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Connecting Worlds

A survey of developments in educational research

Robert G. Myers

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Connecting Worlds:

a survey of developments in educational research in Latin America

Robert G. Myers

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Contents

Foreword

Robert Myers deals in this book with an unusual subject: the situation of educational research in developing countries and its relationship to the research done in the industrialized countries. Connecting both worlds of research is his goal.

Few persons are as capable as Bob to approach and discuss this subject. To his solid academic background he has added fifteen years of field experience in educational research, first in Latin America, and later traveling through other parts of the world as the first coordinator of IDRC's Educational Research Review and Advisory Group.

More than an agency man, Bob has managed to become in the developing countries a researcher among others. He knows, first hand, the problems, joys, and sorrows of the search for solutions and the anxieties of researchers to stretch scarce resources across broad questions and issues. Beyond this, Bob, most of all, has become a friend to Latin American educational researchers.

These are the reasons why his reflections seem to flow from a considered wisdom and have a flavour different than the summary judgements in which so many "experts in development" so easily indulge.

The book takes Latin America as its centre; other regions are dealt with in explicit or implicit reference to this continent. Stories, trends, and events of the past two decades are carefully collected, synthesized, and interpreted. A meaningful image of the whole gradually emerges.

Drawn mainly from personal experience, this image of educational research is not complete in all its aspects, nor does it intend to be. It is coloured more by the countries and institutions in which the author has had most direct experience. It could hardly be otherwise.

A more complete report would contain reference to many more institutions, persons, and research. Mention in Latin America might be made particularly of the communication and diffusion networks established in the region by multinational agencies (such as the UN through UNESCO and UNDP; OAS; ILO through CINTERFOR; Economic Commission for Latin America; ECIEL; IBRD, etc.). Other organizations too — among them CLACSO, Asociacion Latinoamericana de Escuelas Radiofonicas, Union de Universidades de America Latina, etc.[1] — would find a full description and assessment.

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[1] A detailed treatment of the action of these organizations can be seen in: Schiefelbein, Ernesto, Production, diffusion and use of knowledge through educational networks in Latin America, CIDE-PIIE, Santiago, February 1978 (mimeo).

In spite of this necessarily curtailed scope, this work will receive a cordial welcome from educational researchers in the developing world. His insights lead the way to the hard task of connecting this world to its counterpart elsewhere. This can only be for the benefit of both.

Pablo Latapi
Mexico City, 1980

Acknowledgments

The ideas and information contained in this manuscript originated in my conversations with hundreds of dedicated scholars and practitioners from Asia, Africa, the Middle East, and Latin America concerned in their daily lives with extending educational opportunity and improving education outcomes. My first acknowledgment must be to that growing but still unconnected community.

The Research Review and Advisory Group provided both support and cooperation during the two years I served as its coordinator, and later, the inspiration for this work.

Finally, I wish to express my appreciation to Susanne Mowat, Kenneth King, and Sheldon Shaeffer of the International Development Research Centre for their counsel and guidance as I wrote and for their help in the process of preparing this manuscript for publication.

Introduction

Promises and Problems

In 1967, a conference organized by UNESCO on the role of research in educational change reached the conclusion that

> Although educational research is at present a manifestly thriving activity enjoying a higher level of financial support than at any previous time in its history, it must be admitted that a good deal of the aid it is now receiving is based as much on faith in its potentialities as on recognition of its past accomplishments.[1]

That affirmation seems as true in 1980 as it was in 1967, despite which research in the field of education continues to expand. Indeed, since 1967, research seems to have become fashionable throughout the Third World, much as it was in Europe and the United States a decade or more ago. Today, most ministers of education in Asian, Latin American, Middle Eastern, and African governments can point to a research unit, sometimes standing on its own, sometimes tucked into a planning office or a curriculum development centre. Outside governments, the number of successful university-based and private research groups has also increased markedly. International agencies have taken a keen interest in these institutions and their activities, and, increasingly, research is on the international agency agenda.[2]

The recent and continuing growth of educational research in developing countries cannot be explained away as a current or passing fancy of the fashion conscious. Nor is it simply a response to international pressures or an expression of a desire to display yet another symbol of development. Nor is this growth just a product of increasing "technification" within governmental bureaucracies or of the hollow hope retained by a few that a "miracle strain" may be discovered for education. And the explanation for expansion goes well beyond a need to provide recently trained researchers with something to do. Fashion, international pressure, increasingly technical bureaucrats, the hope for miracles, and employment generation for researchers each provide a partial explanation for the growth of research but it would be unfortunate to over emphasize any one.

The expansion of educational research[3] in the Third World is related to the dramatic expansion of education itself. Heroic efforts to increase access have placed additional strains on budgets. With these efforts, a host of second generation problems of quality, distribution, and management, have appeared even before first generation problems (leaky roofs, the lack of textbooks, limited access) have disappeared. Accordingly, policymakers and administrators are being pushed to tighten management, to improve the planning process, to evaluate the many recent and often ad hoc innovations, to adjust ongoing programs, and to find new options. They have cause, therefore, to seek

out and use new information and knowledge, both to guide and to justify their actions. And they are doing so.

Despite the rapid increase in the number of educational research institutions and the apparent growth of demand, for reasons both solid and questionable, the future of most educational research institutions in the Third World is far from assured. The feeling, noted above, that research is living on its potential rather than on its accomplishments, is still widespread. Paralleling the growth of research and in tension with the increasing demand for it is a growing skepticism about its value.

Criticisms of research are familiar enough. Some critics stress the seemingly irrelevant choice of topics, inadequate conceptualization, poor timing, or inconclusive results of research itself. Others focus on social and political constraints on research which render it ineffectual in practice. Still others emphasize weaknesses related to the structure and organization of the research community. Even as it grows, the research enterprise is under attack. As a result, research institutions in the Third World are struggling through a period of growing pains in a less-than-ideal environment of contradictions and ambivalence, affecting negatively both the future production and use of research.

Among the structural and organizational features of the research community that receive criticisms and that adversely influence both production and use, is the too frequent isolation of researchers from each other and from mainstreams of research. Separated by distance, time, culture, and research traditions, and lacking effective means to overcome these gaps, researchers seldom assimilate and build on what others have learned, let alone develop or translate it for use by policymakers and practitioners. With increases in the number of researchers and in the volume of research, the potential benefits from overcoming isolation through improved communication and interaction increase. Nevertheless, the synthesis, communication, and use of research-based knowledge lag far behind its production.

