to read them in the original.

In addition to the nine authors listed above, we wish also to express our special gratitude to our co-investigator Hans N. Weiler, Assistant Professor of Education and Political Science. Dr. Weiler served as principal adviser for the Carpenter monograph, and is currently serving in the same capacity for the Kimball monograph.

Other scholars to whom we are indebted for advisory services, all of whom are currently associated with Stanford University, are Professors Robert G. Bridgham, Elizabeth G. Cohen, Robert W. Heath, Robert D. Hess, John W. Meyer, Robert C. North, William R. Odell, G. William Skinner, and George D. Spindler. Our thanks go similarly to Professor Richard L. Warren of the University of Kentucky.

In addition to the above persons, we wish to thank three other members of our seminar group for their help in conceptualizing problems and formulating research designs. These three, all of whom are likely to be undertaking ERUT-type research in the future, are:

Fr. Jose Arong, a Filipino educator who is currently on leave from a post with the Notre Dame Association of Colleges, which maintains an extensive school system in Mindanao and Sulu. Fr. Arong has done considerable anthropological research in this area of the Philippines.

Fr. Humberto Barquera, a Mexican educator from the Centro de Estudios Educativos, Mexico City, who has plans for additional educational research in Mexico.

M. Georges Nihan, a Belgian educator with extensive experience in the Democratic Republic of the Congo. M. Nihan has also been affiliated with the International Institute for Educational Planning in Paris.

In addition to the members of the group from SIDEC, from time to time other scholars from other parts of the university joined in our seminar discussions. These participants are listed below; unless otherwise indicated, they are all from Stanford's Department of Anthropology.

Kenneth R. Ayer, who is about to undertake fieldwork in Thailand concerning the impact of the introduction of modern highway transportation upon attitudes and behavior of Thai farmers relevant to agricultural growth and development.
Jacob M. Bilmes, who will soon resume earlier fieldwork in Thailand in cognitive anthropology, focusing on certain aspects of farmers' decision-making processes and patterns, with special reference to investment and development.

Hugh A. Blackmer, who has been contemplating fieldwork in up-country Sarawak, East Malaysia, concerning cultural ecology and agricultural development among the Iban.

Miss Gloria Davis, who is currently conducting preliminary fieldwork concerning the selected psychological aspects of agricultural growth in Bali.

Hendrik Molster, a Dutch economist affiliated with Stanford's Food Research Institute, who is planning a micro-economic study of selected aspects of agricultural growth in rural Indonesia.

Mrs. Margaret Schoenhair, who will be doing field research on certain aspects of education designed to produce development among Mexicans or Mexican-Americans.

We cannot close this preface without acknowledging a fundamental debt of gratitude to Dr. William M. Rideout, Jr., who served as Program Coordinator throughout the life of the USOE-STDEA Research Contract, and to Miss Carolyn De Young, who assisted him in the capacity of Project Secretary. These two tireless workers contributed vastly above and beyond any normal standard of performance that might reasonably be applied. Dr. Rideout, now Associate Professor of Education at Florida State University, handled administrative relations with USOE, took care of budgetary matters, and made a wide variety of other decisions that bridged between the administrative and the professional. Miss De Young helped by shouldering many burdens, ranging from the booking of a plane ticket to an upcountry Thai airport complete with grass landing strip, to compensating a researcher for a bowl of curry consumed in line of duty at a village food stall in East Malaysia.

Robert B. Textor

Frank J. Moore

George W. Parkyn

Stanford, California
September 1970
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CHAPTER ONE: INTRODUCTION

The central role of human resources in the process of development is generally recognized, but it is evident that a much deeper understanding is needed of the role of education in the transformation of traditional societies, as well as in the maintenance of the forward thrust of the more developed nations. The "Education and the Rural-Urban Transformation" (ERUT) sub-project is concerned with the actual and potential role of education in facilitating the adjustment of rural people to influences radiating from urban centers, and in preparing them to meet the ever-growing challenge of modernization.

The ERUT project's primary focus can be defined as follows:

1. ERUT focuses on rural people. Included in this focus are people enculturated in rural areas who have moved to urban areas, whether temporarily for purposes of education and employment, or permanently as migrants.

2. ERUT focuses on the knowledge, beliefs, values, attitudes and skills of rural people. It examines the appropriateness of these in the light of the probable future conditions under which these people must live -- conditions which in many cases are subjected, or probably will soon be subjected, to substantial and disturbing influences emanating from urban centers.

3. ERUT focuses on the role that education has played, and could potentially play, in transforming such knowledge, beliefs, values, attitudes, and skills in ways appropriate to probable future demands and opportunities originating in urban centers.

SOME KEY CONCEPTS AND TERMS

A fundamental difficulty in analyzing this enormously complex transformation is that of coming to grips, in meaningful fashion, with what precisely is involved in the process. The problems, on the whole, tend to be understood intuitively rather than to be rigorously defined. As a consequence, in the absence of generally accepted -- or at least carefully stated -- basic assumptions, it is difficult to arrive at generalizable conclusions. A second and corollary consequence of working in a gray area of assumed mutual understanding is the risk of
insufficiently distinguishing between objectives and the means to attain them, specifically between education and schooling.

It is, therefore, imperative to describe at the outset, with at least some measure of precision, the meanings which we assign to the principal terms defining the boundaries of our inquiry: process, education, rural, urban, and transformation:

**Process:** In the context of this study, this is a change from one point defined as "rural" toward some point defined as "urban." The process may be viewed as it affects an individual or a larger social group. It encompasses change of distinct aspects of the patterned behavior of an individual or a social system, examined in isolation or in various combinations. The process may involve movement along some continuum, or movement in discontinuous steps; and it is possible that different components of the individual or supra-individual behavior system undergoing change may move at different rates, in different manners, and possibly in different and divergent directions.

**Education:** This is the development, through teaching, training and learning, of the capacities required by an individual to adjust to a given environment and to function effectively within it. Education can be formal or informal, and is most emphatically not limited to functions that can be exercised within a formal school system.

It is important to bear in mind that, in the context of the concerns with which the ERUT monograph series deals, a given environment will itself be in the process of undergoing change, and that this change affects, and is affected by, the education of the individual.

Neither schools nor the wider educational system can anticipate the specific environment to which the individual may have to adjust. At best, only intelligent guesses can be made. Educational purposes will be served the more effectively to the extent that adjustment techniques are taught -- methods of problem-solving rather than precise steps, theory related to implementation rather than specific skills.

The development of any given skill is a function of training for specific discrete tasks. There is considerable evidence that such training may be facilitated by teaching to a level sufficient for an understanding of the relationship of the specific task to the immediate setting in which the task is accomplished.
The complement of teaching and training is learning: the search for, and the willingness to accept, new knowledge and new skills. Although in traditional schooling situations learning is often assumed to be a passive quality brought about through teaching by rote, it is in fact an action process which can operate independently of specific teaching and training activities. Those educational processes that take place outside of schools -- the socialization of the child in the home and community -- generally depend much more on spontaneous learning than on formal or informal teaching or training; the same is true of the acquisition of many of the skills imparted through traditional apprenticeship systems.

The effectiveness of the educational system depends on the interrelation of teaching, training, and learning, and can be thought of -- in units that need to be established and described -- as the rate of progress toward goals at various resource costs. This, in turn, requires some ex ante definition of goals. A serious problem is, however, that in most situations educational goals tend to be tacitly assumed rather than clearly and specifically defined, largely because of the difficulties -- political and intellectual -- of specifying the complex and often mutually incompatible objectives to which educational systems seek to address themselves. Resources, in terms of economic costs, can somewhat more easily be specified and quantified, although inevitably opportunity costs are subject to changes originating in the changing pattern of societal objectives.

Unless the distinction between schooling and education is clearly kept in mind, there is danger of confusion arising between the part and the whole. This risk is especially great in developing countries where schools, to a much greater extent than in the industrial nations, set a different course for the child than that which regulates his out-of-school activities. The norms a school system assumes, or seeks to develop, are often not at all compatible with the norms dominating the family and wider social environment of the child. School and home make quite different demands and often assign quite different responsibilities.

**Rural:** This term refers to the economic, political, social and cultural activities and relationships which occur in a setting where income for subsistence and exchange is primarily derived from crops or animal husbandry undertaken by a majority of the economically active population in the geographical unit under study. The characteristics of the rural society are postulated to be those associated with its last period of reasonably stable equilibrium, where the economic order is associated with a pattern of social and political organization which tends to perpetuate itself without significant rapid change and which, if disturbed, tends to regain its
old equilibrium. The characteristics of rurality are not universal but specific to a particular population. The complexity of the technology of production and the character of the social relationships associated with it may vary from place to place, from a quite primitive society at the hunting and gathering stage, to the sophisticated irrigated agriculture of pre-Meiji Japanese peasantry. This definition of "rural" is thus obviously not restricted to subsistence farming. It is quite compatible both with the production of a marketable surplus and with a concept of social mobility within a relatively closed system, although the wide and varied contacts that may be associated with markets and mobility are likely to bring about events that will upset the stable equilibrium and set in motion a process of transformation.

Urban: This term refers to conditions where land in a given geographical area, under the control of a given community or its individual members, is primarily occupied by buildings, with high residential density, or by arteries of transportation; where there is substantial occupational specialization and diversification of services, with few, if any, people engaged in agriculture or husbandry; and where there is a high concentration, in absolute as well as in relative terms, of a "pace-setting" elite and "pace-setting" institutions in most activities other than natural resource development.

The urban versus rural distinction may be regarded as a nearly mutually exclusive one at its extremes; so may the distinction between hamlet or village versus city; but a "town" may be either predominantly rural or predominantly urban.

Transformation: This refers to a process of change from knowledge, beliefs, values, attitudes, and skills that are typically "rural," to those that are typically "urban." Again, the attributes to be regarded as "rural" and those to be regarded as "urban" will vary from culture to culture, society to society.

Despite this variation, however, the notion of "modernization" is important, and indeed almost implicit, in our conception of the rural-urban transformation. The conceptual definition of "modernization" in these monographs derives from Levy (1966) and focuses on the technological setting of behavior, specifically on the increasing use of inanimate sources of energy and the increasing use of efficient tools. Levy and others have shown that these technological changes bring about increasing specialization which, in turn, is associated with -- and indeed requires -- changes in people's knowledge, beliefs, values, attitudes, and skills. Broadly speaking, these changes are
those which give emphasis to universalistic recruitment to role relationships which are defined in functionally specific terms, perceived in affectively neutral ways, and characterized by rational cognition. Attitudinal attributes of "modernity" have been clarified by writers such as Smith and Inkeles (1966) and Kahl (1968).

It should be noted that modernized technology, social structure and attitudes frequently occur in non-urban settings, as witness agriculture in countries like New Zealand, Japan, or Denmark, or the "modernist-activist" attitude structures found by Kahl among members of certain social strata in smaller towns in Brazil. Moreover, "urban" behavior and attitudes are often non-modern, as for example those of the large number of ex-tribal people residing in West African cities like Ibadan, or those of the tens of thousands of peasant immigrants in the barriadas surrounding Arequipa. Finally, it should be stressed that "urban" styles of life can and do vary within and between cultures. "Urbanity" in São Paulo differs substantially from "urbanity" in Rio de Janeiro, and both in turn differ from "urbanity" in Bangkok.

Despite these observations, it is also true beyond question that, in general, urban styles of life around the world are relatively "modern" and, indeed, could hardly be otherwise. Empirically, it works out that most urban communities in the world are more "modern" than are most rural communities. For these and other reasons the ERUT project looks at education affecting the enculturation and socialization of rural people from the standpoint of whether such education is likely to promote the "modernization" of knowledge, beliefs, values, attitudes and skills. The working assumption is that in general, but with numerous and substantial adaptations to local cultural and social conditions, education that promotes modernization will also enhance the typical rural person's ability to defend himself against unduly punishing demands from urban centers, as well as to take advantage of some of the opportunities made possible by these urban centers.

SOME ETHICAL CONCERNS

It may be said, then, that our chief concern in the ERUT project is with the modernization of the lives of rural people, whether these lives are lived out in rural or urban environments. This emphasis on various alternative forms of modernization as the dominant mode of transformation is one for which we make no particular apology. It is our belief that a general solution to the pressing problems of rural people is more likely, by far, to be found somewhere within the bounds of this complex concept, than anywhere else. At the same time, we are ethically much concerned with what
Black (1966: 26) has termed the "agony" of modernization, and believe that programs of modernization should be adjusted wherever possible to the cultural and individual preferences of the persons involved. On ethical grounds (and indeed on demographic, economic, and political grounds as well) it can also be argued that most of this modernization ought, in the typical developing country, to take place in a rural setting or at least in smaller towns, as distinct from urban settings which typically take the form of slums, barriadas, or bidonvilles where social services and economic opportunities are woefully inadequate, and human exploitation and misery are rampant.

We see in properly planned educational programs a major potential resource for the minimization of the agony of modernization. Moreover, we by no means exclude from our thinking the possibility that educational programs that place increased emphasis upon selected traditional content can help to reduce such agony and, indeed, even serve to advance certain overall goals of modernization. This is especially true where "traditional" attitudes toward work, planning, or saving are appropriate to modernization (as in Japan and certain parts of Melanesia). It can also be true in other situations where this is not the case. Thus, for example, the Ministry of Education in Thailand could conceivably strengthen emphasis on traditional Buddhist teachings concerning the inappropriateness of undue craving for material and monetary values, which in turn might conceivably have some marginal effect in discouraging migration of farmers to the megalopolis of Bangkok. This would be desirable from the standpoint of keeping the level of in-migration closer to the optimum level appropriate to modernization.

SOME SALIENT FEATURES OF THE LESS DEVELOPED NATIONS

It may be well here to summarize briefly some selected critical differences between countries and societies that are typically considered "developing" -- or, less euphemistically, "underdeveloped" -- and those that by contrast may be thought of as "developed." In this brief section we shall speak very generally, and it is to be understood that there are many exceptions to the generalizations we make, and many variations upon the themes we adumbrate.

Before the intrusion of disturbing forces from the outside, the horizon of a farmer in the traditional society of an undeveloped country was typically limited to the family or clan, or to the village and its immediate surroundings. Local agricultural communities were inward-looking and inherently resistant to change. The existing social order was acceptable and this, in turn, was built on an economic base which, according to some evidence, had reached something like an
optimum level of resource allocation to sustain it. Depending on the political framework of the territory enclosing the village, it was subjected to greater or lesser pressures; but these were not generally directed toward change. The traditional society, if it was able to survive at all (and, of course, many were not) did so by possessing sufficient resilience to accommodate itself to such pressures as war, taxation, epidemics, drought and other man-made or natural calamities. Generally, it was able to react successfully to such pressures and to regain its former equilibrium. The society was not interested in change, and by its very nature unable to bring about change. Then came the impact of Western technology, as a precursor of Western political thought. These forces tended to destroy first the economic underpinnings and then the political framework within which the traditional society could perpetuate itself.

Prior to modern contact, some traditional societies had elaborate formal educational systems, some had rudimentary ones, and some had none (Hertzog 1962). But as the power of traditional rulers and structures of control declined, colonial administrators, missionary educators, foreign educational advisers, and others proceeded to introduce, if indeed they did not impose, their own concepts of formal education. The result has been that in underdeveloped countries today the very definition of education, its purposes and hence its content, reflects the needs of outsiders or, at best, the needs that well-meaning outsiders have imputed to the society to which they brought education. At least until the concept of education is fully assimilated by an indigenous elite (and often for a long period thereafter) Third World education in practice tends to follow, with some time lag, educational developments abroad. It will, to that extent, continue to reflect the conditions, with respect to objectives and resource needs, of an environment other than the one in which it functions.