The obvious, persistent, and unfortunate lack of communication and interaction among researchers and research centres provides a starting point and focus for this monograph. Throughout the discussion, I will be concerned with the three sets of connections commonly assumed to be weak: between researchers in the First and Third Worlds; among researchers within the Third World; and between researchers in education and those in other fields. I will also inevitably, touch on the elusive connections between researchers and practitioners, funders, and policymakers.

The main vehicle for description and analysis will be a case study of the changing worlds of research within Latin America. Observations and conclusions drawn from a look at the Latin American region will be used to make comparisons with other Third World settings. In a concluding section, I will present suggestions for improving communication and interaction across worlds of research so that, in turn, the processes of carrying out and using research might be improved.

To focus attention on the potential value of ''connecting worlds of research'' implies that improving communication and interaction would also improve the processes of generating research-based knowledge and of using it.

This assumption, lying behind most discussions of the diffusion and use of research results, but seldom made explicit, is reasonable but naive. Improvement depends on how connections are made, who makes them, and the circumstances under which the process occurs.

One way in which increased interaction is supposed to improve the production and use of research is as stronger institutions and researchers become sources of support and inspiration for weaker institutions and individuals. But it is not clear how much (or under what conditions) connections between the strong and the weak help or hinder over the long haul. Such lines of communication can, for instance, become lines of dependence better left unconstructed. Researchers in a weaker institution can be influenced to think along particular lines prescribed by others, disregarding more original work they might have done if left to their own devices. Moreover, the topics and methods imparted as a result of the connections to researchers in other national contexts can lead to irrelevant and unsound research. And, a tension arises from the fact that, once communication networks are established, they can restrict as well as expand horizons, screening people and ideas and methods out as well as in. Invisible colleges can become invisible clubs. None of these possible outcomes from increased interaction need occur, however.

Another reason for seeking improved communication is to avoid duplication. It is a common contention that because knowledge, properly adapted, is transferrable, duplicating research done elsewhere is inefficient and costly. Connecting worlds of research should, therefore, reduce local research costs as well as increase the return on investments already made — or so the argument goes.

Behind the desire to avoid duplication is an assumption that what has been discovered or developed through research in one setting can be used in another. This assumption may hold for medical science, or space research, or plant breeding, but not for education. Although Mendel's laws work as well in Botswana as in England or Austria, we have discovered that even the application of agricultural advances requires extreme sensitivity to both geographic and cultural differences. Adapting and applying agricultural knowledge is as critical as discovery, and the process requires as intelligent and qualified researchers as does original research. If this is true for agricultural research, it is doubly so for the field of education. It is unlikely, then, that simply improving diffusion of knowledge will (or even should) lead to reduced investments in research in the Third World. My argument for improving communication among researchers does not rest on that premise. If anything, improved communication is likely to increase local research costs, even while, in a narrow sense, reducing duplication.

The obvious potential for increasing the use of research results provides another argument for improving communication and interaction among researchers. However, communicating knowledge does not assure its use. For all its presumed objective character, knowledge is a very personal good, discovered and translated into policy and practice by individuals. Those who have been part of the process of creating and adapting knowledge are more likely than others to be users and advocates. There may, then, be a hidden virtue in the duplication of research, particularly of research that adapts findings from elsewhere to local circumstances. Such research involves, in addition to its findings, individual

learning and motivation that does not accompany simple communication of research results. Thus, in the long run, an investment in local research may prove to be profitable even though appropriation of a discovery from research elsewhere might appear initially to be easier and less costly.

These qualifying comments should not be interpreted to mean that improvement of diffusion by connecting worlds of research will have little or no value. Local research, whether producing new knowledge or leading toward reinvention, is frequently stimulated by an idea from outside. Increased interaction provides new outlooks on old problems, expands the kit of analytical tools available, and promotes dialogue. It allows learning through comparison and contrast, assists the process of knowledge accumulation, facilitates critiques, and provides a source of professional motivation for researchers.

The ways in which research results are (or are not) communicated and used, and by whom, not only influence the potential impact of research on education but also determine how the capacity to carry out research grows and takes shape in a particular place. In settings where a research community is only beginning to form, that relationship is particularly important. Conversely, the ways in which local research is organized, who carries it out, the political and social climate, the sources and magnitude of funding, and the existing level of sophistication of the research infrastructure condition how results will be communicated and what form interactions among researchers will take. Logically, then, any analysis of communication and interaction among researchers must be concerned with a larger picture of how research is organized and carried out. Thus, providing information about the researchers and institutions which, it is suggested, should be brought closer together, and about the contexts in which existing connections have grown, will be an important part of my task.

Sorting the Connections

The phrase ''connecting worlds'' owes its origin to concern with the apparent lack of interaction between researchers in the First and Third Worlds. How isolated Third World researchers really are from First World researchers is a question to be treated later.

Worlds of research are separated, however, by much more than political geography. Cutting across national boundaries are worlds distinguished by variations in the form, substance, ideology, and disciplinary traditions within research itself. Economists and anthropologists cohabiting a university in Mexico, for instance, are often worlds apart — despite the location of offices next to each other. The same could be true in Sweden or the United States. Similarly, researchers concerned with the education of adults and those studying, for example, school finance or the social aspects of classroom organization, are likely to be in touch with different sets of individuals. Social scientists who take education as a theme for their research tend to function in a world very different from that of educators working from a base within the field of education. There is, then, no lack of disjunctions setting boundaries around separate (and seldom equal) worlds of research.

In general, connections are made between worlds of research in two broad ways: as information moves and as people move. The two can, of course, be

combined and are complementary. Movement of research-based information is primarily a passive and impersonal process, involving journals, newsletters, information services, bibliographies, etc. Usually the flow of information is after the fact, conforming to a traditional model of diffusion in which research results are written up, published, and scattered to the winds to fall where they may.