The result is often a tragic mismatch of function and need. Third World nations typically face a wider range of needs than do the industrial nations on which they have patterned their educational systems -- wider in the sense that their needs might range all the way from preparing local people to run a highly sophisticated oil refinery, down to helping slash-and-burn agriculturalists modestly improve their productivity. This wider range of needs, pressing against much more severely limited resources than are available to developed nations, makes for a much broader -- and hence more difficult -- range of choice. And this difficulty is exacerbated by the pressure of time: governments of developing countries seek to catch up quickly, so that instead of an orderly evolution over decades they seek to traverse a widening gap in a matter of years.

There is in all developing countries considerable emotional and political pressure for the introduction of universal "free"
primary education, and for the eradication of illiteracy. At the rice- or yam-root level in the villages, this pressure results partly from a lack of sophisticated understanding of what free education means. There is a simple faith that free education genuinely costs society nothing by way of other opportunities foregone. Popular pressure for education is also rooted in the illusion of economic rewards to the educated, a promise that for the overwhelming majority of children moving through the school system simply cannot be fulfilled.

But the pressure for education is generated not only within the underdeveloped country; outside advisers and the broad spectrum of international assistance agencies also preach the gospel of the joys of education and literacy, often without knowledge of or regard for the country's needs and resources or of the effects of expanding education on overall national development. Thus, Ashby (1960: 3) points out with evident pride:

"We could have approached this task [of advising the Federal Government of Nigeria on post-secondary and higher education] by calculating what the country can afford to spend on education and by proposing cautious and reasonable ways in which the educational system might be improved within the limits of the budget. We have unanimously rejected this approach to our task."

How easy it is to be high-minded where one bears no responsibility for action ... or for its consequences!

Another serious problem is that the language of instruction in many Third World countries is not the mother tongue of the child, often even at the primary level. Teachers, who are frequently untrained, themselves often lack fluency in the language of instruction. Yet throughout the developing world, there is a need for fluency in English (or French) for anyone who wants to function at a professional level, certainly if he seeks higher education on a par with what can be obtained in developed countries. This requirement, to understate the matter, places serious intellectual and emotional demands on the individual student and makes substantial claims on the limited resources available for education. It should be added that problems arising from the growing use of English as the lingua franca of professional education and universal communication do not affect people of underdeveloped countries only. (We know of no reason to believe that Finns, Hungarians, or Japanese have an appreciably easier time learning English than Ibo, Thai, or Quechua.) But people in the developing countries must also, and simultaneously, cope with the much more complex problems of shedding the cocoon of traditionalism and adjusting to the modernizing world. They are thus much more thoroughly uprooted by the educational process in that they must not
merely acquire new linguistic skills, but must at the same time learn to use this new language as a tool for the acquisition of new patterns of thought and behavior.

The problems of the costs of education, too, are quite different in underdeveloped countries. Broadly speaking, the element of "earnings foregone" in the cost structure of education is negligible, or at least significantly less important than in the industrial countries. For the majority of primary school leavers, and increasingly for those completing one or more cycles of secondary school, there are simply no jobs available; nor is there much convincing evidence, except possibly in pastoral economies, that child labor is required to maintain production of the family holding. This means that many of the assumptions that underlie the planning of education in developed countries, and many of the implications inherent in discussions of education as an investment, simply do not apply in developing countries. To use them as a planning base under Third World conditions is not merely to inject an irrelevant dimension, but is actually to invite a situation in which costly mistakes will be made and in which the allocation of the burden of educational costs may be distorted to the distinct disadvantage of the poorest members of the society.

By contrast with the developed countries, in the Third World it is not possible to make one of the principal functions of the educational system that of assisting young people to adjust to a changing job environment. The number of available jobs grows at a much slower rate than the number of people qualified to fill them. This dearth of employment opportunity is not necessarily the result of faulty planning. It might merely reflect the fact that there is a shortage of investment opportunities. This, in turn, and for a variety of reasons, is rooted in the very fact of underdevelopment, part of which reflects a lack of education and of relevant skills. This circularity provides some justification for a rapid expansion of education, although it remains to establish proof that the vicious circle of which poverty and ignorance are links can most rapidly and most economically be broken through investment in mass education. This last point is one that some educators will accept only with reluctance, and which every educational planner must discipline himself to keep clearly in mind.

The economies of developed countries have certain complementarities of skills in relation to available investment capital, markets and infrastructure -- such as power, water, transport and general urban services. Lack of such complementarities is a symptom of underdevelopment. It reflects, among other things, the lack of investment opportunities brought about partly by lack of absorptive capacity. This is caused by the unavailability of relevant skills, which in turn is a result, among other things, of the lopsided structure of school
systems with respect to ratios of terminal students at different levels of the education pyramid. And finally, even where adequate skills are available in the proper ratios, complementary services and facilities might still be lacking.

There is thus little point in viewing education as a means of enabling a graduate to pursue a career involving frequent shifts from job to job, at ever-increasing levels of complexity of responsibility. While this might be realistic for a very small number of graduates in the Third World, in general the job system does not work this way. Those fortunate enough to find non-agricultural jobs at all are not likely to give up the security, seniority, and assured perquisites of whatever position they hold, in order to take a chance on another. Their need, therefore, is for timely upgrading of skills rather than preparation for frequent job change. If new and distinctly more complex positions open up as a result of new investment or changes in technology, it is much more likely that these new jobs will be filled by new entrants into the labor force, rather than by persons already employed seeking advancement by changing position and employer. Not only economic pressures, but also social tradition emphasizing particularistic ties of loyalty, generally militate against this. Under these circumstances, it would seem important for the educational planner to devote considerable attention to problems of training primary graduates and others in rather specific skills, and here we include the upgrading of skills of workers already some years in the labor force. This is not, of course, to gainsay a need also for general education, especially in the basic communication and computation skills; and certainly some members of every Third World population need broad and deep education, as distinct from training (Staley 1968: 7). Nonetheless, it is our feeling that much more emphasis should be given to ascertaining what are the best training programs for a given country's specific needs. In common with the views of Foster (1965), and with the case study findings of Al-Bukhari (1968) and Fuller (1970), we are inclined to believe that much more use should generally be made of industrial, non-school resources in providing this sort of training.

Lastly, it is important never to lose sight of the very serious limitations of the school system in the broad process of development. While such limitations are found also in the industrial countries, they are of a whole different order of magnitude in most of the Third World. There, even the best-planned educational content offered in schools tends to diverge from, if not indeed to conflict sharply with, the educational influences of the out-of-school world of the child. While in developed countries home and school tend (speaking relatively) to reinforce each other, in modernizing countries school and home exert different influences, make conflicting demands, and offer competing challenges to the mind of the child.
SOME MAJOR "ERUT" PROBLEMS

The position taken by our ERUT group is that education for rural people must take into account the ineludable fact that in most Third World nations the great majority of the rural population must live out their lives in a rural setting. Responsible planning, therefore, must take into account the need to educate people for rural adult life. This does not mean, of course, that such a rural life need be one of poverty or indignity. Rural life can be modernized, and traditional farmers can be educated, motivated, guided, and assisted to become modern farmers. A realistic, responsible, yet reasonably hopeful transformational flow chart might be something like the following:

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Traditional Agriculture | Modern Agriculture | Urban Residence
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The width of the various arrows suggests the relative size of the flow, for a given period, in a modernizing nation. Note that the preponderant flow is from traditional to modern agriculture, and that the second heaviest flow is from modern agriculture to urban employment. Ideally, the more traumatic alternative of an individual's moving from traditional village life directly to urban life would be held to a minimum, consistent with prevailing values in the culture concerning opportunity for social mobility. It would also seem advisable to discourage the flow from urban employment to modern agriculture, although this might be somewhat less traumatic on the whole, and might also produce societal benefits in that urban sojourners who return to their villages sometimes bring with them useful ideas about technology, management, and productivity. No argument whatever could be made in favor of a shift from modern agriculture to traditional agriculture, for it is by practicing modern agriculture in the presence of traditional agriculturalists that the shift to modern agriculture is fostered. Moreover, a shift from modern to traditional agriculture would also certainly be accompanied by a pervasive sense of frustration and defeat. And finally, the flow from urban employment to traditional agriculture would in general seem to be most traumatic and socially useless of all.

The above flow chart is based on "average assumptions" concerning the pattern of development. A social or educational planner from Country X, if he were to attempt to use it heuristically, would naturally need to adapt it to the pattern of development in his own
country, as well as to whatever other cultural, social, or political considerations he deemed relevant.

The flow chart illustrates that a first imperative of the development process (almost regardless of what country, culture, or resource base one considers) is to transform traditional farmers into modern farmers, while training persons for industrial and service employment at the rate at which they can be productively absorbed in an expanding modern sector. Empirical observation makes it clear that, in terms of numbers of people, the shift to modern agriculture is overwhelmingly more important than that to urban employment. A by-product of this rural transformation is the sloughing off by the traditional rural sector, in the process of modernization, of people surplus to its immediate needs as the new technology of modern agriculture makes workers redundant on the land. Unless an expanding and diversifying modern agriculture can provide employment for these surplus workers, many of them are likely to join a dysfunctional manpower flow to the large cities. For the attraction of the cities is indeed great -- and it is an attraction rooted less in the demand for labor in the number and with the skills that rural migrants can bring with them, than in the intrinsic appeal of urban living.

Much of the flow of personnel from rural to urban residence is largely beyond the scope of social and economic planning by governments, except in the case of a few highly authoritarian or totalitarian governments. In many situations, the best that government planning can do is to work with private planning, and with unplanned trends, in such a way as to mitigate the most undesirable consequences in terms of maldevelopment for the society, or trauma and frustration for the individual. Least excusable of all, however, are those educational policymakers who, far from mitigating the undesirable consequences of economic change and migrational trends, actually help to cause maldevelopment and trauma.

Such irresponsibility takes many forms, most of which can be summed up under the heading of "urban bias." Curriculum content and method of instruction tend to be devised by urban educators who are often both unacquainted and unsympathetic with rural life. The result, in many cases, is that even in the early grades of the simplest village schools, the course content and "flavor" of the teaching tends to alienate children from their rural setting. Explicitly or by implication, rural children learn to look at the environment in which they live -- and in which the great majority of them must necessarily spend the rest of their lives -- not critically, but with condescension and contempt. The school child soon gets the message that only a dull student, or one totally devoid of ambition "to better himself," will remain on the farm. Instructional content that might be directly relevant to rural living is often treated as something of a joke by teachers who themselves may only recently have escaped, if at all,
their own rural background and orientation, and who preach the virtues of "urbanity" with the often only partially knowledgeable zeal of the convert.

The urban orientation that prevails among most school systems throughout the Third World reflects, of course, the fact that these systems rarely have strong indigenous roots. This orientation is socially reinforced from a number of directions, three of which should be mentioned. First, teachers are trained to follow a pattern developed to meet needs quite different from those of the rural people and environment for whose improvement they are ostensibly working. Second, a narrow manpower approach to education focuses primarily on only one of the resource bottlenecks to development, that of persons qualified for a limited number of relatively specialized tasks. Third, there is the fact that, not uncommonly, the children themselves, and/or their parents, are inclined to place a value on urban-oriented education as the road to rewards of wealth and status that are thought to be available only to those who move away from the land. Improvement of the rural setting -- a critical requisite for development -- is not generally a recognized or accepted alternative, and the system as it operates is not geared to promote this improvement.

The too-frequent result is that rural schools give the rural child little that would prepare him to function effectively in either a rural or an urban setting. Yet, upon completion of a few grades or, at best, with the formal evidence of rudimentary literacy that a primary school certificate provides, millions of young people throughout the Third World drift each year to the cities. There they hang on as casual laborers, or permanent job seekers, until they have exhausted whatever means of support they may have, or can borrow. They then trickle back, defeated, to the village. Because an urban setting exercises some modernizing influence even on those at its margin, they may well function somewhat more effectively in the rural setting upon their return to the village, but it is likely that this limited advantage is more than offset by a pervasive sense of failure, the awareness that they did not make it. These involuntary returnees are likely, then, to be not only incompetent at modern agriculture, but contemptuous of all agriculture. This is true wastage, both individual and social. A flow chart of the process might look about like this:

![Flow chart of the process](chart.png)
All of this is not to say that no rational educational innovations have been successfully implemented. It is true, for example, that little black children in former French African territories no longer chant in French: "Our ancestors, the blue-eyed, fair-haired Gauls...." The paper-hanging and fireplace-building tests required to satisfy standards set for London City and Guilds certificates are no longer part of the vocational school curricula of Ghana, Nigeria and Sierra Leone. And the linguistic rivalries of Flemish and Walloon colonialists are no longer inflicted on the youngsters of the Kinshasa Congo. Yet by and large education in the developing countries still plods along the well-worn path of Western educational patterns petrified around the turn of the century. At great cost this path is being widened in many nations to accommodate broader streams of pupils. However, the questions: "Where does this path lead? Is this the direction in which we want to go?" are asked all too timidly, if at all. And all too often the school system remains the road from stagnation to frustration. It has not yet become the steep ascent toward a more rewarding existence and a partial fulfillment of the expectations generated by the impact of new economic and political ideas on the traditional society.

There are obviously many reasons why education has largely failed to contribute adequately to the promotion of economic and social development, and we shall here list only a few that we consider important. Foremost among them is the conservative orientation of the ministries of education, often rooted, it would seem, in the modest professional qualifications of the educators who staff them. Such educators have a vested interest in the status quo, and are more at ease with the old and familiar than with venturesome steps into the unknown. Timidity and the quest for stagnation are rationalized with emotional pleas to maintain "equivalence" -- standards of equal "excellence" to those of developed countries -- regardless of how outdated or irrelevant these standards may be. Another reason for maintaining an unproductive status quo is the fact that within the government structure there is generally no effective way of dealing with problems of education as a whole. Consequently, education for development, and for the rural-urban transformation, is largely restricted to the narrow limits of school systems that fall within the jurisdiction of a ministry of education, thus tending to exclude some of the more promising approaches, such as community development, training-within-industry, extension education, and the like.

Our somewhat abrasive treatment of ministries of education in the Third World is hardly intended to be a wholesale condemnation. Nor, for that matter, is it intended to imply that educational planning in the United States is any paragon of sophistication or responsibility. We, too, have our "ERUT" problem, and in general we are handling it badly. (Sims' Monograph No. 9 in this series deals with one aspect of this.) But happily there are signs, both within this country and
in many less developed lands, of the growth of a small corps of dedicated planners who would do things differently. It is to these planners that the following section is primarily addressed.

**SOME APPROACHES TO SOLUTION**

It is easy enough to criticize the existing situation and point out weaknesses, as we have done. It is much more difficult, and indeed humbling, to try to spell out effective solutions. In this section we will make clear some general approaches toward solution which might be of some value to a planner from Country X who wishes to plan in a responsible fashion.

We should perhaps start with a caveat. In recent years a great deal of mischief has been committed by some economists, and by their inclination to be seduced by the joys of indiscriminate model building. There is today a definite tendency to equate the validity of an economic model with its elegance. Our position is not against models; indeed, to take such a position would be, in an ultimate sense, to oppose systematic thinking. Our position is, in fact, quite friendly to the general notion that in systems analysis and quantitative model-building lie great hope -- perhaps the major hope -- for the future of educational, economic, and social planning. But models can be no better than the assumptions which underlie their construction; and not enough is yet known either about the basic facts or about the intricate relationships among them to make models for the purpose of planning whole educational systems now more than clever toys. To cloak the still incalculable with a spurious mantle of precision, as some model-builders now do, is, like the "Emperor's New Clothes," merely to draw attention to nakedness.

The most obvious need of the planner from Country X is to spell out with reasonable clarity the overall objectives of the educational system in terms of the promotion of development, and to define the responsibilities of various parts of the total system in meeting these objectives. Both the in-school and out-of-school sectors should be considered. The relationship between the goals that have been set and the resources that are available must be clearly defined. This means prioritizing among the various goals. This entire set of specifications must be arrived at, and expressed (if at all) in terms that are politically and socially acceptable to the population of the country concerned.

Proper planning requires that criteria of success be specified in advance, so that reasonably rigorous evaluation may subsequently be carried out. We recognize the difficulty of obtaining indices of relative success or nonsuccess which are at once practical, reliable, and
valid. Nonetheless the effort should be made. We recognize, further, that in planning education for development, "everything depends on everything else." These interdependencies are often difficult to specify in detail. Again, however, an effort should be made. Since it is extremely difficult to analyze more than a few interdependencies at a time, extreme care must be taken to spell out in detail how a specific evaluation of one aspect of a program relates to the whole.

A clearly defined time perspective is also crucial. In the field of educational development lead times are significantly longer than in almost any other developmental activity except perhaps biological research in medicine and agriculture.

Also essential is an awareness that goals and expectations, costs and returns, relate differently to each point of a social and economic continuum, ranging from the individual at one end to the society, represented by a national government, at the other end.

In planning education for the rural-urban transformation, it is important to define the educational clientele. This means, first, estimating the number of children who are at any given time rural, who can actually be shifted from rural to urban vocations on the basis of realistic assumptions about development over the next decade or two. It is likely that in most Third World countries such a shift can involve only a relatively small minority of children. The fact that this minority might be crucial to the development process should not be allowed to obscure this basic fact. By and large, therefore, rural schools must focus upon the needs of persons destined for adult life in a rural environment.

The above considerations do, however, underline two further needs. First, there is the need to devote much more attention than has generally been devoted, to selection ratios and to criteria for the identification of those kinds of rural persons required by the urban sector -- rather than to let this problem solve itself by default on the assumption that the personnel needs of the development process are best met by the creation of the largest possible selection pools at each level of the school system. Secondly, the real alternative of a productive, dignified, fulfilling life on the land must be created -- and this means that government must conceive, coordinate, and support a variety of rural development programs, in which the educational vector is but one of many.

Lest the above-sketched approach to responsibility and realism seem unduly hardhearted, we should here add that it is our stance, on both ethical and functional grounds, that every polity, however underdeveloped, owes to each of its children certain basic educational rights, and that among these are the right to learn to read and write, the right to learn to do simple calculation, the right to learn basic
subsistence skills, and the right to learn how to appreciate and enjoy the essentials of one's cultural heritage. No planner should take it upon himself to decide which children should receive a primary education (however this might be defined in the particular country), for the child who is thus denied is, in fact, condemned to a marginal life. He is excluded from education, not on the proper grounds that he is incapable of being educated, but on the basis of a sheerly arbitrary decision (Stolper 1966).

Once it has been firmly decided that the educational system must provide rural children with education relevant to rural needs, the question must next be confronted as to just what sort of educational content will best serve these needs. The studies summarized later in this volume will have more to say about specific details of this issue, especially those by Carpenter, Buripugdi, and Seymour. One key consideration is the need for balance between content that will dignify rural living and inform the student how to be more resourceful in wresting a decent living from his rural resources, and content that will inform him about his national environment in such a way as to equip him to participate meaningfully in such relations as he is likely to have with that environment. Meaningful, positive participation might take the form of voting intelligently for candidates for the national legislature, defending himself effectively against attempts by urbanites to cheat him in political or economic terms, securing for himself resourcefully the full economic benefit of extra effort exerted to take advantage of national market opportunities, etc. Somehow, this balance must be achieved in such a way as not to depreciate the self-esteem of the ruralite by unintentionally bedazzling him with a false glitter of the alleged superiority of urban life, particularly where relatively trivial amenities and differences in life style are concerned. Somehow, the ruralite must learn that he can be just as worthy a citizen of Country X by remaining rural as by becoming an urban migrant -- if not, perhaps, just a shade worthier. We do not, by the way, regard all this as an easy task. Among us we have spent many man-years in village residence, much of it in the Third World, and we are under no illusions as to the genuine hardship of village life for most villagers, or the genuine comfort of urban life for those with adequate income. But difficult or not, the task must be undertaken, and we are convinced that much more creative curriculum-building efforts can be made on this front than have been.

It is by now generally acknowledged that to hope for improvement merely by altering curriculum content is hardly a sophisticated approach. Much of what a child learns -- be it intended or otherwise by the planner -- has little to do with the formal content of instruction. The method of teaching, and the general atmosphere and "institutional press" of the school, are at least as important. The best curriculum content in the world can hardly be effective if taught by
teachers who are untrained, unmotivated, or unrewarded. The planner in Country X would, therefore, do well to inform himself as to the patterns of recruitment, selection, and education of teachers, as well as patterns of posting, promoting, and upgrading. Special studies of the "subculture" of the teaching profession in Country X would thus often be highly revealing and helpful to the planner. To post to rural areas teachers enculturated in the city is often to court disaster; even rural-enculturated teachers, unless carefully selected and educated, are likely to have succumbed to the virus of urban bias. Somehow, the kind of teacher must be found, trained, backstopped, rewarded, and retained who will respect rural people and find rural life respectable, who will exert himself not only to make rural schooling relevant to preparing children for rural life, but, equally important, to make children and their parents aware of this very relevance.

So far, we have been discussing ways of re-orienting existing rural school systems from an urban bias to a rural bias. We have indicated some of the difficulties in such an operation, and these difficulties can be of Herculean proportions, especially in recently ex-colonial countries that have copied the metropolitan educational mold down to the last detail. Indeed, it might well be that in some Third World countries this mold is so firmly established, and the resources for changing it so limited, that attempts to force a rapid re-orientation might weaken the existing school system further without securing corresponding progress toward re-orientation. In such a case, the planner might make the strategic decision that, in the short run at least, it is better instead to strengthen the school system (rural schools included) to perform more effectively the task of filling urban-generated needs. This would require a clear formulation of goals and a highly selective expansion of types of schooling geared effectively to meet manpower needs based on projections of specific demands for skills to underpin social and economic development at specified projected rates over specified periods of time.

Especially where the ruralization of rural schools is so difficult, but in other cases as well, it is important for the planner to seek new and innovative approaches looking toward the possible establishment of alternative educational channels. Such channels should usually focus primarily on rural adults of post-school age who are economically and socially already firmly committed to remaining in the village. The education of these adults in knowledge, attitudes, and skills relevant to modern agriculture and modern rural living might serve as a corrective to the urban bias in the schooling that these adults received earlier, or in the schooling that the children of these adults are now receiving.

Around the Third World are numerous examples of such attempts to create alternative educational channels. Many of these fit under
the broad rubric of "community development." Of these, many are handicapped by the "faith healing" approach which has left in its wake innumerable bridges that have crumbled, roads that have washed out in the first rain, and buildings erected to provide a variety of services that in fact were never provided. There is danger, too, that some projects of this sort might turn out to be little more than corvee labor, thinly disguised. And even where this is not the case, even where a project generated considerable voluntary local momentum, enthusiasm can quickly wane after the ceremonial ribbon has been cut, leaving the community exhausted, dispirited, and no closer to the "modern" world. The monograph by Foley in the present series has more to say about such community education and action programs, and their varying degrees of success.

We certainly have no desire here to denigrate all "community development" programs as futile or ill-conceived. Certainly there are cases on record where change agents and adult educators have been genuinely effective in getting community members to cooperate effectively and make permanent changes that have definitely improved the quality of rural life (Goodenough 1963; Textor, et al. 1958). Nevertheless, we think the planner in Country X would be wise to consider also a variety of more flexible, more individualized educational approaches within this general community development tradition. It would be desirable to emphasize programs in which each interested individual (or kin group) can act in his own way and at his own speed, thus perhaps permitting the development of a community or group spirit much more consistent with the overall objective of easing the process of transition from a traditional village to a modern rural society. Stimulating a community to grow better yams or get higher yields of cotton, or teaching the local cobbler to make better shoes, serves not merely to increase individual economic well-being, but also builds on existing knowledge and, therefore, increases the range of effective choice to open doors for the introduction of new ideas needed to adjust to a modernizing environment. Instead of herding peasants with shorthanded hoes to scrape dirt for a village road, it is often a much better use of time and talent to encourage them to grow more things better, and then build the road with modern equipment once farm production rises to the point where trucks are needed to transport the crops to market.

Work along these lines has been successfully undertaken in Iran, and is described by Smither (1967). Much can also be learned about the educational pay-off of the activities of the Compagnie Internationale du Development Rural in the Ivory Coast and the Cameroun Republic; of SATEC in Senegal and of the rural development projects of the Eastern Nigeria Ministry of Community Development.

This educational strategy of reaching out directly to rural adults also offers hope of reaching rural children through their
parents. It is psychologically and politically easier to resist the temptations of urban bias in designing a program for adults who are already committed to rural living. And on the whole it might be easier to convince such an adult of the pitfalls of urban life for his own child, than to convince the child himself. In the longer run, too, this type of approach could have the salutary political effect of causing parents to demand more relevant education for their children.

THE CHAPTERS THAT FOLLOW

In the next chapter we shall summarize certain aspects of Sims' Norm Set Theory considered to be of salient relevance to ERUT-type research. Sims draws from existing theory in psychology, sociology, anthropology, and political science -- but hardly at all from economics, which is one reason for the economic emphasis of this introductory chapter. Assuming economic soundness of the plans and trends that surround a given educational plan, we feel that Sims' Norm Set Model is of heuristic value to the planner of an ERUT-type program who wishes to proceed systematically and responsibly.

In Chapter Three we summarize the approach and findings of the three country case studies already published. ERUT Monograph No. 1, by Satorn, examines certain professional attitudes and norms relevant to education for development, and to ERUT, among a sample of key officials who set both the policy and the tone of primary and secondary education in Thailand. While Thai education, in our judgment, does suffer from an urban bias, that kingdom at the moment is exerting numerous efforts to modernize agriculture, and policymakers do perceive educational inputs as being relevant to that end. Chapter Three also summarizes Carpenter's findings concerning an adult education program in Turkey. This program seems to be producing results that are "rational" from an ERUT point of view -- but, interestingly enough, that are largely accidental from the standpoint of the stated goals of the program. Finally, Chapter Three summarizes Foley's research in the Philippines, which discovered numerous structural and cultural reasons circumscribing the great potential effectiveness of the rural school teacher as an agent for promoting the modernization of rural life.

In Chapter Four we examine the approaches of our five researchers whose reports will be published shortly after the deadline for submission of this summary report. Buripugdi, working in Thailand, adduces considerable evidence that the schools could be used to promote attitudes conducive to modern agriculture among rural children -- though little such use has been made of the schools to date. Seymour is
studying, among other things, a curriculum and method of instruction in rural Sarawak that is in many ways quite inappropriate to the stimulation of modern agriculture. Kimball, working in Uganda, examines a large number of educational input variables of potential relevance to the creation of a generation of modern farmers. Benitez, in the Philippines, is concerned with attitude shifts of rurally enculturated young people, few or none of whom will return to live in the village, but some of whom will almost inevitably move into positions of educational policy leadership in the oncoming generation. Finally, Herring, also reporting from the Philippines, examines the direct impact of American Peace Corps rural teachers on their Philippine colleagues, in terms of changes in attitudes toward work. Such attitudes have a tendency to generalize to attitudes toward modernization. And teachers with modern work attitudes might, in turn, reasonably be expected to affect Filipino school children in a variety of ways relevant to the modernization of agriculture -- in a nation whose countryside has already sent far too many unneeded and unemployable migrants to the primate city of Manila.

Thus have our nine researchers attacked their own chosen and varied versions of the ERUT problem, and in our final Chapter Five, we shall make a few concluding remarks as to what, in our view, is the significance of their work.
CHAPTER TWO: NORM SET THEORY AND ERUT RESEARCH

As we indicated in the Preface, ERUT Monograph No. 9, Self-Image and Social Change: Towards an Integrated Theory of Cybernetic Behavior, by Dennis C. Sims, should be read along with the present monograph. However, we recognize that some readers might not have access to the Sims monograph, and for that reason we shall attempt in this chapter to summarize Sims' essential theoretical framework very briefly. It should be emphasized, though, that this chapter does not do justice to Sims' work, and the serious reader is once again urged to read Sims in the original.

THE CENTRAL PROBLEM

The central problem faced by Sims is that of bridging several existing gaps in social science theory which have arisen as a consequence of the separation of micro and macro levels of analysis as applied to social change. Micro analysis is here defined as the explanation of the behavior of an individual on the basis of his internal processes. Macro analysis, on the other hand, is concerned with accounting for individual behavior, or group behavior, or the behavior of other large aggregates of individuals, principally by referring to the social and cultural settings in which this behavior takes place. The social setting may be viewed largely as the system of institutions, roles and statuses which influence individual behavior. The cultural setting refers broadly to the system of shared knowledge, beliefs, values, and attitudes which individuals are expected to take into account in their behavior. Sims has developed his Norm Set Theory in an attempt to reconcile knowledge and insights about human behavior change obtained at the micro level of analysis, with that obtained at the macro level.

Many of the problems to which Sims addresses himself have long been the subject of concern among a variety of social scientists. Anthropologists have concerned themselves with acculturation, revitalization movements, and community development. Political scientists have studied political development, political culture, revolution and evolution. Social psychologists have examined mass movements, leadership, and conformity. Sociologists have been concerned with general theories of social action and change, changes in social stratification and mobility, and community development. Economists have dealt with
problems of economic growth and development. Educators have addressed themselves to educational development and national development. Psychoanalysts have worried about motivations for development and motivations to accept the costs of individual transformations. But there is a need to relate these various levels of approach to each other. While some excellent partial integrations have been attempted, particularly in the studies of achievement motivation and in cross-cultural child-rearing studies, a serious and systematic attempt to relate what psychologists view as necessary theoretical propositions concerning individual change to propositions viewed as being equally necessary for macro change and development by sociologists, anthropologists and political scientists, has, in Sims' opinion, yet to be made.

Sims draws heavily from all the major social science disciplines, except economics. His objective is not to summarize the literature, but rather to select from it those conceptual elements which he considers to be of crucial importance, and to integrate them into a deductive model. He thus draws from the fields of psychoanalytic theory, ego psychology, and social psychology sets of interrelated propositions designed to integrate micro and macro analysis. He develops a model of self-organization, self-maintenance, and self-development which contains several innovations in a theory of psychological development.

In integrating the micro with the macro areas of concern, Sims places special emphasis on two concepts: autonomy, especially with reference to capability, motivation, and goal setting; and legitimacy, especially with reference to "political culture," and changes therein.