I do not propose here to enter into a theoretical discussion of various diffusion models; I refer the reader to writings by, for instance, Havelock[4] or Havelock and Huberman.[5] My own view is that most studies dealing with diffusion of information, whether among researchers, or from researchers to other users, are deficient. They rarely relate the uses of research to conditions of its production. They fail to explain many indirect and intangible results of research such as change of attitudes, influence on climates of opinion, or legitimation of new ideas. They are influenced by assumptions that the researcher is always distinct from the user and that knowledge is first generated, then applied, passing through sequential stages. Thus, conventional explanations deal only marginally with the important forms of research and diffusion in which distinctions between user and researcher and between knowledge and practice vanish.[6]

In education as in other fields, international organizations have taken an increasing and somewhat faddish interest during the 1970s in the movement of information, aiding development of reporting services, newsletters, subject-related information networks, and computer-based bibliographical systems.[7] In my opinion, emphasis on these forms of connecting worlds, particularly at an international level, has been excessive. When information moves, the possibilities for slippage and missed connections is immense. Diffusers seldom know who their potential consumers are; consumers do not know where to look for information. The flow of information is sporadic and the impersonal quality of the exchanges seldom leads to more permanent communication and interaction among researchers. Information regarding research in progress is seldom communicated and is almost always out of date when it is, decreasing the probability of more permanent interaction among researchers. Established systems for exchanging research information rarely include information about research organizations and researchers. Finally, the local, informal, personalized networks needed to take proper advantage of broader diffusion efforts are not in place.

Connecting research worlds is more actively accomplished when knowledge is embodied in people who move between or among worlds, collecting and passing on information as they go. That occurs when people attend meetings, or study or travel or work together. Sometimes these direct connections are formal and contrived; sometimes they are informal. There is a general feeling, supported in the growing literature on networking[8] that face to face communication and informal networks are more effective than bibliographic searching because they are personalized, because the information transmitted can be both more focussed and extensive, and because communication is more likely to occur in context.

Probably the main basis for developing international connections between worlds of research has been foreign study. The continuing flow of students from Asia, Africa, and Latin America to England, France, the United States or the

USSR, particularly at graduate levels, has established a formidable basis for personal or institutional connections and for exchanges of information once students return home. Another basis for establishing international connections has been as consultants move abroad to work. That work may demand practical involvement in the educational system or may include doing or supervising research. International meetings, in conjunction with professional associations or focussed on a particular subject, facilitate connections, not only by transferring information, but by establishing personal contacts that can later be drawn upon.

More recently, and increasingly, international communication has been aided by what might be called "circuit-riders," who, through a stream of short-term, periodic visits spread information about what other researchers are doing. In their travels they perform a brokering role which, the diffusion literature suggests, is crucial.[9] Such individuals tend to be placed in international organizations, which can afford the travel, or in universities in Northern countries. Their role as brokers of information is seldom explicit, any more than building continuing connections is an explicit part of most programs of study abroad. Aided by the jet airplane, the circuit-rider has become an integral but relatively unconscious and unanalyzed part of the process of connecting worlds.

An Experiment in Connecting Worlds

In the fields of agriculture, population, education, and science and technology, international review groups have been formed in recent years, charged with providing an overview of the state of research in their respective areas. By definition, these groups constitute experiments in connecting worlds of research, particularly the First and Third Worlds. Each member of the review groups is an information broker. Connections made within the groups cut across geographic, disciplinary, and ideological backgrounds and in some cases across research and policy lines as well.

Many of the observations and reflections in this manuscript stem directly from my experience during 1977 and 1978 as a participant in and coordinator of the Education Research Review and Advisory Group (RRAG).[10] The RRAG was established in 1976 by the International Development Research Centre to review the state of educational research as it related to educational problems in developing countries. In carrying out its charge, the RRAG was committed to helping overcome the isolation of researchers by collecting and reviewing scattered research results, by involving key individuals from several worlds of research and policy in the process of the review, and by diffusing widely the results of its work. (See Appendix for a fuller description of the Review Group and of its publications.) The Review Group was, then, not only an instrument for diffusing research results but also an active experiment in connecting worlds of research. The Group took an interest as well in analyzing the process in which it was involved.

As coordinator of the Review Group, I performed a circuit-rider's role, not only with respect to immediate members of the group but also for other researchers and policymakers with whom I made contact in conjunction with the mandate to collect and synthesize research results. In that role, I was privileged

to talk with and learn from many researchers and policymakers in many settings. In part, this manuscript constitutes a report on those conversations. In part it is a reflection on my own role both as observer and as active participant in the process of connecting worlds of research.[11]

Some Lessons Learned

From the Research Review and Advisory Group, have come a set of observations about the growth of educational research in the Third World, about the climate for and organization of research, about research themes and methods, and about the communication and impact of research results.[12] These observations will give the reader an idea of what lies behind this monograph. Some of the points that follow will be more strongly supported than others in subsequent chapters.

About the quantity and quality of research;

- A large and growing body of research-based knowledge of very unequal quality exists in the Third World that remains scattered, uncritiqued, and largely unknown outside the settings in which it is produced.
- The quantity and quality of research are related to national wealth and stability and are conditioned by particular national circumstances. It is difficult, therefore, to generalize about research in the Third World.
- Heavy and often unrealistic demands are being placed on a relatively small number of very able Third World researchers, stretching them thin and leading to production of research that is often of poorer quality than it needs to be. (These unrealistic expectations feed an ambivalent attitude toward research.)
- A large portion of research in the Third World is in the form of MA (or PhD) research of an isolated sort dealing with themes not connected to policy issues in the setting in which it is produced.
- The quality and sophistication of research, while needing to be improved and monitored, must be judged in accordance with the particular state of development of research in a given society. If research skills and attitudes are embryonic, they should be allowed to grow, keeping quality as a goal, but not demanding quality during the process of skill formation and practice at the same level as in other settings.
- The formal qualifications of researchers in a developing country are not particularly good indicators of the quality of research they will turn out.
- Research on education by those outside the education community (social scientists, doctors, etc.) can have and has had a positive influence on the quality of educational research.
- Critical, reflective research is in short supply.
- Action research is relatively scarce (with the possible exception of Latin America) and, when carried out, yields results that tend to remain unpublished and at a local level.
- Evaluation research is increasing but is still weak.
- There is a need to balance types of research and to be sure that research in the Third World is not given second-class status by denying researchers the opportunity to carry out basic research.