SUMMARY OF THE MODEL

In briefest possible terms, Sims' model of the self consists of one or more self-images; a self-image consists of one or more norm sets; a norm set consists of one or more norms. A norm set may be colored by a variety of "elements." Typically, "one or more" means "several."
A given self-image held by a given individual might be schematized thus:

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<th>Self-Image W</th>
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<tr>
<td>Norm Set Wₐ</td>
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<td>Norm Set Wₜ</td>
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If Self-Image W is regnant at a given moment in time, then normally Norm Set Wₐ will govern the individual's behavior. But, depending on the individual's perception of situational and environmental factors, it might be that Norm Set Wₖ or Wₜ will do the governing. The norm sets are in this sense hierarchically organized.

Within a given norm set, norms are not postulated as being organized on a strictly hierarchical basis, though each norm set will have its dominant norm. Dominant norms are usually of an "ideological" character, while non-dominant norms are usually of an "instrumental" character.

A given norm set will be suffused with "elements." An element might be an attitude, a cognition, an evaluation, or a preference.

A DEDUCTIVE SYSTEM OF PROPOSITIONS

Sims presents a deductive system of propositions, starting from some basic assumptions about human behavior and moving to an application of the concept of "norm set" to findings from broad areas of social science. This is a succinct and useful statement of a part of his approach, and we therefore present it here almost verbatim. This will complete our truncated presentation of Sims' Norm Set Model; in the next chapter, we will discuss it further in connection with results from field research.

1. Human behavior is organized.
   1.0 It does not consist of random responses.
1.1 It does not consist of passive reactions.

1.2 It is an open system, cybernetic in its nature, i.e., a self-directing system adjusting output according to the state of the environment.

1.3 It occurs as a part of a set, and there are finite limits in an individual to the number of different, isolated sets of behaviors which can be retained, i.e., every behavior is not independent of all others.

2. Sets of behaviors are themselves organized under norms. Norms are the decision rules for behavior. The organization of behavior will thus reflect the interaction between the content and organization, the hierarchy, of norm sets and the environment as "perceived" by the system. (For this reason many of the following propositions, with appropriate changes in labels, could be applied across all types of cybernetic systems.)

2.0 Sets and their components vary in internal cohesion, salience, consciousness, repression, defense mode, etc.

2.1 Norms are products of interaction between individual and environment.

2.2 Norms do not occur randomly through individual development but reflect cultural patterning and need not be similar from culture to culture.

2.3 All norms are learned. Dominant norms tend to be learned from significant others in childhood development.

2.4 The bases of self-image differentiation are loosely related to the bases of role differentiation.

3. Norms are grouped by the individual in experience into norm sets.

3.0 Development of these sets reflects cultural organization. The content and
3.1 A norm set is usually marked by a partial hierarchical ordering of the norms it includes, and is subject to the laws of balance, consistency, congruity, or dissonance. The essence of these laws, although varying in details is that when A and B are associated with each other in the same mind and one implies the negation of the other, pressure is generated in the form of discomfort. A and B may be norms, elements, i.e., attitudes, cognitions, evaluations, preferences, or other mental constructs and depending on the nature of the situation and other elements associated with A and B, these theories predict various types of outcomes. Typical outcomes might be: 1) reversing the balance of one of the elements, 2) isolating the elements from mutual association, 3) rationalizing the association by redefining the situation or elements, or 4) raising the level of frustration tolerance.

4. Norm sets, in turn, are hierarchically ordered. A given hierarchy of norm sets, taken together with their overall mode of operation, may be considered the equivalent of a self-image.

4.0 An individual may have more than one self-image.

4.1 A small number of self-images and their corresponding norm sets, can organize all of an individual's behavior through the advantages of hierarchy.

4.2 Cognitive differentiation and isolation are essential mechanisms for functional adaptation and boundary maintenance of norm sets.

4.20 Defense orientations function as input filters to norm sets.
4.21 Defense orientations relate environment and memory as boundary maintenance processes.

4.22 Continuity of memory can be maintained through selection of reinforcing items in either an incongruent environment or a congruent environment.

4.3 The hierarchic order of norm sets is maintained through feedback loops.

4.30 New information is selectively perceived, and its meaning is a function of the system's degree or organization in the area to which the input is channeled and the degree of accuracy in the mapping of input on the memory of the system.

4.31 Information is gathered on the efficiency of operation and on resources of the system to alter the output to the environment according to input.

4.32 Information comparison is achieved by mapping on norms and through testing subsystems.

4.33 Maintenance of control within an activated norm set is a function of test routine in the current as compared with subroutines testing past outcomes analogous to the current situation and testing extrapolations of the current situation upon rewards and costs in terms of governing norms.

4.330 The effectiveness of the test is a function of:

a) reliability and validity of current perception;

b) range of associations from memory applied to the current state;
c) accuracy of recall;
d) range of associations imagined from the current state;
e) accuracy of calculation of future states of the environment.

4.3.31 The decision to maintain or produce action governed by a norm set is a function of the outcome of the test routines and random inputs which filter through the selection system to affect current perception or range of associations recalled or projected.

4.4 Within a given self-image, norm sets with higher hierarchical rank may be recognized by properties differentiating them from the lower. In particular, higher sets should be found to:

4.4.0 be more differentiated;
4.4.1 be more coherent;
4.4.2 be more congruent;
4.4.3 be more intense in affect and apply to larger domains of behavior under that self-image.

4.5 Social reinforcement is essential for the maintenance of a structure of self-images and, likewise, for the ordering of norm sets within a given self-image, i.e., the self-image is better described as a steady state than as a passive structure.

4.6 The power of a given self-image or structure of self-images may be defined 1) as the ability to maintain the structure when faced with external challenges to that structure, or 2) as the ability to impose that structure on the environment.

4.7 The greater the internal coherence (ego strength) of a self-image, the less change will be effected
by a given external input conflicting with the state of the system. (That is, the greater the ego strength, the higher the system transformation level.)

4.8 (Corollary of 4.7) The greater the coherence of environmental inputs, i.e., more highly organized the role systems, and the less the coherence of a self-image, the lower the transformation level, and the more subject the individual will be to change.

4.9 The closer the environmental input is to the individual's values, the more highly organized the individual's organization of cognitions and responses (the higher the transformation state, higher discrimination).

4.10 An individual's freedom or autonomy within a situation is a function of the coherence of his activated norm set relative to coherence of the environment as discussed in 4.6 and 4.7. A multiplicity of self-images may be beneficial under environments which are isolated from each other. But see 6, 6.0.

5. Given the selection of one response within a given norm set, the higher is the probability that the following selection will be from the same set given a greater internal coherence in the norm set than in the structure of the environment.

5.0 The consistent selection of a subset of behaviors under a given self-image may be analytically distinguished as the selection of an operating culture or the selection of a role.

5.1 Selection of behavior from an operating culture, or selection of behavior appropriate to a particular role, is a function of the state of the system and the perception of the situation cum social stimulus (see 4.5-4.8).

6. Adaptation of norm sets to the environment can be accomplished through a wide range of psychological processes.
6.0 Some processes may produce reorganization in the norm sets.

6.1 We can classify most major reorganization processes as those of isolation, aggregation, assimilation and accommodation.

6.2 The effectiveness of each adaptation process is relative, and is a function of the relation between the organization of the system and its environment -- particularly the ratio of system resources to input variance.

6.3 The impetus for the generation of new norm sets comes from declining satisfaction produced by the interaction of the existing set with the environment.

6.30 Satisfaction is assessed through testing subroutines (see 4.2, 6.5).

6.4 Evaluative internal standards (or, ideological dimensions of action) are the determinants of the mode of adaptation.

6.40 Processes of adaptation will be selected after first mapping on a sort between the "ideological" dimension as contrasted with the "instrumental" dimension.

6.41 If the behavior following the dominant norm set (or norm) does not pass test routines, behavior will be selected following subordinate norm sets (or norms) within the set or subordinate norm sets following a principle of "least effort." To the extent to which input can be perceived as applicable it will be applied to all existing alternatives prior to activation of the threshold of new norm set generation (see 6.5).
6.5 Norms initially acquired by pragmatic motivation for maximum reward and least cost may under appropriate environmental conditions be transformed into ideological status and subsequently become the basis of a new norm set.

6.50 Such a transition is dependent on a number of environmental factors, chiefly small-group or reference-group support.

6.51 Where the ideological focus of a new norm set is opposed to the ideological focus of action in the larger culture and small group interaction around the new focus cannot be isolated in space or time from the larger culture, small group support may not be sufficient to establish and sustain a new steady state.

6.510 Under the above conditions of opposition and active confrontation the viability of the new set may become contingent upon the ability of adherents to successfully proselytize in the larger society.

7. Norm sets are not dispersed at random throughout societies, mass movements, organizations, or groups.

7.0 A wide variety of dominant norms (and, a fortiori of subordinate norms) can be adapted to a given environment.

7.1 Of the potential variety of norm sets which are viable in a given environment only a limited segment will be developed by a society, mass movement, organization or group.
7.10 The greater the number of bases of role differentiation and the greater the population of individuals, the greater the probability of variation in norm sets.

7.100 It will usually be the case that as one examines larger aggregates within the same larger system of human relationships, e.g., groups, organizations, mass movements, or societies, one will encounter a greater variety in norm sets.

7.11 (Corollary of 7.10) The larger the aggregate and the greater the division of labor or differentiation of function, the wider the range of dominant norm sets necessary among its members, if differentiation of function stems from differences in the bases of role differentiation as opposed to mere number, e.g., specialized knowledge, age, generation, wealth, sex.

7.12 (Corollary of 7.11) The larger and the more complex the differentiation of function in an aggregate, as in 7.11, the more representative the aggregate will be of the patterns of norm sets dispersed in that society.

7.13 Propositions 7.10, 7.11, and 7.12 are increasing functions over time provided that the ratio of variation in environmental input does not increase in proportion to free floating resources available to system regulators.
CHAPTER THREE: SUMMARY OF RESEARCH COMPLETED

In this chapter we shall examine the three empirical country case studies that have been completed to date, those by Satorn, Carpenter, and Foley. These are ERUT Monographs No. 1, 2, and 3, respectively. This order is the order of their relative emphasis on micro variables. While all three authors are concerned with both micro and macro variables, there is some difference in emphasis. Professor Satorn's is the most strongly psychological, in that all of his survey data concern evaluative norms; the author himself, as an expert of long standing on Thai administration, supplies supplementary macro analysis from personal ethnographic knowledge. The key concept of Satorn's research is that of the social role. Dr. Carpenter's study is also principally micro in emphasis, using a key concept of broader scope but less precise definition, that of the "operating culture." Carpenter also analyzes at some length such macro features as the institutional structures within which typical relationships occur between peasant and teacher, peasant and commercial townsman, etc. There is no inherent reason why Satorn could not have keyed his work to the operating culture concept, or why Carpenter could not have keyed his to social role. Professor Foley's monograph emphasizes macro factors most among the three, and as such is squarely within the genre of educational ethnography. His study also provides, however, much rich information on the micro variables relevant to decision-making by individual teachers.

All three authors are fundamentally concerned with the transformation of rural life through educational efforts to alter the norms and behaviors of masses of rural people. The three authors do differ, though, in how directly they focus upon these rural "consumers" of education. Carpenter looks most directly at them, focusing on a sample of Turkish peasants who became students in an adult literacy program. Foley looks most closely at the values, norms, and social organization of a sample of Filipino teachers and then makes certain assumptions as to the probable effects of these teachers on their rural students. Satorn in effect makes a double "inductive leap," from administrator to teacher to student.

The differences among these three approaches are not capricious but reflect both the research situations in which the three scholars were working, and each scholar's intellectual and professional preparation. Of the three, only Carpenter had access to a country and culture where there was an on-going, vigorous adult education program for farmers in existence and available for study.
Foley's initial interest in his subject sprang from a fascination with the so-called "community school" movement in the Philippines. A site exploration trip in 1967 convinced him, however, that by that year there was very little of this movement left to study. He therefore decided to pick up the historical strands of this movement but to concentrate, by ethnographic and survey techniques, primarily on community school-like norms and behaviors of rural and semi-rural teachers. Satorn was unable for fortuitous and technical reasons to do fieldwork directly in Thailand himself, and this limited him to a population of sophisticated administrators who could and would respond to a mail questionnaire.

Each of the three investigators operated from maximum "comparative advantage." Satorn is himself a native rural Thai from a working agricultural background, a fact which makes him comparatively rare among Thais who come to the United States to study for advanced degrees. He is, moreover, a professional educator of Thai educational administrators. Foley is a veteran of Peace Corps service in the Philippines, where he was a teacher in rural schools; he speaks two Philippine languages fluently, and is married to a Filipina teacher and educator. Carpenter, likewise a former Peace Corps teacher, speaks fluent Turkish and conducted his fieldwork in the same district of Turkey where he formerly served as a volunteer.

The Carpenter and Foley studies tend to assume that the rural-urban transformation concerns primarily the transformation of the way of life of a population that will remain in rural residence, and the Satorn study also makes this assumption, though less explicitly. Needless to add, all three authors assume that this transformation will be a modernizing one, in the sense that "modernization" is defined in Chapter One. Indeed, the reader might find it rewarding, in developing an intuitive feeling for the attitudinal and behavioral dimensions of "modernization," to page through the questionnaires used by each of these scholars, found in the appendices to their monographs, where he will discover with ease the "modern" as distinct from the "non-modern" or "traditional" classes of responses to the questions asked. The clear commonality among items appearing on these three questionnaires and those appearing on questionnaires developed by scholars like Smith and Inkeles (1966) and Kahl (1968) conceivably reflects lack of imagination on the part of our team, but certainly reflects a growing consensus among scholars of the modernization process as to what, in theory at least, constitute some of its major attitudinal dimensions.

It seems to us both possible and profitable to translate the conceptual schemes of these three authors into categories relevant to Sims' Norm Set Theory, by positing that each individual (Thai administrator, Turkish peasant, or Filipino teacher) has at least two self-images, a "traditional" one dominated by norms referred to by Sims as
"ideological-legitimating," and a "modern" one dominated by norms of an "instrumental-autonomous" nature (p. 164). This is a first approximation, of course, and takes us nowhere beyond the obvious. If the Sims framework is to be genuinely useful to our ERUT group over the next few years (or to any other research endeavor) then we must be able to use it productively to do such things as the following:

Ascertain third, fourth, and fifth self-images, if any, possessed by Thai administrators, Turkish peasants, or Filipino teachers. For example, the Thai administrator can perhaps be profitably regarded as having a self-image as a Regime-Protecting Administrator of Developmental Change, in addition to other self-images, such as Good Family Man and Good-Hearted Kind Person. Each of these four self-images could easily, and productively, be regarded as distinct from, and in important respects in competition with, each of the remaining three.

Ascertain the hierarchical order of norm sets within each self-image, and the norms that dominate each set.

Ascertain how, and under what environmental conditions, norm sets within a given self-image compete for dominance.

It is our contention that the Sims schema offers both sufficient specificity and sufficient flexibility to serve this heuristic purpose rather well, and we shall comment on this further in the sections to follow, each of which deals with a particular monograph.

**THE SATORN STUDY IN THAILAND**

Pinyo Satorn's case study, *The Provincial School Superintendent in Thailand: A Study of Role Perceptions and Expectations*, is ERUT Monograph No. 1. The provincial school superintendent is, or can be, a key figure in educational modernization, and in such instrumental use of education to promote economic and social development as might take place in Thailand's 71 provinces, all but two or three of which are overwhelmingly rural in population. The extent to which the superintendent will actually utilize education to promote development is in good part a function of the way he defines his role, and the way those officials who hold administrative power over him define his role. These officials are divided by Satorn into two distinct groups: 1) the governors of the 71 provinces, who are "line" officers in the dominant Ministry of Interior and have general supervisory powers in their respective provinces; and 2) senior educational administrators in Bangkok. Satorn identified 72 such senior educational administrators as holding positions of crucial importance. Of these, 65 were
in the Ministry of Education, and the remaining seven were in a branch of the Ministry of Interior which had recently been assigned responsibility for primary education throughout the kingdom.

Satorn makes the assumption, in accord with role theory, that the superintendent will function more effectively if there is congruence between his perceptions and expectations of his own role, and the perceptions and expectations of the superintendent role which are held by the governors and senior educational administrators. The essential thrust of Satorn's study is to uncover areas of congruence and areas of incongruence, and to explain and interpret these in social science and professional education terms.

**SUMMARY OF PROCEDURE**

Satorn selected four major task areas of the superintendent's responsibility: 1) community relations, 2) curriculum and instruction, 3) personnel administration, and 4) business administration and services. He then developed a Thai language opinionnaire containing 50 items designed to tap these four areas. This opinionnaire was mailed to all 71 superintendents, all 71 governors, and to the 72 senior educational administrators. Null hypotheses were set forth that no significant differences existed among the perceptions and expectations of the role of provincial school superintendent held by all three respondent groups, and by each pair of respondent groups.

To obtain his items, Satorn carefully canvassed the professional literature, consulted five Thai former provincial school superintendents and nine roughly comparable American officials, and relied on his own first hand experience over many years in the Thai civil service. From this he developed a pretest opinionnaire of 100 items, which he administered to a separate sample of 48 respondents in Thailand, including former provincial governors, district officers, and section chiefs in the Ministries of Education and Interior. On the basis of item analysis of his pretest results, he developed a final opinionnaire of 50 items.

Satorn asked his respondents to select one of the five fixed responses accompanying each item: strongly agree, agree, uncertain, disagree, and strongly disagree. The responses were scored on the basis of the method of summated ratings. For responses judged by Satorn to be professionally and developmentally "favorable," the "strongly agree" response was given a score of 4, the "agree" response a score of 3, the "uncertain" response a score of 2, the "disagree" response a score of 1, and the "strongly disagree" response a score of 0. For professionally and developmentally "unfavorable" statements, the scoring system was reversed, with the "strongly disagree"
response being given the score of 4, and the "strongly agree" response the score of 0.

Total scores and scores of individual items were found; the range, median, mean, and standard deviation were obtained; and the null hypotheses were tested by the application of the analysis of variance and the t techniques. The null hypotheses were rejected when the F or t values were found to be significant at the .05 level or lower. The F and t values which were not statistically significant permitted a rank order of items that exhibited a certain degree of intergroup consensus, a low F or t value indicating a high degree of intergroup consensus.

The intragroup consensus within each group was determined by histograms showing, by percentages, the frequency distribution of responses to individual items; thus, if all responses fell into only one response category there would be perfect intragroup consensus. Since this extreme was not expected (and did not occur) the standard deviation of the scores of each item, obtained for each group, was used as a measure of degree of intragroup consensus, a low standard deviation indicating high consensus. These standard deviation scores also permitted a rank order of items with respect to degree of intragroup consensus.

Satorn mailed out a total of 212 opinionnaire forms, and the number of usable returns was 184, or 86.79 percent of all the respondents included in his study. The reliability of the opinionnaire, as determined by the split-half method and corrected by the Spearman-Brown formula, was found to be .91.

SUMMARY OF FINDINGS

The correlation coefficients of the subscores of each of the four major task areas with the total scores of the opinionnaire were:

Community relations: .65
Curriculum and Instruction: .89
Personnel administration: .83
Business administration and services: .82

This finding points clearly to a conclusion that makes good sense ethnographically, namely that the area of relations between the bureaucracy and the citizenry is characterized by less consensus than other areas of an essentially within-bureaucracy nature. This,
in turn, reflects a deeper problem. Ever since the Revolution of 1932 Thai civil officials have tended quite honestly to espouse overtly the value that democracy is best, and to express the preference norm that the people ought to become involved in political decision-making. Yet many of these same officials have been uncertain, inconsistent, yet generally conservative in actually encouraging such involvement. This statement is made non-pejoratively; we are well aware of the difficulty of getting a people reared under conditions of an absolute monarchy to behave as participating modern democrats in a responsible manner. In short, this finding of Satorn’s suggests for Thai leaders an educational problem of the first magnitude.

Satorn calculated an analysis of variance of the three group means to the total scores, to test the differences among the means. This yielded an $F$ value of 7.75, which was significant at .01 level. In short, the three groups of respondents exhibited markedly different perceptions and expectations for the role of the Thai provincial school superintendent, in terms of the 50 items of the opinionnaire as a whole. The $t$ test applied to each pair of group means resulted in the following:

\[ t \text{ (superintendents v. governors)} = 3.149 \text{ (significant at .01).} \]

\[ t \text{ (superintendents v. senior educational administrators)} = 0.699 \text{ (not significant).} \]

\[ t \text{ (governors v. senior educational administrators)} = 3.700 \text{ (significant at .01).} \]

In short, each group differed significantly from each other group, except that there was no significant difference between the superintendents and the senior education administrators. This last result is not surprising, since other evidence establishes reasonably well the existence of a common educator’s subculture.

The histograms showing frequency distributions of responses to each item demonstrated that for no item did all responses in any of the three groups of respondents fall into a single response category. The standard deviations for individual items, within a group of respondents, were found to range from .44 to 1.15. Considerable non-consensus thus characterizes each group. The senior education officials showed the lowest overall consensus, followed by the superintendents, with the governors showing highest consensus. This finding is congruent with the fact that among senior educational officials is to be found a wide variety of background and academic preparation in the field of professional education, both in Thailand and in the West. In these policy-making, pace-setting ministerial posts are to
be found officials ranging from those who are culturally conservative and concerned primarily with system maintenance, to those who are culturally liberal and politically reformist.

From his analysis of responses to individual items, by the three groups, Satorn identifies problems stemming from both non-consensus and consensus. Non-consensus predicts problems on grounds of conflicting perceptions and expectations. But consensus can also pose problems where it applies to propositions which, to the educator or development specialist, indicate or imply agreement to do things that are unwise or inappropriate. A few examples follow:

1. **Citizen Participation in Educational Affairs**: The respondents were not certain whether they should arrange for lay people to have a chance to participate in the formulation of provincial educational policy, even though they seemed to be permissive concerning parents’ participation in the affairs of individual schools.

2. **Local Financial Support**: The superintendents and senior educational administrators tended to expect the provincial government to appropriate as high a percentage as possible of local tax monies to provincial education, so that as little funds as possible need be requested from the central government. The governors, shouldering as they do the duty of allocating local tax monies across many provincial needs, were much less ready to agree. This is not surprising. What is interesting, however, is that all three groups tended to agree that the provincial school superintendents should seek financial support from the private sector, without considering the personal background of the donors. There were no significant differences in the mean scores among the three groups or between any pair of them, indicating that in general all three groups were prepared to encourage the financing of local education from private contributions regardless of the background or character of the contributor. However, there was wide variance of response within each group, which indicates that this issue is controversial. The reason for its controversiality is doubtless that some respondents paitake of a relatively more modern point of view which is alert to the possibilities for fraud and governmental dysfunctionality which inhere in the implied quid pro quo which the contributor might expect from government officials. It is for this reason that Satorn regards a positive response to this item as "professionally unfavorable." As an educator concerned with modernization and development, he is not pleased with the responses to this item. His historical and cultural explanation, and professional prescription, are as follows: 'The deeply rooted traditional practice of autocratic bureaucracy under the ancient regime of government in Thailand, which used to
let the provincial governors and other government bureaucrats enjoy privileges, prestige, power, and status well above those of ordinary citizens, seems to linger in the minds of the Thai administrators of today. With such memories, the Thai administrators do not mind requesting financial support from anyone so long as they can enjoy the privilege of the support effortlessly. If all forms of corruption are to be abolished from the Thai society, official recognition of corrupt persons directly or indirectly should be avoided at all costs" (p. 183).

While both Satorn's finding and his interpretation on this point make good sense to us, we must also add a brief digression at this point. We have for some time been beguiled by the possibility of NLA leaders' encouraging useful educational innovation and development by the encouragement of the people's "merit-making" contributions of money, materials, and labor. The merit-making pattern is at the very heart of the Buddhist culture of Thailand, and has served for centuries to harness broad popular participation in getting temple buildings erected, temple libraries stocked, monks' hospitals built, and the like. Until recent historic times formal education was carried out almost exclusively by monks, who taught young boys the Buddhist Dharma and the "three R's" in the temple. Thus, the relationship between education and merit-making is old and deep. Merit-making is still perceived as relevant to the education of laymen, and perhaps this pattern in Thai culture could be more effectively harnessed in the future, well within the limits imposed by Satorn's dictum above.

3. Curriculum and Textbooks: In spite of the fact that the Department of Educational Techniques in the Ministry of Education possesses full power over the development of curriculum and the preparation of textbooks, all three groups of respondents seemed to agree that the provincial superintendent should play a leading role in the preparation of detailed courses of study for schools in his province, in such a way as to suit the peculiar local needs of that province. The three groups also expected the superintendent to call a meeting of teachers and other educational personnel at the end of every school year to evaluate the curriculum and textbooks in the light of these local needs. One senses that what is happening here is that the degree of endorsement of decentralization outruns the availability of superintendents with sufficient training to perform these technical tasks. One also wonders whether these decentralized functions might not best be handled by each educational region (of provinces), as regions tend to correspond more closely with ecological and subcultural zones.
4. Personnel Development: Respondents generally agree that promotion by merit (two steps, one step, or no steps in a given year) is better than assuring each teacher a single automatic step increase each year, regardless of merit. The senior educational administrators felt most strongly this way, followed by the governors; the superintendents were somewhat less convinced, doubtless in part because it is the superintendent who must bear the brunt of criticism from disappointed teachers. Nonetheless, agreement among all groups is in the "modern" direction of according status on the basis of achievement criteria. The governors believed most strongly in periodic transfer of teachers in order to broaden their experience and promote innovation, while the superintendents tended to disagree. However, the high standard deviations in responses to this item within all three groups indicated high intragroup conflict.

**PROFESSIONAL COMMENTARY**

In general, intragroup consensus was strongest among the governors, and weakest among the senior educational administrators, with the superintendents in between. Intergroup consensus was stronger between the superintendents and the senior educational administrators, than between either of these groups and the governors. The governors are, then, most united in their opinions, yet most isolated from the others. Given the power of the provincial governor in Thailand as the "line" officer in overall charge of all affairs in his province, this is a fact of some importance to the Thai planner who would utilize education to promote development. Clearly, any type of structured communicational process -- conferences, in-service training programs, refresher courses, or the like -- which would bring all three of these groups together for full and frank discussion and mutual learning, would be all to the good. And Satorn, who has for some years served as lecturer and resource person for just this sort of program, is now equipped with highly specific materials on which to stimulate frank and meaningful dialogues.

In the longer run, too, the most promising approaches toward meaningful and useful consensus would also seem to be educational approaches. Scholars such as Satorn could perform useful research and innovation by looking into the earlier educational and training background of typical governors, district officers, and other "generalist" personnel in the Ministry of Interior, and then doing the same for personnel in the Ministry of Education. Discrepancies in background judged to be of a serious nature can, in the longer run, be repaired by alterations in curriculum in the courses typically pursued by the two groups.
THE CARPENTER STUDY IN TURKEY

Harold F. Carpenter's case study, Adult Education and the Transformation of Rural Society in Turkey, is ERUT Monograph No. 2. This study focuses on cultural and attitudinal change among Turkish peasants. Essentially, it looks at the extent to which a sample of Turkish peasants who had enrolled in an adult education program emerged possessing a new, effective "operating culture" (see below) that would permit them to interact successfully with city people.

SUMMARY OF PROCEDURE AND FINDINGS

The research site was the district of Duzce in west central Anatolia. Interviews and observations focused on a carefully drawn sample of 238 village males, of whom 63 percent were participants in the adult literacy program. All of these villagers were administered a 210-item interview schedule. In addition, several villagers were interviewed in depth and/or observed in both the village and the urban settings. At every step, wide use was made of historical and ethno-graphic approaches.

THE TEACHERS: The teachers in the program in Duzce District were drawn entirely from the ranks of the local village primary school teachers, who offer their adult literacy classes in the local primary school classroom during the evening hours. One of Carpenter's more interesting findings is that there was a strong self-selection factor at work. Most of the village primary teachers who volunteered to teach adult classes were of urban enculturation. By contrast, most of the total population of rural primary teachers in Turkey, and in Duzce, are of rural enculturation. The urban-enculturated volunteers were generally dissatisfied with their rural assignments to begin with, and would much have preferred urban postings. The difference between their own preferred mode of life and that of their adult charges was a difference of which they were acutely and poignantly aware. This is significant in terms of their tendency (conscious or otherwise) to model or impart to their students not just literacy, but a variety of urban standards and points of view.

These adult literacy teachers typically were graduates of a teacher training school, and had been in the profession for an average of four years. Significantly, none of them had received in-service training or additional professional education dealing with the instruction of adults or with adult psychology, or professional training that would sensitize them to the Turkish rural subculture. In the adult literacy classes, they typically followed the same methods and used the same materials that had been prepared for the teaching of
primary school children. No other methods had been suggested to them, and no other materials had been made available.

ANTECEDENT CONDITIONS FOR PARTICIPATION: The first phase of Carpenter's study was concerned with the villagers' motivations for participation. To assess these motivations, a sample of respondents residing in three villages receiving the literacy classes for the first time during the 1968-1969 program year were administered the interview schedule prior to the commencement of the classes.

Findings: A negative self-image tends to characterize the participant but not the non-participant group members. This image, the result of specific kinds of exposure to the urban public culture and interaction with the operating cultures of urban Turks, motivated the participants to participate in the classes.

CONSEQUENCES OF PARTICIPATION: At the conclusion of the four-month adult literacy program, the participants were readministered the interview schedule to identify and assess the immediate consequences of participation.

Findings: Participation in the literacy classes effected some major changes in the attitudes of the participants. They acquired more modern, more efficacious attitudinal sets and were more sure of themselves and of their ability to undertake new projects on their own initiative and with their own resources. The perpetuation of the status quo was no longer seen as inevitable or desirable, and the participants themselves were more open to new experiences than they had been previously.

DIRECTION OF CHANGE: The last phase of Carpenter's research considered the direction and permanence of the change in the "operating cultures" (see below) of the participants over time. The post-participation interview schedule was administered to villagers who had participated in either the 1966-67 or the 1967-68 program year adult education literacy classes.

Findings: The participants' new operating cultures appear to be strengthened and to become functional over time. They become progressively more active consumers of the public media, undertake new work experiences, and travel more frequently and extensively after participation.

Perhaps the most startling finding in this study is the virtually total lack of congruence between the formal purposes of the adult literacy program on the one hand, and, on the other, the motives
of villagers for participating, and the resulting psychological changes. Essentially, the government perceived itself as merely imparting literacy to illiterate farmers, while the farmers who opted to participate perceived themselves as pursuing a new identity, and, later, as having achieved that identity to a substantial extent.