About the climate for, and the organization and funding of, research:

- Although the capacity in the Third World to carry out educational research has grown dramatically in the last two decades, it is still fragile, particularly in African countries.
- The climate for continuing growth and use of research in most countries of the Third World is only mildly favorable given widespread repressive political environments and the absence of a widespread "research mentality".
- Educational research is increasingly located within governmental institutions and conditioned by a need for social bookkeeping. This contrasts with research in the social sciences which have a much stronger base in universities. (There are variations within particular countries.)
- Concentration of research in government is mistakenly sought with the expectation that research will therefore serve policy better; a closer tie can result, but such concentration tends to restrict research to problems of immediate interest and to problems defined by those currently in power.
- Educational research remains concentrated in capital cities and elite institutions. There is a need to localize research use.
- The impetus to the growth of research in Africa, Latin America, the Middle East, and Southeast Asia has come largely from outsiders. Foreign influences on research, through funding and foreign training, remain very strong. There is a need to rethink imported technologies, methods, and concepts, and if needed, adapt them to local conditions.
- Research leadership (substantive and organizational) is very important to the growth of research.
- Few countries in the Third World (India may be an exception) have a capacity to produce a next generation of researchers. They are, therefore, still overly dependent on the First World for training.
- The level of support for research in education is very low, particularly when compared with agriculture and industry, or when investment in educational research in the Third World is compared with that in the First World.
- To a relatively large extent, funds for educational research in many Third World countries continue to come from international agencies, a situation which raises questions of dependency and induces researchers and research institutions to choose topics set by foreign funders.
- More money for research, particularly if tied to specific themes, does not necessarily improve research. It may distract researchers from more important topics and may lead to the complete subservience of research to policy already made or to funders' priorities.
- Funding is seldom consistent enough or long-term enough to allow continuity within institutions or of research foci. The sporadic and uncertain nature of earmarked (rather than general, untied) funding retards institutionalization, makes accumulation of research-based knowledge difficult, and prohibits longitudinal research.
- The bureaucratic mazes through which researchers must pass are often so onerous and demanding of entrepreneurial skill that available research funds may go unused even when there is a huge demand for funding.
- Competition for funding hinders growth of a research community.
- There is an evident lack of seed money for research.
- Few private research centres have been able to become self-financing.
- National ability and willingness to fund research is conditioned by international conditions including, for instance, the pressures on resources of non-oil producing countries.

About research topics and methods:

- Priorities and needs vary by place, person, time, and circumstance. Therefore, focussing research priorities, which can limit options for funding, is seldom a useful exercise, particularly at an international level. What seems more important is for each locale to set its own priorities.
- However, identifying gaps in knowledge can be useful and can be presented as one input to decisions by researchers and funders regarding what research should be undertaken.
- Reviews of research that not only summarize what is known in particular areas but also can be used actively to foster communication among researchers and with policymakers are needed at national levels.
- A major contribution of educational research has been to reveal the complexities of educational systems.
- The social dimensions of education are still under-researched (social antecedents, processes, and consequences).
- There is a need to review and extract from the social science literature those research results that pertain to education.
- Historical, anthropological, and political approaches to education have been slighted.
- Longitudinal research is relatively rare, always expensive and very much needed.
- The following trends in methods and measures are evident: from norm-based to criterion-reference measurement; from universal to situation-specific research; toward measuring what happens during the learning process, not just the product of learning; toward simultaneous consideration of the multiple goals of education; toward micro-studies; and toward action research.
- Noncognitive outcomes of education deserve more attention by researchers.
- There is a need to incorporate indigenous technical knowledge into research; scientific methods can be used in a participatory mode.
- Many educational concepts and methods need clarification and adaptation to Third World circumstances.

About the diffusion and impact of research results and about connections among worlds of research:

- At this point in time and in some locations, the problem of connecting First and Third World researchers may be more one of loosening and broadening connections than of reinforcing existing ones.
- Connections among researchers in the Third World are infrequent and weak, sometimes even within nations.
- Connections among researchers in different nations of the Third World still tend to occur through the First World rather than directly. That is changing slowly, and Latin America has made the greatest advances in this respect.
- As training opportunities within the Third World continue to increase, and as foreign consultants are drawn from within the Third World, developing alternative ways of connecting researchers from the First and Third Worlds must be examined.
- Links between social (and natural) scientists and educational researchers are weak in most countries, adversely affecting the quality of research on education.

- Networking is a fad that must be examined closely for its ability to restrict as well as facilitate flow of information among researchers.
- Large-scale international information systems depend too much on the strength of local and informal networks that either do not exist or that operate independently.
- Diffusion of the written word cannot be expected to produce good results in a culture with a strong and dominant oral tradition; strengthening a national literature may help establish a written tradition, but will require subsidization in most parts of the Third World because demand for written results of research is low.
- Informal and direct contacts maximize the possibility that research results will be diffused and used, whether by other researchers, practitioners, policymakers, or funders of research.
- Even in a culture where written information is sought out, brokers are a key. Selective, targeted diffusion of research directed toward brokers is an important strategy of research communication and use.
- Circuit riding deserves more attention as a diffusion strategy. That role should not be carried out only, or even mainly, by staff members of international agencies.
- Preoccupation with the disjunction between research and policy is often misplaced, and is related to a failure to distinguish among types of research and among users of research. Research can make a difference and has; that happens in many ways, direct and (mostly) indirect, depending also on the conditions affecting its use.
- Two important ways in which research makes a difference are as researchers actively involve themselves in the issues to which research is directed, and as decision makers at different levels become actively involved in the research process.
- There is a need to educate consumers of research. Until a research mentality spreads much more broadly among potential consumers of research (for instance, teachers), there will be a relatively small market for most research results. Therefore, the conduct and diffusion of most educational research, particularly that oriented toward theory rather than toward planning, implementation, or action, will have to be subsidized.
- There is a need to collect scattered information on selected research themes and actively diffuse it within the Third World. Current efforts at broad diffusion through formal information services should be balanced by more personal diffusion, building on existing informal, as well as formal, contacts of key brokers of research. Such a strategy demands an informal mechanism such as an international review group of Third World scholar–practitioners, with the participation of counterparts in the First World.