THEORETICAL AND PROFESSIONAL COMMENTARY

Carpenter's theoretical framework borrows most heavily from the formulations of Ward H. Goodenough (1966). This we consider fortunate, for Goodenough has been a pioneer in theory-building designed to integrate the explanation of culture change with the explanation of personality change. Essentially, he does this by positing the existence not only of a "public" culture closely shared by many individuals in a given social unit, but also of a "private" culture peculiar to a given individual. An individual's private culture is the sum total of his "operating" cultures, and he can always learn another operating culture which will permit him to interact with new kinds of people in new kinds of environment. Reduced to its simplest terms, Carpenter's theoretical scheme treats the adult education program for farmers in a particular district of Turkey as attempting to add to the private culture of each participating farmer a new operating culture which will permit that farmer to "operate" in an urban environment and to interact with urban people.

Goodenough seems to say that an individual is often motivated to acquire a new (modern) operating culture because he sees this as a means of changing his identity in a desired direction. However, Goodenough remains somewhat vague concerning the precise processes or mechanisms, viewed from micro perspective, by which a given individual's various operating cultures interact, overlap, reinforce each other, alternate with each other, etc., in order to form the new hoped-for identity (pp. 261-62).

Picking up from Goodenough, Sims (p. 34) comes to closer grips with this problem. To review briefly, Sims posits that an individual possesses a plurality of self-images (identities). Subsumed under each self-image are several hierarchically ordered norm sets. Subsumed under each norm set are several norms. At a given moment in time the individual (i.e., his superego) chooses and makes regnant a particular self-image. The regnant self-image is the "governor" that decides which norm set to invoke; this norm set, once chosen, controls the individual's behavior. As we read Sims, it would appear that, loosely speaking, a given regnant norm set is roughly equivalent to a given operating culture (p. 67).
It seems to us that Sims has added a degree of specificity which renders the Goodenough formulations more useful, while in no way running counter to the essential thrust of the latter.

Put in commonsense terms, it would seem to follow that the job of the ERUT-type educator is:

1. To determine, for a given population of rural people, what new self-images many or most of them desire.
2. To determine what are the norm sets appropriate to these desired self-images.
3. To design, in terms of both cognitive and affective dimensions, an educational program for students from this population which will enable them to acquire these new norm sets.
4. To design programs that will help these students to find appropriate opportunities to "act out" these new norm sets in ways that are otherwise not unduly upsetting in a social or psychological sense.
5. To design means by which these students will receive appropriate and timely reinforcing feedback.

The above five points are made on the basis of certain assumptions with respect to the administrative and economic context within which the ERUT educator functions. For one thing, the educator himself has a variety of self-images, one of which is presumably that of "national modernizer." Functioning under this self-image, the educator will be guided by the relevant norm set; whatever norm set this turns out to be, it will probably include norms (and cognitive and affective elements) concerning what the villagers need (in the Goodenough sense, p. 49) in order to achieve their "wants" of a modern and urban nature. The educator's perception of these needs will naturally condition his perception of the degree to which the wants of the villagers for new self-images can and should be satisfied. The educator will also consider the political, administrative, and economic feasibility of various possible adult education programs, and the projected enhanced economic viability of the resulting predicted new self-images of the villagers. All of these considerations will be made in terms of reasonable congruence with the existing national economic plan. We shall return to this question of economic feasibility below.

We hasten to add that to date the principal value of these formulations by Sims (and, for that matter, by Goodenough) is heuristic. Operationalization of the Sims schema is enormously difficult, as it is in any formulation that concerns what supposedly
occurs within the "black box" of the individual psyche. For a researcher to be reasonably sure that he has identified one, rather than another, self-image, let alone norm sets within a self-image, requires both great skill and great effort. Less skill and effort are required, in general, to identify a particular operating culture -- but, on the other hand, the results obtained will be less specific and hence of less help to the planner of educational programs.

Given the fact that Carpenter is (as far as we know, excepting Goodenough himself) the first field investigator to have utilized the Goodenough theoretical framework, and given the fact that the Sims framework was not available to him at the time he did his fieldwork, it is not surprising that Carpenter comes up with just two operating cultures, peasant and urban. And given the many extreme contrasts in content between village life and city life in Turkey, one may place great confidence in the boundaries that Carpenter has drawn between these two operating cultures, especially in view of his deep understanding of overall Turkish culture. Because of this very confidence in his work, we feel we have little to say about his substantive conclusions except to urge that the reader read them in the original.

There is, however, something that might be said to someone with Carpenter's qualifications if he were essaying new research building upon the foundations that Carpenter has laid. At risk of being overly brief and dogmatic, we would suggest:

1. Adopt the Sims theoretical framework at least for heuristic purposes and, if possible, by deliberate operationalization. This could result in corrections to the design of the government's rural adult education program by bringing into closer harmony the cognitive and affective goals held to be important by program planners, and corresponding goals held to be important by typical or modal peasant-students. As Carpenter has pointed out (p. 368) many of the government's goals are vague, and vagueness carries with it the virtual inevitability of misunderstanding and waste of resources, as well as failure, in some instances, of rapport between teacher and students.

2. Using the Sims framework, consider specifying more than one new self-image to which a villager might reasonably aspire. As matters now stand, a villager who acquires a "modern" or "urban" operating culture (Goodenough), or who establishes a new self-image as a "modernist" or "urbanite" (Sims), is acquiring something so vague as to make program planning and evaluation difficult. We would suggest further specification, perhaps of the following types of new self-images:

   a. Modern farmer: A rurally resident Turk with this self-image, once the self-image is socially validated, would be able to cope with, and profit from, economic and social challenges
amanating from urban sources. At the same time, he could utilize norm sets appropriate to interaction with traditional peasants. Norm sets subsumed under this self-image are appropriate for a variety of situations ranging from quite "traditional" to quite "modern" and urban.

b. Modern rural non-farmer: Norm sets subsumed under this self-image would reflect the greater differentiation and variety of demands often or typically placed upon the individual whose livelihood involves more complex extra-village and urban interactions.

c. Effective urban migrant: Here, the individual perceives himself as having become essentially an urban dweller. Norm sets subsumed under this self-image are further varied and differentiated, and urban-appropriate norms tend to be located high on most sets. This type of migrant is "effective" in the sense that he can act out his new self-image; he is thus different from the "urban peasant" one meets throughout the Third World, who resides more or less permanently in the city, yet remains psychologically and socially a peasant, often to his own detriment as measured by his own values.

It should be noted that we have constructed the above three self-images on the basis of economic role. There is no necessary reason why this must be so; however, we find ourselves starting with economic considerations simply because no new self-image will long endure as viable unless it is, among other things, economically viable.

It is also worth noting that the above constructions have been based on role, rather than on some sort of role-free "identity." Again, there is no necessary and unanswerable reason why this must be so; however, it does seem likely that new identities, new self-images, are hardly likely to endure for long unless reinforced by positive feedback from "significant others" -- and this often implies that the significant other stands in some sort of reasonably clearly defined role relationship with the individual undergoing change. Incidentally, Sims is at a loss to be sure whether the concept of "operating culture" is generally of greater utility for analytical purposes of this sort, than is the concept of "social role" (p. 35). We share his quandary, but would add that, for general ERUT-research purposes, it is our bias to attempt formulations first in "social role" terms, at least where the analysis involves only a single language and "great tradition" -- as is the case in Turkey.

Another reason for the relative primacy in our thinking of the notion of economic role is that without specialized skills and
role-specific effort propelled by considerable motivational strength, it is difficult to see how the sort of rural economic development wanted by the great majority of peasants around the world, will ever come about. Carpenter, too, emphasizes this point, in conceding that a new "identity," in and of itself, is hardly likely to bring about the modernization of rural life (p. 371).

A final observation concerning the possible advantages of Norm Set Theory is worth making at this point, and that is that it facilitates cross-national and cross-cultural comparisons in a reasonably orderly manner. Assuming for the moment no great constraints on available research money and effort, the Sims approach permits us to ask not only what norms, arranged into what sets, subsumed under what (generic) kinds of self-images are important in predicting change in Turkey, but it also permits asking conceptually similar questions, mutatis mutandis, concerning change in other modernizing nations. Moreover, the Sims approach accommodates itself to the conceptual frameworks and attitude-contents of such researchers as Inkeles and his associates (Smith and Inkeles 1966), and Kahl (1968). By insisting on a hierarchy of norm sets within a given self-image (but preserving flexibility by setting no limit on the number of self-images within a personality, or norm sets within a self-image, or norms within a norm set) Sims insists that the researcher economize on search effort by emphasizing what is important, permitting the content items that prove less analytically important to be slaked off for purposes of parsimony. We would only add that we are not quite sure in our own minds why Professor Sims does not carry the hierarchical principle further, especially with regard to norms within a norm set (p. 49).

THE FOLEY STUDY IN THE PHILIPPINES

Douglas E. Foley's case study, Culture, Politics, and Schools in the Rural Philippines: An Ethnographic Study of Teacher Community Involvement, is ERUT Monograph No. 5. We consider this work a particularly judicious and successful combination of the "contextual" (ethnographic and historical) method, with the survey method. Primarily, the contextual approach gets at what Sirs refers to as the "environment," while the survey method gets at the micro variables of individual decision, or rationalization. Of special interest is the fact that Foley chose a research site in the heart of the area of Central Luzon where the Hukbalahap terrorist movement has been, and remains, active. This radical and terrorist activity is a response, in part, to the high rate of tenantry among farmers of the area, and to the general sense of political impotence and frustration felt by many.
local peasants. This imparts to Foley's findings a peculiar importance to the political analyst, and we are indebted to him for this, particularly in consideration of the fact that his choice of this research site clearly placed him and his family in a position of some jeopardy to life and limb.

SUMMARY OF PROCEDURE AND FINDINGS

The broad purpose of Foley's study was to describe the cultural and political context of education in this rural and semi-rural setting, and to relate this context, taken as a set of environmental variables, to a set of micro variables concerning degree of professionalism of individual teachers, and to a set of dependent variables concerning differential participation in "civic" activities. These civic activities include:

- those that are socially integrative, but on a "traditional" cultural basis, such as participation in local Catholic fiestas;
- those that are socially disintegrative, such as participation in disputes between local political factions;
- those that are political, but of a non-partisan nature, such as public events involving use of the media;
- those that involve traditional or modern sub-community participation, such as co-parenthood (compadrazgo) or social welfarism;
- those that involve the modeling of modern behavior, such as efficient food production and modern sanitation practices; and
- those that involve participation in integrated development schemes, such as community development programs.

Foley combined a variety of anthropological techniques -- such as intensive interviews and participant observation in one community for a year -- with formal survey interviews. Foley's survey drew a random sample of 650 teachers and community members from thirty villages or small towns in one province. The research instruments were carefully pretested and were administered in the local language, Tagalog. The analysis of these survey data took the form of bivariate and multivariate frequency tables, and used the chi-square test of statistical significance. Other non-parametric measures of association were also used.
A number of contextual factors were found to affect teachers' community participation.

1. It was found that a tradition of teacher involvement in the community has been and still is being encouraged by the Bureau of Public Schools and the President of the Republic. These role expectations of parents and teachers are described.

2. The promotion and efficiency rating systems also constitute a built-in incentive for participating in extracurricular and community activities. Obtaining a promotion depends partly upon developing a strong non-school or community backer to influence the educational decision-maker. The powers of educational administrators and the relationship between politicians and school officials are described in terms of a social exchange system.

3. Lowland Christian Filipino communities are often characterized by factionalism between feuding kinship groups. A detailed village case study is presented to illustrate how such factionalism often circumscribes the degree of political activity of teachers, and creates role strain among teachers who have strong partisan sentiments.

4. Characteristics of teachers as a professional group, i.e., their lower class background, lack of wealth, heavy family obligations, limited occupational aspiration, dissatisfaction with working conditions, and limited social relations with the community, also help to explain why teachers are not more active civically. The teacher social groups, community status, and power relations are described.

Although Filipino teachers are sometimes characterized as an inactive group, Foyle found that approximately 20% of them were active in traditional "civic" or good citizens' activities, e.g., community religious events or school-sponsored community programs (PTA projects and scouting). Even larger percentages were actively modeling modern sanitation (70%) and food production practices (75%) and were reading (42%) and listening (62%) to political news. Less than 5% were, however, active in partisan political activities, national community development projects, or social welfare activities. Teachers, then, are proportionately quite active in traditional "civic" affairs. Moreover, the "elite" teachers, i.e., those most professionally active and higher in socioeconomic status, are the most active. These activist teachers also tend to be older (35-50), and to be residents of their community. Conversely, the younger, non-resident professionals are less involved and are more likely to migrate to the cities or abroad. The initial relationships between high professionalism, socioeconomic status, and community political activities
were, however, washed out when controlled for sex. Males were overwhelmingly more active in civic affairs. These results generally held true for both villages and small market towns.

THEORETICAL COMMENTARY

Sims' Norm Set Theory assumes "average expectable environmental conditions" throughout. One of Foley's major contributions, in this respect, is to etch clearly the range of variation in environmental conditions, particularly those that stem from the particular fortuitous political situation in which an individual teacher might find himself (pp. 313, 316). Another environmental factor that can vary widely is the teacher's kinship situation -- whether or not the teacher is operating in a situation where he is locally surrounded by kinsmen, and, if so, whether or not these kinsmen are socially and economically placed in such a way as to render it probable or improbable that the teacher's civic participation will be "worth it" in terms of available culturally specified rewards. In short, the situational and political environment, and the environment of ascribed positions, render somewhat problematical the easy assumption of "average expectable environmental conditions" necessary to the convenient application of Norm Set Theory.

Nonetheless, Norm Set Theory does seem to provide an opportunity for the parsimonious ordering of a great deal of decision-making on the part of the individual teacher in Foley's sample. The two most important self-images which we may posit as existing within the psyche of rural Filipino teachers are those of "family member" and of "teacher." In Philippine culture, the conflict in norm content between these two self-images is likely to be severe (compared, for example, to a lesser conflict in, say, Japanese culture). In situations where the "teacher" self-image is invoked, the choice of which subsumed norm set to make regnant will often be characterized by considerable vagueness; that is, the norms and norm sets would tend to be vaguely defined. It is nonetheless predictable that the norm of "being a fairly active missionary" would occupy a rather high position on many or most of these norm sets (p. 304 ff.). Within limits, a teacher expects to get involved in community affairs, and community members likewise expect him to. However, the teacher typically has few positive norm expectations with respect to the kind of community involvement he should practice, preferring to respond somewhat passively to orders or suggestions from those above him in the hierarchy (p. 304). From a modernization standpoint, this would suggest problematical results, depending on how rational, and how well informed, those higher on the bureaucratic hierarchy are. In any case, teacher involvement in community political movements aimed at removing the root causes of rural frustration and unrest, such as land reform, are generally not
a part of the typical teacher's dominant norms subsumable under his "teacher" self-image -- or any other self-image (p. 304). Politically, then, the norm set structure of the teacher self-image is hardly such as to militate toward political radicalism -- at least in the short run.