The Latin American Case[13]

In 1960, the institutionalized capacity to carry out research in the field of education in Latin America was almost nonexistent. Education had been the province of governmental bureaucracies or of teacher training institutions which, as elsewhere, lacked a tradition of scientific research. Universities showed little or no interest in education itself as a subject for study and research, not even for the purpose of self-evaluation. Private and governmental organizations devoted specifically to educational research and evaluation could be counted on one hand as could the number of researchers trained to the doctoral level and concerned principally with research on education. Almost without exception, educational research organizations in Latin America were founded after 1960. The same is true for journals. Indeed, most institutions and publications are less than ten years old, creatures of the 1970s.[14]

To note the lack of an institutionalized capacity is not to say that research on education was totally absent before 1970. Some research was hidden in governmental agencies — in curriculum development centres or planning offices — but it often remained unpublished and seldom extended beyond description to analysis or beyond cases to generalizations. University-based scholars concerned with education usually took a highly theoretical, philosophical approach to their research, manifest, for instance, in analyses of Latin writers and thinkers such as Sarmiento or Andres Bello.[15] Only occasionally did Latin American social scientists examine existing educational institutions and their social dimensions in an empirical way. Some empirical research was carried out by foreigners, often on an individual basis and occasionally in conjunction with Latin Americans. Despite these exceptions, research, particularly field-based empirical research in education, is relatively new to Latin America.

As educational research began to take root in Latin America, non-Latin American influences played an important part. It is probably fair to say that the major impetus to educational research has come from outside the region, but I do not wish to overplay that idea nor to disregard local demands, initiatives, and support. Governments such as Mexico, Brazil, Colombia and Venezuela have at different times undertaken important initiatives to strengthen educational research. In this discussion and in the context of a more general concern with connecting worlds of research, I will emphasize non-Latin American influences and involvements. In some cases the influences are very general, related to the international climate and circumstances within which Latin American countries must act. In other cases, it is possible to identify and discuss initiatives by particular institutions and individuals.

Research in the Decade of Hope and Expansion: the 1960s

Initial Influences

The growth of research in education was helped along by the fact that education, generally, was a growth industry in the 1960s. Between 1960 and 1970, primary school enrollments rose by 170 percent and post-primary by 290 percent. It is estimated that the percentage of the age group enrolled in primary schools rose from 50 to 70 percent, in secondary schools from 13 to 26 percent, and in universities, from 2 to 6 percent. While enrollments were growing at a rate of more than 6 percent per year (well above the rate of population growth), public spending for education was increasing at a dramatic 13.7 percent per year during the decade.[16]

The circumstances and directions of that growth influenced the content and character of research as it began to find a toehold in Latin America. In the older states of Latin America, for example, in contrast with most of Africa and parts of Asia, growth was not stimulated by the demands of new nationhood. Thus, the spate of studies dealing with national political culture, carried out primarily by foreigners, that characterized research in Africa in the early 1960s had little parallel in Latin America; the closest parallel to such studies was a series of writings dealing with student movements.[17]

Also in contrast with Africa, urbanization was well advanced in most of Latin America by 1960, and education had spread broadly enough through the population that it was widely perceived as a necessity. Yet many individuals remained outside of the educational system. Thus, governments were pressed by popular demand. Moreover, this was a time in which popularly elected governments were ascendent through much of the region. For both philosophical and political reasons, governments felt it important to expand education.

The main rationale for promoting rapid educational expansion was, however, an economic one. This was the beginning of the First Development Decade in which there was widespread faith that education could serve as one, if not the main motor of economic growth. That faith was fed by international organizations which not only helped provide the rationale but also made funds available in the form of loans or grants.

Initially, the desire to relate better education to economic development found expression in attention to the upper levels of educational systems, in projects to reform universities and to vocationalize secondary schools. Plans to modernize universities so they might become better producers of technical knowledge and of high-level scientists and technicians needed for development were not, however, based on results from systematic research done within the region. While debate was laced with historical and philosophical analyses of the role of the Latin American university in Latin American society, recommendations for reform leaned heavily on models imported from the United States.

In most plans for university reform, the importance of strengthening research within universities was stressed. In selected institutions, research did begin to take hold with, however, much more attention to research in the natural sciences, agriculture, and economics than to the noneconomic social sciences and education. Nevertheless, the tenacious traditions of Latin American universities were not easily modified, even by the structural and administrative

reorderings that occurred. An affinity for a new tradition of empirical research still had to be created. Thus, although university reform and the associated attention to research helped develop a climate for research in education as well as other fields, the impact was far from dramatic.

To match education to the demands of economic growth, governments sought also to improve the process of planning. Tools and techniques of manpower analysis, then being sharpened in Europe, were thought appropriate for Latin America as well, and major manpower studies were undertaken in Argentina and Peru,[18] directed by researchers imported from Europe and the United States. The techniques of manpower analysis spread quickly through the region; technical exercises that they were, these analyses did not explore causal relationships nor try to illuminate educational processes.

In the early 1960s, growth of manpower planning was paralleled by another form of analysis as economists turned to calculating rates of return on investments in human capital. The first such studies carried out in Latin America were mainly by foreigners.[19] Although vestiges of both the manpower and human capital traditions remain, their popularity has faded. Both, however, influenced the development of educational planning and research in Latin America, reinforcing an early bias toward technical analyses that treated educational systems principally as producers of human resources.

In the hopeful, melioristic environment of the early 1960s with its emphasis on matching education to economic growth, the slowly growing demand for systematic empirical studies was closely related to planning. It was assumed that research could have a direct and positive impact on policymaking, making it a more rational and efficient process. Indeed, diagnoses, descriptions of *la realidad*, and experimentation with educational technologies were directed primarily toward improving planning and implementation. That connection was strengthened and demand was stimulated by loan stipulations from international agencies which now required sector studies and plans before a loan could be made. Not surprisingly, such demand as there was, from governments and international agencies was for research carried out within established social and institutional arrangements and assumptions. Little attention was devoted to challenging basic goals of education or to exploring its social consequences and antecedents. The lagging growth of educational research within universities reinforced this trend.

Changing Demands and Conditions

As the end of the 1960s approached, the early fervor associated with educational growth and reform had subsided. Momentum had been established, however, and the continuing expansion of educational systems placed additional strains on already scarce resources forcing attention to matters of efficiency. Because education grew faster than the number of new jobs added to the economy, planners slowly adjusted their techniques by incorporating analyses of the causes of underemployment among school leavers and placing less importance on the seemingly impossible task of predicting bottlenecks. Moreover, manpower projections proved inadequate for predicting educational needs related to economic growth. The definition of development began to expand to include distributive as well as growth concerns. With that unfolding, the lower levels of education, now deemed important for both political and economic reasons, also began to receive attention.

With these halting developments, the role of research slowly began to broaden. It became increasingly obvious that foreign ideas needed adapting, that expanded and complex education systems required continuous monitoring and adjustment, and that basic assumptions needed to be questioned. Budget pressures heightened the search for alternative ways to deliver education and to make the process more efficient without losing quality. There was, too, a growing feeling that to escape from dependence on others, a national capacity to experiment and monitor was needed in education as well as in other areas. Within governments, support began to build for establishing research and evaluation units to aid the planning process in ways that went beyond the earlier need to satisfy requirements of funding agencies.

In the 1960s, major research units were formed within ministries of education in Chile, Peru, Colombia, and Venezuela; Brazil and Mexico had long boasted such. Thus, local as well as foreign resources were being allocated for research. Within these governmental units, however, the nature of research was dictated by pressures from within the ministry. Research units were called upon to respond to urgent data needs, i.e., to support a policy already proclaimed, or to provide data for a minister's speech. Important in their own right, these demands nevertheless limited the amount of longer term, carefully designed, critical research that could be undertaken. When critical research was carried out it was often with external funding. In the Peruvian Instituto Nacional de Investigación y Desarrollo de la Educación (INIDE), for instance, several studies evaluating the nuclear school system as related to rural development were funded by the Ford Foundation and would probably not have been done, even within the relatively favorable reformist Peruvian environment, had that funding not been available. Thus, in some cases, foreign presence marked even government-based research units, through funding of research projects as well as through the foreign training of government researchers and the provision of technical assistance.

In Chile, policy-related research was given a boost in 1964 by the new government of Frei, anxious to make good on its ambitious promises of expansion and reform. Using data already available from several sources, a research component was built into the planning office under the direction of Ernesto Schiefelbein and many practical studies were carried out on such topics as repetition, costs, and illiteracy. In the process, some training occurred, a documentation service was set up, and national meetings of researchers and policymakers were instigated. A national assessment system was established in 1967. With dramatic changes of government in Chile (in 1969), the emphasis on empirical information, systematically obtained and used as a basis for diagnosing difficulties, temporarily disappeared from the halls of the Ministry.[20]

The Colombian government set up in 1968, as part of a more general reform, the Colombian Institute for Pedagogy (ICOLPE). Originally, ICOLPE was to have placed heavy emphasis on research, including research applying the social sciences to the study of education. Almost from the beginning, however, it was clear that research would constitute only a minor part of the Institute's activities and the curriculum development and teacher retraining would be the major activities. After passing through several changes of leadership, ICOLPE was dissolved in 1975, victim to the political process. In its relatively short life, ICOLPE's large staff did produce a series of studies, largely descriptive,

dealing with educational administration, financing, organization, and pedagogical themes. It also assisted in the process of documenting and diffusing existing research. Nevertheless, a capacity for continuing research, even of the narrowly technical variety undertaken, has not been institutionalized within the government.

A less technical strain of research began also to take hold slowly in Latin America in the mid-1960s. A broadening definition of development, the failure of educational technology to provide hoped-for savings, the critique of Ivan Illich, the spread of Paulo Freire's jolting educational philosophy and actions, the elaboration of dependency theory, the general growth of a social science research community, student movements, and reactions to the spread of authoritarian regimes in the region helped a critical strain of research gain currency. Challenging accepted forms and premises and reflecting on the relationships between educational and other social institutions began to take on an importance it had not previously held. Occasionally (for example, in Peru, where major changes were decreed by the reformist military government) critical research was not considered in bad form by governmental policymakers intent on change. In most countries, however, research presenting challenges and raising questions was not deemed policy-relevant by policymakers. But with these observations on changes, we are jumping ahead too fast.

Effects of Foreign Study and Technical Assistance

With the general push for educational expansion in the early 1960s, many Latin Americans went abroad to study, often funded by governments or international organizations. The majority of these students travelled to the United States, but a significant number studied in Europe where they were usually caught up in a very different tradition from their U.S.-trained counterparts.[21] A few Latin Americans, but only a few, studied abroad with the idea that they would return to a career as a researcher. Most were educators studying in departments of education.

One effect of study abroad was, of course, to introduce new and often competing ideas and methods into Latin America. Students returning from the United States often had been exposed to highly quantitative approaches to research, becoming conversant with multiple regression analysis and sample survey techniques. Although seldom enrolled in social science courses, they were usually exposed to the social sciences. Reflecting the general state of development in the social sciences in the United States at that time, theirs had been an ahistorical training rooted in an incrementalist view of education and social change. Upon return, they constituted a base, still narrow, upon which a tradition of empirical educational research would begin to build.[22]

Latin Americans abroad in Belgium, France, and Germany tended to study in institutions where they could indulge and deepen the more congenial tradition of historical–philosophical analysis to which they had been socialized. Nevertheless, they too brought back with them new ideas, models, methods, and theories, usually rooted in conflict resolution, in a structuralist view of the world and often incorporating elements of an empirical tradition as well. Foreign study provided both counterpoint to, and reinforcement for, the historical–philosophical tradition of research so typical of earlier years. Moreover, an empirical element in most foreign training provided a starting

point for conversations between researchers steeped in the parallel research traditions, the presence of which has both enriched and complicated growth of an educational research community in Latin America.

Whether training occurred in the United States or in Europe, students brought back connections with people and institutions as well as knowledge and skills. As they moved into policy or research positions back home, they often drew upon their connections. After studying at the University of Chicago, for instance, the head of the new (in 1964) Centre for Curriculum Development, Training, and Research in Chile called upon the services of a former professor, Benjamin Bloom, to help operationalize and evaluate a new curriculum based on his *Taxonomy of Educational Objectives*. To a degree, then, foreign study deepened dependence by Latin Americans on knowledge generated abroad, even while setting a stronger base for independent study and innovation. That contradiction will always remain and was not, of course, unrecognized.

By the mid-1960s, charges of academic imperialism within the social sciences had already gained strength in Latin America particularly with reference to research methods imported from the United States. The field of education was not immune from such criticisms which, in academic circles, were offered primarily on ideological grounds. Within government, imported ideas and methods were criticized for more practical reasons. The sophisticated technologies imported were not well understood by most researchers, let alone by the consumers of research in policy positions, and they were often too expensive and time consuming for the pressing tasks at hand. Thus, the promise of quick quantitative solutions to urgent problems began to fade — even as the demand for such solutions increased — despite notable successes in which systematic collection and analysis of data did serve policy well.[23] Moreover, returned researchers were often more critical of existing social and educational institutions than governments could tolerate. The critical and skeptical spirit underpinning research sometimes overflowed its boundaries. For practical and ideological reasons, then, the return of those trained abroad often nudged the worlds of research and of policy further apart.