A basic finding in the Foley study is that male teachers in general are much more likely to be civically active than are female. There are a variety of cultural and social explanations for this, involving the female's other sources of security, and the competing demands on her time and energy. In any case, the male teacher's structure of self-images would appear to be fundamentally different, and one of Foley's policy recommendations is that if the Government of the Philippines desires that teachers involve themselves more intensely in civic affairs, it should recruit more intensely among male candidates.

PROFESSIONAL COMMENTARY

Looking upon the Foley work as a whole, we might at this point indicate a few summary intuitions. One is that the individual teacher's professional self-image is indeed a factor of some importance, and that the "right" kind of "professional" emphasis in teacher education institutions is important, if the Philippines is to reach developmental goals outlined by its leaders. A second conclusion, however, is that without an alteration in the realities of the "contextual" factors of life in central Luzon, in the direction of social justice and political efficacy for the general public, it is questionable how much good even the best teacher education program can do.
In addition to the four monographs just summarized, there are five additional ERUT studies now nearing completion. The first three of these are rather closely parallel, and examine a variety of relatively direct relationships between education in rural schools, and rural modernization. These are the studies by Buripugdi in Thailand, Seymour in Sarawak, and Kimball in Uganda. The remaining two studies are somewhat specialized, but still bear directly upon concerns that are central to the broad ERUT problem area. Benitez' research in the Philippines will throw light in systematic fashion on numerous socio-logical and psychological aspects of attitudinal modernization of rural Filipino adolescents who have been selected by competitive examination to attend the Philippine Science High School, which is perhaps the most prestigious secondary school in the Republic. Herring's research also focuses on the Philippines, and on the modernizing impact on the work attitudes of rural Filipino teachers that results from close contact with American Peace Corps volunteer teachers.

Each of the five researchers operates from a position of "comparative advantage." Buripugdi is a Thai, was born on a farm, and knows from childhood experience what farm work is like. Seymour is a former Peace Corps teacher in Sarawak, and controls the Iban language. Kimball is a former teacher in the Columbia University Teachers for East Africa Program, and has done both teaching and educational consulting and development in East Africa; he controls Swahili as a field language. Benitez is a Filipino who has done previous empirical fieldwork in his home country. Herring is a former Peace Corps teacher and volunteer leader in the Philippines, and the former associate director of a highly experimental program for the training of Peace Corps teachers for service in the Philippines. Incidentally, this program was carried out at Stanford University in 1966, and both Benitez and Foley were members of the teaching staff.

A brief outline of each of these studies will serve to indicate their scope and nature, and to show how they complement the researches already completed and published in this series.
THE BURIPUGDI STUDY IN THAILAND

Chalio Buripugdi is currently completing ERUT Monograph No. 4, a study of Thai farmers' progressiveness and productivity orientations as these relate to educationally reproducible experiences. Such orientations, which would appear to be readily translatable into Norm Set Theory, are hypothesized as being capable of explaining differences in productivity among rice farmers who otherwise have about the same opportunities to be productive. Mr. Buripugdi's study is thus at the very heart of the ERUT interest in the promotion of modern agriculture.

As a point of departure, Mr. Buripugdi takes the position that the economic development of Thailand and other Southeast Asian countries cannot proceed without development in agriculture (Rostow 1960: 21-24; Sun 1962: 3), and since sociopolitical development depends so much on economic well-being (although the reverse is also true) the betterment of lives of Southeast Asians relies heavily on their success in agriculture. In spite of the need, Southeast Asian agriculture has a very low productivity. This is so partly because Southeast Asia has a relatively very low resource unit per man ratio (Thom 1965: 179). This implies that the development of human quality is virtually essential to the improvement of Southeast Asian agriculture.

The idea of improving the quality of farmers through education takes on added credibility due to the fact that research in other areas, such as Tang's work in Japan and Ho's in Taiwan, has demonstrated that education, unspecific in purpose though it has often been, does indeed contribute to agricultural production (Tang 1963; Ho 1966). The ecology of Japan and Taiwan is sufficiently similar to that of Southeast Asia for these two studies to be highly suggestive. It is, therefore, appropriate to consider what kinds of education contribute more effectively than others to the improvement of the quality of farmers in countries like Thailand.

In order to render the problem more manageable, Buripugdi has limited it to the question of how to make education promote high productivity in rice production in Thailand. Rice is, of course, overwhelmingly the most important agricultural product of Thailand, and provides much of the foreign exchange earnings whereby Thailand as a whole is permitted to modernize. It should be emphasized, however, that this focus on rice production by no means implies a lack of awareness of the developmental significance of other agricultural products, especially where such products can be grown on marginal land, or can be raised on a part-time basis, thus coping with problems of agricultural underemployment. Such other crops are not totally excluded from the purview of his research, and due attention is being given to them. The main focus, however, is on education's contribution to promoting rice production. The problem has been
broken down into the following three sequential components. The first two components or sub-questions imply a set of hypotheses which is being tested in the research, whereas the last component is an application of the findings to the formulation of policy recommendations.

1. What is the essential human factor which is responsible for or correlated with high rice productivity and which is potentially producible or encourageable through education? Tentatively, this human factor is referred to as "progressiveness." A farmer is termed "progressive" when, compared with other farmers who have roughly equal opportunities to be productive, his productivity is high. The final definition and specification of the content of this concept is one of the aims of the current research.

2. What are the educational implications of "progressiveness"? What kinds of background experience are related to high progressiveness? Which aspects of such experience are reproducible by schools or other educational institutions?

3. How should educational organizations go about the technical task of providing educational experiences that will stimulate progressiveness in students and other learners? What should be the aims, content, instructional methods, and related educational operations, at the various levels of education?

Buripugdi's research model started by identifying the problem of low productivity among a group of rice farmers in Thailand. It then empirically determined the content of the human factor, tentatively called "progressiveness," whose presence in high degree among the farmers is thought to increase their productivity. Then, Buripugdi aims to establish relationships between high "progressiveness" (or productivity directly) and certain background experiences of the farmers. As the last step, he will attempt to make educational recommendations based on the above findings, as well as on theoretical knowledge and contextual data relevant to the implementation of the recommendations.

"Progressiveness" is a key concept in this research. It is introduced as the intervening variable between "background experience" and "productivity" in order to clarify the manner in which these variables are related. It has been a difficult concept to operationalize, and although a statement as to its tentative definition and general content can be made at this time, the final definition and content will be determined only on the basis of the research findings. For the moment, the working definition being accepted is the tendency on the part of a farmer to behave, to know how to behave, and to evaluate behaving, appropriately and conducively to higher agricultural productivity. The concept is thus both a behavioral concept and, to
a limited degree, a personality concept. In this latter sense, personality attributes or orientations are, of course, inferred from reported behavior of the individual. It will be noted that this formulation of the concept lends itself to the utilization of education as a means of enhancing productivity. That is, the right kind of education, communicated by the right teachers under the right conditions to the right students at the right point in the students' lives, should be able to teach people to behave in appropriate ways, to enlighten people cognitively as to how and why to behave in that manner, and to engender a positive appreciation of such behavior.

To summarize, the objectives of Buripugdi's research are briefly as follows:

1. To identify the "human element," here termed "progressiveness," which is associated with high productivity among a sample of farmers who have enjoyed relatively equal opportunity to be productive. A satisfactory measurement scale of "progressiveness" will also, hopefully, result from this effort.

2. To identify within the concept of "progressiveness" those underlying or conducive experiences which could be replicated within a classroom or other educational stimulus situation, so as to produce in the future a greater number of "progressive" and productive farmers.

The relevance of this research to the process of schooling is clear and direct, for it may be able to indicate the main dimensions of those skills, cognitions, attitudes, and values which, with the right kind of educational policy, could actually, effectively, and economically be encouraged in the classrooms and other educational stimulus situations. As this report is being submitted, Buripugdi has completed data collection and analysis, and is in the write-up process. We are encouraged by a recent communication from him that he believes, on the basis of data analysis, that he has identified significant educationally reproducible types of experience and competence which encourage productivity, and that he feels strongly impelled, in the near future, to participate in planning appropriate educational innovations to incorporate such inputs into the Thai curriculum.

THE SEYMOUR STUDY IN SARAWAK

James Madison Seymour is currently completing ERUT Monograph No. 5, which is an intensive ethnographic case study of the relationship between a rural school and its community, in a countryside which
traditionally has practiced simple agriculture. Seymour’s study focuses on the objectives, operations and consequences of a rural elementary school in a carefully selected Iban community in Sarawak, East Malaysia. This Iban community has traditionally subsisted by slash-and-burn agriculture, and is currently undergoing agricultural diversification and modernization, in part as a consequence of governmental development schemes. Seymour’s study attempts to identify certain intended and unintended results of the government’s having established a school in this community, and to explain how these results relate to other development processes currently occurring in, or affecting, the community.

It is assumed that a school contributes optimally to rural development when it is integrated with community life and reinforces selected elements of the indigenous culture by enculturating local young people to believe in them, value them, and live by them. But as a modernizing agency, the school must also acculturate rural youth to certain unaccustomed standards of behavior. More information is needed about which are the most appropriate enculturating and acculturating functions, how they operate and interrelate, and what their consequences are in terms of the process of development, as defined by Malaysian and Sarawakian leaders.

Unlike rural school systems in most western countries, which often expanded as a consequence of industrialization, those in developing countries are intended, at least putatively, to promote economic growth and culture change. Therefore, the rural school in developing countries is a conspicuously modern institution, and is generally regarded as one of the principal mechanisms articulating the rural community to the national society. The rural school is intended to teach relatively modern knowledge, symbols, and attitudes, and it is supposed to operate according to norms and values associated with the national educational system. Ideally then, the rural school transmits the national version of the “contemporary, modern, world culture” to and within the community, and rural-enculturated youth learn modern symbols, norms, and beliefs as they pass through the school. The extent to which they learn these, of course, depends on many factors, some of which are academic ability, the quality of teaching, the degree of change in the community, and the strength and immediacy of social and economic incentives.

But the actual contribution of the rural school to development in traditional communities appears to fall short of these goals. In some brief but insightful studies, anthropologists have found that the rural school has for various reasons made little impact on the youth and the community. In his study of village life in peninsular Malaysia, Wilson has criticized the village school’s curriculum and instruction for not translating modern values into a set of symbols
and concepts comprehensible to the villagers. The impersonal character of the teacher, the strange and abstract language of the classroom, and the absence of immediate rewards all contrast sharply with the child's informal learning through trial and error, through the vernacular, and through the help of emotionally reinforcing parents or kin. Learning in the latter system is more meaningful for the child than in the former (Wilson 1967: 150-152).

In Thailand, Hanks has concluded that adult villagers care little about secular learning in the government schools because it is incongruent with their religious and moral conception of education. Unless Thai educators mediate secular learning in terms of this conception, the parents, according to Hanks, do not reinforce their children's learning, or encourage their attendance (1958: 9-14).

In Upper Burma, Nash reports that the rural school transmits conservative attitudes toward authority and change through patterned and sanctioned role behavior in the classroom more successfully than it teaches Burmese youth scientific knowledge and techniques which are prescribed in the official syllabus (1962: 135-143).

In a somewhat similar manner, Sibley has attributed Philippine teachers' failure to introduce community projects successfully to their overlooking of important features in the village social structure. The villagers' street perception of the teacher as only a classroom leader, the villagers' work patterns, and the informal ranking of leaders have all been disregarded or misunderstood by the teacher (1960: 209-211).

In Sarawak itself, early government reports indicate that rural Malay schools transmitted traditional norms of the Malay community more effectively than they introduced new habits of study and learning (Seymour 1967: 70-79).

While the above examples indicate that the rural school has not been very effective in mediating aspects of modern culture in the traditional community, other reports are replete with indications of the dysfunctional role of the rural school in "siphoning off" the talented and ambitious students to the cities where they either secure or fail to secure white-collar jobs (Hailey 1938; Foster 1965a; Furnivall 1943, 1948).

The reasons for these divergent results are far from clear. However, there are a few significant studies conducted by anthropologists which define more precisely how the rural school actually can contribute positively to the developmental transformation process. In two communities, one in Mexico and the other in Guatemala, Nash finds that, in contrast to Burma, village schools can effectively teach a modern and nationally prescribed curriculum. But economic
and social incentives for modern education are real and imminent in these communities, because the transformation process is well under way. Moreover, these schools have contributed to cultural continuity by helping to recast community values of self-employment into modern terms of economic independence or salaried jobs (Nash 1965: 131-143).

In rural Japan, Siegel lucidly contrasts the adaptive functions of two schools operating in different ecological settings. In one, where land and jobs are scarce, the youth use their schooling to obtain employment beyond the village in urban centers. Without the innovative influence of educated youth in the village, the more conservative elders easily maintain their power and influence; by eschewing modern stimuli from national-level institutions, they slow the pace of economic growth. But in another village where land and job opportunities are more abundant, the school prepares the youth for community life or for agricultural and technical secondary schools, from which most of the graduates return to the village. Moreover, the activities and patterns in this school relate to those in other national-level institutions which operate in the village, thus reinforcing a slow evolving sense of community identity (Siegel 1961: 530-560). Using data from Cornell University’s social experiment in Vicos, Peru, Holmberg and Dobyms report that when the essential pattern of school operations is brought into congruence with other development efforts, the school can accelerate the process of planned change. As soon as both parents and children perceived in immediate and tangible terms that the school could satisfy their needs, they began to identify with it; and in the process they progressively internalized an egalitarian ethic which other development thrusts also tried to encourage (Holmberg and Dobyms 1962; 107-109).

Such studies constitute a promising beginning, but much more needs to be known as to just how a rural school transmits the traditional or rural culture. A careful examination is still needed to define more precisely from a cultural perspective just how the school, in combination with other modern agencies, accelerates the development process in a traditional community (Mosher 1966; Sharp 1967; Staley 1966).

The central problem of Seymour’s study is, therefore, to explore the objectives, operations, and consequences of the rural school and their relationships with other development processes in the rural community. It considers both the enculturating and acculturating functions of the rural school, and examines the manner in which certain intended and unintended consequences of these functions may be accelerating or impeding the planned social and economic changes in the agricultural sector. This study isolates, analyzes, and describes these relationships, differences, and inconsistencies, and attempts to define more precisely the "optimum mix" of traditional and modern elements which should be considered in the curriculum and operations of the rural school for its maximum contribution to rural development.
Like Foley, Seymour has augmented his unstructured and semi-structured ethnographic approach with a variety of more formal techniques. These include archival surveys, attitude surveys, classroom observation, and language testing. He has used a semi-projective technique, an adapted Munyu Sentence Completion Technique. In addition he has used the Philippine Non-verbal Intelligence Test, developed by Guthrie and his associates. Seymour has adapted this to the Sarawak environment.

Seymour's study is, then, essentially an educationally oriented ethnography of an Iban community, augmented by the use of more structured techniques. Seymour, his educator wife, and infant son lived in their Iban community near the Indonesian border for about a year. We are indebted to Seymour for his determination to pursue important problems in an appropriate location regardless of the personal discomfort that this might entail. Indeed, it also entailed dangers, for terrorists have been active in the area, and Malaysian Army personnel have been killed two miles from Seymour's research site. This situation dictated the decision that Mrs. Seymour and their son return home earlier than planned, and at this writing Seymour is continuing his fieldwork alone. He anticipates completion of data collection in November, 1970, and of the writing of his monograph sometime in 1971.

Meanwhile preliminary reports from Seymour in the field suggest rather strongly that rural elementary education in Sarawak faces many of the same problems which beset other developing countries. The school system is highly selective and tends to favor the minority of bright students at the expense of the majority who usually do not receive the education which is intended for them. Teachers are urged to adapt a uniform syllabus to local conditions, but often they fail to do so adequately because of an over-emphasis on verbal instruction and a misunderstanding of new methods advocated by the syllabus. The urban migration of school leavers has not yet reached alarming proportions in Sarawak, but it is clear that many of these leavers do not obtain the basic education which would enable them to become more efficient and productive cash-cropping farmers.

THE KIMBALL STUDY IN UGANDA

Our knowledge of the effectiveness of schooling in encouraging those attitudes of mind, and in developing those competences, needed for the better utilization of rural human and natural resources, will hopefully be carried a stage further by Richard L. Kimball's study in Uganda, which will very shortly be published as ERUT Monograph No. 6. Kimball's research is designed to discover how far the school can go...
in developing among its students an adequate conceptual framework and skill repertory that will allow them later to respond efficiently, flexibly, and satisfyingly to the challenge of change, mainly through more effective use of the land. In particular, Kimball, whose specialty is science and mathematics education, is attempting to determine how effective the "new" curriculum in science and mathematics education -- with its emphasis on inquiry, discovery, and invention -- can be in encouraging a pattern of self-evaluation and creative growth. He hypothesizes that these "process" skills will prepare an individual for the continuous learning and self-confidence he needs for cognitive control in his life situation, and physical control in resource utilization, more effectively than the traditional curriculums in Uganda elementary schools.

The essential rationale of this research is based on the assumption that the kind of change process that can bring about an improvement in the social and economic life of a country like Uganda, and minimize trauma and anomie, will be one that provides individuals with the skills, values, and attitudes that help him satisfy his immediate wants -- especially through the modernization of agriculture and rural life. Scientific and mathematical education is hypothesized to play a necessary and important role in this process, and also in the longer-range process of equipping an individual for continuing advancement in a variety of other domains of life -- and "advancement" is, of course, defined by the individual for himself, within the guidelines provided by his cultural and social system.

Kimball's theoretical assumptions and formulations, as well as his research design, are enormously complex. For this reason, and because his own monograph will very soon be published, our comments here will be minimal. Essentially, Kimball has taken a sample of Ugandan students who have been exposed to the new science and mathematics curriculums, and attempted to measure what difference these curriculums have made in terms of these students' rationality, creativity, and self-image. Kimball has adopted an elaborate set of controls for such antecedent variables as social class and enculturation (e.g., whether rural or urban). The psychological and other outcomes of exposure to the new curriculums are measured and contrasted with similar outcomes along a matched sample of persons who have not been exposed to these curriculums.
In ERUT Monograph No. 7, Jose Conrado Benitez will undertake a study somewhat different from the foregoing three, concentrating on the diffuse socialization outcomes resulting from a Filipino student's having been selected for, and having been educated in, the Philippine Science High School. This unusual school is truly national, in the sense that it is open, strictly on the basis of merit, to any boy or girl in the Philippines, whether the child of a rural tenant farmer or an urban millionaire. Since a sizeable proportion of those selected are from rural backgrounds, Benitez' research affords an excellent opportunity to examine the process of attitudinal and behavioral transformation to urban and modern standards.

The specific aim of Benitez' study is to investigate the role of schooling as an antecedent condition for the formation of social and political attitudes, that is, to examine the school as a mediating mechanism which effects the acquisition and formation of relevant social and political predispositions. This research thus is located in the field of "organizational socialization." It regards the school as a diffuse socializing agency, and it seeks to investigate those characteristics of the school and the process of schooling which may be positively or negatively related to selected social and political concerns.

In general, studies relating education to relevant social and political goals have tended merely to correlate the amount of schooling with selected social and political variables. Such studies have tended to treat education as a homogeneous function, different types of education being treated alike, and have assumed it to be unidirectionally related to specified outcomes. More importantly, most studies using large-scale cross-sectional data on an adult population have not identified or described the nature of the schooling process by which individuals acquire the relevant attributes. Furthermore, they have usually failed to discriminate between socialization outcomes attributable to the school process per se, as distinct from those that might be attributed to maturation, selection, and attrition.

Newer developments in socialization theory and research, however, are concerned with the socialization of children into patterns of interaction with institutions of the community and into other forms of behavior comprising much of adult life. The emphasis in this line of scholarly concern is on the social demands which social structures and institutions place on the performance of social roles.

Two of the most active fields which relate social structure and individual socialization, and from which theoretical support for
the present study can be drawn, are those of political socialization and organizational socialization, especially insofar as the latter relates to schools. Organizational socialization theories which seek to relate the school directly to socialization outcomes generally focus on the following dimensions as important independent variables: 1) the effect of teachers as role models; 2) the effects of various curricular elements; 3) the effects of peer groups as reference groups and as membership groups; 4) the effects of organizational, size, location and financial capabilities; and 5) the effects of various school climates, institutional pressures, and contextual properties of the school.

In more generic terms, they have been conceptually identified as the organization's capacity to present clear norms, to provide performance opportunities, and to reward performances selectively.

Viewing the schools in these terms, it can be hypothesized that schools which can confer greater status, derived from their relationship to the wider society, have greater power to socialize (Meyer 1968). However, the power of any given school to confer status is itself influenced by the status the students already possess. Likewise, the organizational structure of the school, which provides opportunities to act out the acquired status, conditions the power of the school as a socializing agent.

If the power of the school to socialize is thought to depend on its ability to confer status gains, one proceeds to ask on what socialization outcomes is the school considered to have such a power. The nature of the socialization outcomes is described and defined in terms of "diffuse socialization," by which is meant "the acquisition by individuals of qualities which will guide a considerable range of their behavior -- behavior in differing contexts and vis-a-vis different social orders. We use this idea in contrast to specific or technical learning" (Meyer 1968).

To investigate systematically the impact of a school on diffuse socialization outcomes, particularly those sociocultural and political attitudes postulated as important in the development and modernization literature, requires an appropriate situation; and fortunately the Philippine Science High School lends itself to this purpose very well, since it admits a highly selected group of students who clearly will form an intellectual and social elite. Admission into this school can be viewed in terms of status gains; and it is hypothesized that status conferral and acquisition will influence the entering students' self-esteem and their sociocultural and political attitudes ("attitudinal modernity") as they anticipate the performance of future social roles of considerable importance.
The purpose of Benitez' research, then, is to carry out a descriptive and an explanatory analysis of the impact elite recruitment and training have on diffuse socialization outcomes, specifically on self-esteem and on "attitudinal modernity."

The specific research objectives are:

- to assess through a longitudinal panel design the impact of recruitment in Philippine Science High School on the attitudinal variables; and
- to determine through cross-sectional data on the total school population the changes in self-esteem and in attitudinal modernity that occur during the course of schooling.

As a result of this research, considerable insight should be gained into a problem which, as Inkeles in his discussion of the "socialization of competence" has emphasized, has not been adequately studied, namely the degree to which and the ways in which socialization is a relatively conscious process of training in anticipation of future social roles (1966). When these roles are those of an important, innovative, national elite in a developing country, the significance of this research is clear.

THE HERRING STUDY IN THE PHILIPPINES

Ronald B. Herring will be concerned in ERUT Monograph No. 8 with the effects of interaction between members of an industrialized culture, and members of a Third World culture, in transmitting values and behavior patterns relevant to the promotion of development. His study is essentially a social psychological one, and focuses on the interaction between American Peace Corps volunteers who taught in rural Philippine schools, and their Filipino colleagues. More specifically, Herring is interested in identifying the factors in this intercultural communication and modeling situation which facilitate the transmission of orientations toward work, especially professional work of the type likely to be conducive to modernization.

Over a period of some three years Herring has gathered both cross-sectional and longitudinal data in the Philippines, which will permit the testing of a variety of hypotheses concerning the effective or ineffective transmission of modern, intensive work attitudes. It should be emphasized in passing that his survey data show clearly that Filipino teachers in general place a distinctly positive value on modern, professional, intensive work attitudes -- and that those
who have been in contact with Peace Corps teachers tend to perceive the latter as an important source of modeling of such attitudes. This was particularly true in cases where the American teacher worked quite closely with his Filipino colleague, and such closeness was common, often assuming the form of team teaching.

During the initial phase of Herring's research, in 1967, one sample of teachers was drawn from schools in which a volunteer had just completed a two-year assignment. A second sample of teachers was drawn from schools to which a volunteer was about to be assigned. Schools in these two categories were sampled in each of five provinces: Rizal, Laguna, Cavite, Batangas, and Quezon. The second phase of the study involved repeat interviews with teachers in the second sample two years later. These interviews were conducted with Filipino teachers who both did and did not establish work relationships with the American teacher during the period when he was assigned to their school. In addition, a third, control sample was drawn from teachers in comparable schools where no American teacher had ever been assigned.
CHAPTER FIVE: SOME CONCLUDING REMARKS

The present chapter consists simply of a few concluding remarks, rather than a formal drawing-together of empirical results in the form of conclusions tightly ordered within an explicit theoretical framework. Given the breadth and diversity of the ERUT field, the latter endeavor would hardly be possible. It is our feeling that the principal contribution of the ERUT monographs will not lie in the development of a particular theory, however much we might desire that; rather, each case study will serve a particular set of needs deemed important by its author, and as such can stand by itself. Hence we shall limit ourselves to a few generalizing comments, and then move to a brief programmatic discussion of a few aspects of the type of ERUT research we see as important for the future.

As for the methodology used in the Satorn, Carpenter, and Foley studies, we see considerable "multiplier effect" for future research in the ERUT field -- and we have similar expectations for the studies now nearing completion. The Satorn approach, borrowing and adapting from Gross, Mason, and McEachern (1958), is adaptable to a wide variety of scaling problems and offers rigorous reliability controls. The Carpenter and Foley approaches combine a historical and ethnographic approach with a structured inquiry approach, in accord with the general research tradition that has grown up in SIDEC over the past several years. The essence of this tradition is that the researcher must be capable of formulating his variables in accordance with relevant theory, measuring and testing them rigorously, and capable also of appreciating and controlling the relevant contextual variables of historical trend, cultural pattern, and social structuring.

In terms of substantive generalizability, the Carpenter study is perhaps the most relevant, in the sense that it is least culture-specific and most tightly geared to a single theoretical framework, namely that of Goodenough (1963). We have already discussed our ideas concerning the relevance of Sims' Norm Set Theory to the Goodenough formulations (p. 44). We foresee that many of Sims' propositions listed on pp. 25-32 would in themselves constitute a theoretical point of departure for an empirical study of monograph length.

It is our conviction that the field of educational planning for development would be well served over the next decade or two, if resources were to continue to be expended on this type of research. Educational research at present suffers grievously at the hands of research which focuses primarily on intra-system educational variables.
and neglects the contextual factors which are essential in giving genuine analytical meaning and policy relevance to the findings. This is true in a wide range of situations where the researcher is from a culture other than that where he conducts his research -- whether in the Third World or among our own ethnic minorities here at home. Moreover, the proper context can hardly be provided adequately by the methodologically sound but culturally shallow treatment that sometimes is the result of research by scholars who do not know the local language and culture. Our ERUT program has insisted that each of its scholars be well grounded, not only in rigorous methodology, but also in the history, culture, and language of the area to be studied. We have every intention of preserving this emphasis in the future.

The preparation of these nine monographs has left us more convinced than ever of the crucial importance of education in the development process. The Foley study, in particular, makes clear that the proper recruitment, proper professional preparation, and proper career support of rural teachers are indeed conducive to the type of community involvement in developmentally oriented local activities which is desired by the government of the Republic of the Philippines, and apparently also by its people.

Participation in this ERUT project has made clearer to us the great desirability of conceiving of education broadly, to include more than the formal schooling of children. Not only is such formal education often structured in the most brittle and least adaptable ways, but it is often inherently inappropriate to the pressing tasks at hand. Education in general, and ERUT-type education in particular, must reach people when they are ready, where they need it, in terms they are prepared to understand and act upon. Much of the scope of education for the rural-urban transformation must find ways of dealing with adults already committed to a given rural style and locus of life, who consciously want, and clearly need, education in order to make an appropriate transformation possible. Other ERUT-type action necessarily involves specific skills training of rural people who have confronted the job market head-on, and in their moments of truth discovered the inescapable need for a particular kind of training or education.

We are equally convinced that that marvelous human resource that is education is, in general, woefully underplanned and malplanned. An example is seen in the Carpenter study, where some of the most important outcomes of an adult education program were evidently not anticipated at all by those who devised the program. Other examples will soon be available in other studies, notably Seymour's. While even a glance at our own country is sufficient to tell us that the Third World has no monopoly on such obloquy, nonetheless in the latter areas the tragedy is in some senses greater. This is true not only because the resource base is thinner and the political pressures for
development often stronger, but also because most Third World nations are more appropriately organized than is the United States to plan education for development. However much one might decry tight centralization of authority on democratic philosophical grounds, the fact remains that Third World governments are usually highly centralized, and that decisions can be made and carried out by a relatively small group of leaders and planners at the center. This simplifies matters enormously, in that only a relatively small number of educational planners-for-development need be trained before an appreciable beginning can be made. While we remain philosophically committed to the ethic of democratic participation, we nonetheless see the only hope for an increase in such participation in the Third World, in the longer run, as lying in the manner and skill with which planners and leaders utilize their considerable powers to shape educational and developmental policy in the shorter run.

Inadequacies in educational planning in the Third World often have their analogs -- and less forgiveable ones -- in our own country. It is simply a fact that most of the most tragic problems of the American urban ghetto are essentially problems of the rural-urban transformation, or rather, of the failure on the part of rural Southern Blacks in cities like Chicago, or rural Chicanos in cities like San Jose, or rural Puerto Ricans in cities like New York, to make this transformation satisfactorily. Here is where "the action" is in our own society; here is where education, in one form or another -- and notably including the appropriate education of the majority population -- is tragically inadequate. Much creative research and experimentation are needed. For example, ERUT-type educational programs for American Indians on the reservations make much more sense when they involve a composite approach utilizing the schools as a means of educating both the parental generation and their children, and fostering interaction which will encourage each generation appropriately to educate the other -- as in the Rough Rock School in New Mexico.

Problems of dissemination also concern us deeply. Do the conclusions and policy recommendations of monographs such as these, won as they are at the cost of great sweat and tenacity of effort, actually make any difference? Do policy-makers read them? If so, do they act upon the policy recommendations? The physical distribution system for monographs of this sort -- principally to repository libraries -- is hardly in itself a guarantee of effective dissemination to people who can change things. Nor do we envision SIDEc or the Stanford School of Education, as such, becoming actively and systematically involved in dissemination activity, however much individual scholars might decide to do on their own.

The principal SIDEc approach to the problem of dissemination of research results to the Third World is, of course, to recruit scholars from the Third World. Thus, Satorn and Buripugdi will be in a position
throughout the remainder of their careers to work within the Thai educational system and promote the type of modernizing and rational change which their research results indicate or suggest. And the same is true for Benitez in the Philippines, and many others.

This same dissemination principle applies, of course, to our American researchers. Those of them who end up working in American universities or educational systems will doubtless be able to apply, mutatis mutandis, some of their findings to their own country. The theory and methodology for attacking problems like this at the research and action levels is closely similar to that which is appropriate for attacking ERUT-type problems in the Third World. And in the next several years, an increasing number of SIDECers will be focusing on America's own internal "Third World."
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