Foreign study both inhibited and stimulated communication among Latin American researchers in the field of education in the 1960s. Study abroad was inhibiting because ties to the foreign institutions in which study had taken place were strong whereas ties among Latin American institutions had not yet developed. However, while abroad, Colombians and Argentinians or Brazilians and Mexicans studying the same topics got to know each other, sharing personal experiences in addition to a basic body of knowledge. These connections, carried back into the region, undoubtedly facilitated communication; but with the possible exception of those who studied in Stanford University,[24] it is difficult to trace such effects. Nor did shared foreign experience assure communication. For example, Agustin Lombana from Colombia and Miguel Petty from Argentina studied concurrently in the same program at the University of Chicago, but did not maintain contact after each returned to his own country to head an educational research institution.

In the 1960s, few individuals from the Latin American educational community went abroad to study in the social sciences. Although an empirical tradition in the noneconomic social sciences had already begun to take root in Latin America in the 1950s, it had not spread to education. Without background in the social sciences, few Latin American educators could qualify for study

abroad in the social sciences. Nor were there jobs within education to which an educator trained in the social sciences might return.

Those few Latin Americans who did apply social science methods to the study of education abroad, tended to align themselves either with their social science colleagues or their education colleagues upon their return. Sharing models and methods acquired abroad was not sufficient to connect the worlds of education and social science within the region. Foreign study seldom overcame a general mistrust within the social science community regarding the qualifications of educationists who ventured outside their own field. The continuing gap between a budding educational research community and the maturing social science community assured that social dimensions of education would receive little attention by researchers. It also narrowed the pool of local talent for research on education, keeping the door open to outsiders somewhat longer than was necessary.

One attempt to integrate education and the social sciences during the 1960s was not successful. The Latin American Committee for the Social Sciences (CLACSO) set up a committee to carry out a regional educational research project. Parallel studies in Colombia, Brazil, Argentina, and Paraguay were commissioned and set in motion but, lacking energetic coordination, the comparative efforts were allowed to drag on. The Committee grew inactive. As a result, education was not given visibility as an applied research theme within the social science community — as might have happened — and the image of educational research as pedagogical research remained.

During the decade of the 1960s and reflecting the increased importance attached to education, technical assistance to education grew. Many international institutions, including the United Nations family, bilateral technical assistance agencies, foundations, and churches, were involved in aiding the growth and improvement of education in Latin America. Financing study abroad was only one form of involvement. In addition, funds were provided for institutions, consultancies, travel, meetings, and local training. Only occasionally were these explicitly directed toward strengthening educational research in Latin America.

Technical assistance in the form of "experts" brought many foreigners into the region. In some cases, these technical experts were explicitly charged with helping to strengthen local research capacity. The Department of Educational Research (DIE) of the Venezuelan Ministry of Education, for instance, housed two resident North Americans who were directed to help DIE carry out an extensive study of educational achievement and, at the same time, provide training and establish research procedures. A large portion of the resident foreigners' time was spent building a data bank. These consultants helped spread the doctrine of empirical research and provided a link between northern and southern educational (if not research) worlds.

Unfortunately, many consultants who were imported to carry out a specific job were present for only short periods of time. Even longer term consultants seldom saw training as part of their responsibility; only rarely did truly collegial relationships develop. Nor, realistically, was there a solid basis for developing such relationships in the early 1960s, given the consulting arrangements and different backgrounds of the individuals involved.

Throughout the 1960s, efforts to strengthen educational research were still, by and large, indirect and piecemeal. By the end of the decade, however, momentum had begun to gather, stimulated by the changing demands and conditions noted earlier, by the appearance of several institutions devoted specifically and productively to research, and by return of a first wave of those trained abroad. In addition to government initiatives, including those described for Chile and Columbia, major programs were begun by several international organizations which provided support explicitly directed toward strengthening educational research capabilities in the region. Although these programs have their roots in the 1960s, they lead us quickly into the 1970s.

Institutionalizing Educational Research: the 1970s

The main foreign institutions assisting the growth of educational research in Latin America have been the Catholic Church and the Ford Foundation. Significant roles have been played also by the Organization of American States (OAS), the United States Agency for International Development (USAID), the Interamerican Foundation (IAF), and, through their support for specific large projects, the Interamerican Development Bank and the United Nations Development Program (UNDP).

The Catholic Church, particularly the Jesuit Order, contributed brain power, social conscience, and money to the organization and growth of educational research. Already the Centre for Educational Studies had been established in 1963 in Mexico and the Centre for Educational Research and Development in 1964 in Chile with strong ties to the Jesuits. But Jesuit-related centres, formed later, are active in several other countries as well. Roman Catholic foundations in Europe, Canada and the United States have provided financial support for research undertaken by the infant organizations, which were able to attract funds from other sources as well.

Churchmen would undoubtedly contest the non-Latin American label attached here. They would be correct, of course. Local or regional religious orders have indeed provided significant assistance for research. The initiative taken by local Jesuits to create a research centre in Mexico, for instance, is a Latin American initiative. Nevertheless, the Latin American church is subject to strong pressures from outside. For instance, taking their cue from Pope John XXIII's social encyclical (*Mater et Magistra*) issued in 1963 and from the *Proclamation of Medellin* in 1968, the Church-related research centres incorporated a strong element of social action into their research activity. Moreover, an important source of funding has been non-Latin American Catholic organizations, most of which are located in Europe.

Before Jesuit-related education research institutions were established, centres for research and social action had been set up throughout Latin America by the same Jesuits, staffed in the main by Latin American social scientists who were usually recruited from university positions. Although these centres of social research and action had an impact on thinking within the church,[25] helping, for instance, to set the agenda and influencing the conclusions at Medellin, they have not been as prominent in the broader social science community where other much stronger institutions exist. In contrast, the educational research institutions with ties to the Society of Jesus have played an

important role in providing organization, available talent, discipline, and financial backing. The decision to maintain educational research in separate institutions (which a number of Jesuits have felt in retrospect was not a good one) has helped maintain distance between education and the social sciences.

A second major outside actor in the growth of educational research in Latin America has been the Ford Foundation. In 1970 the Foundation decided to revamp its program of support for education in Latin America. As a starting point, a meeting was sponsored in Buenos Aires bringing prominent Latin American figures from the field of education and from the social sciences together with several non-Latin scholars and with Foundation staff. Based on recommendations from the meeting, a program was developed which focussed more on strengthening research capability in selected research institutions than on particular topics or problems. Funds were made available for training, abroad or within the region, for research projects, and for developing institutional infrastructure. A suggestion that one or more regional research institutions be set up was rejected by the Latin Americans present. Improved communication among scholars and between educational research and the social sciences was also an aim of the Foundation's program. The institutions supported under this program were generally, however, educational research institutions (with an overlay of social science), not social science institutions taking education as one research topic, again reinforcing the tendency to treat the two areas separately.[26]

In 1967, following the meeting of Latin American Presidents at Punta del Este (Uruguay), an Interamerican Council for Education, Science, and Culture (CIECC) was established. That council directed the OAS, in 1968, to set up a regional program in education, one function of which was to promote research. The vehicle for promoting research became the Multinational Plan for Educational Research, Experimentation, and Innovation which was approved in 1969 and was functioning by 1971. Under the plan, regional centres based in the Ministries of Education in Costa Rica and Argentina were given priority, but research projects were also supported in most other countries of the region.

Whereas the Catholic Church and the Ford Foundation worked mainly with private research institutions, the OAS was required to operate through local governments. The OAS preferred also to work with existing institutions (despite the creation, in 1978 in conjunction with the Venezuelan government, of an interamerican centre for studies and research for the planning of education). Research support focussed on several topics: teachers, technical education, classroom interaction analysis, attitudes toward education, and costs of returns to education. Funds were made available also for training, usually within the region in short courses.[27]

Research per se was not a central part of assistance to education by USAID in Latin America but some funds were available for research,[28] sometimes directly for experimental projects, sometimes as part of a much larger sector loan. These funds were, for the most part, government to government funds, but there have been exceptions, for example, support for the Program for Joint Studies of Latin American Economic Integration (ECIEL) and for a research project carried out by the Centre for Educational Research and Development (CIDE). The research supported has been very much applied research and includes large research and development (R&D) experiments. Areas for which R&D support has been given from 1970 to 1980 include: development of

educational research networks (mainly ECIEL work), bilingual education, preschool education, nonformal education, and educational media for the integration of women. As part of the sector analysis associated with USAID loans, considerable attention has been given to costing and cost effectiveness.

Since its inception in 1972, the Interamerican Foundation has helped develop action research. The IAF has had little to do directly with universities or governmental research organizations, favoring support to institutions whose first priority is action and second priority is related evaluative research. The action-research orientation is not unique to IAF, however; that slant characterizes much of the support coming from church-related sources.

During the 1970s, each of these organizations actively promoted communication among researchers in the various institutions with which it cooperated. These networks are sometimes distinct and sometimes overlap. The OAS, for instance, works with an entirely different set of institutions from the Catholic Church or the Ford Foundation, but overlaps with USAID-assisted organizations. The Ford Foundation has cooperated with several institutions that are part of the Jesuit network.

In addition to those mentioned above, a variety of other educational networks, only some including explicit attention to research, developed during the 1960s and 1970s. Some were promoted by non-Latin American connections, some were internal to the region, and some organized along thematic lines. Each member of the family of UN institutions (UNESCO, FAO, ILO, UNICEF, and WHO, as well as those already cited), for instance, is involved in assisting the development of education in Latin America, each in its own way with its own network, and with emphasis on its own subject area. With the late arrival of German, Swedish and Canadian assistance agencies, new networks are developing. Private and professional organizations such as the Children's Television Workshop and the International Council for Adult Education have been active in Latin America also, helping to promote research and providing connections between Latin America and other regions. Meanwhile, regional institutions and networks have grown also as they deal with radio schools (ALER) and educational finance (APICE). These and other networks are listed in Table 1, taken from a paper by Ernesto Schiefelbein, titled *Production, diffusion and use of knowledge through educational networks in Latin America*.[29]

Two large regional research projects were mounted in the mid-1970s providing a major boost to the development of research and bringing together individuals and institutions from both the education and social worlds. The Committee for Joint Studies of Latin American Economic Integration (ECIEL) received support from the Interamerican Development Bank and from a consortium of donors for a major research effort in the field of education. Coordinated by a broad-minded economist, Claudio Castro, nationwide studies were initiated in six locations to analyze the "determinants of educational performance." A set of cost studies was undertaken as were several studies examining the relationship between education and the labour market. The ECIEL research began from an essentially developmentalist point of view, was based almost exclusively on survey research, and leaned heavily upon multiple regression analysis. Although rooted in economics and coordinated by an organization outside the field of education, the studies were carried out in a

Table 1. Organizations sponsoring networks related to education in Latin America.

UN Agency Organizations
- IBRD (International Bank for Reconstruction and Development)[a]
  - EDI (Economic Development Institute)
- ILO (International Labour Organization)
  - CINTERFOR (Interamerican Centre for Research and Documentation about Training)
  - PREALC (Regional Employment Program)
- WHO (World Health Organization)
- FAO (Food and Agricultural Organization)
- ECLA (Economic Commission for Latin America)
  - DEALC (Development and Education in Latin America)
- UNESCO (United Nations Education, Science, and Cultural Organization)
  - UNU (United Nations University)
  - IERS (International Educational Reporting Service)
  - OREU (Regional Education Office)
    - CREFAL (Regional Centre for Adult Literacy and Fundamental Education)
    - ILCE (Audiovisual Regional Centre)
    - CONESCAL (Centre for Educational Construction)
    - CEDEFT (Centre for Development of Teaching and Technological Formation)
    - CRESAL (Regional Centre for Higher Education)
    - Documentation Centres

Organization of American States (OAS)
- CIENES (Interamerican Centre for Statistical Training)
- Program of Educational Technology
- PDR (Regional Development Program)
- PRE (Program of Regional Education)
  - PMI (Multinational Research Project)
    - CEMIE (Centre for Multinational Research in Education)
    - CINTERPLAN (Interamerican Centre for Studies and Research on Educational Planning)

Convenio Andreas Bello

Donor Agencies
- BID (Interamerican Development Bank)
- IAF (Interamerican Foundation)
- USAID (United States Agency for International Development)
- IDRC (International Development Research Centre)
- SAREC (Swedish Agency for Research)
- Ford Foundation
- Van Leer Foundation
- Rockefeller Foundation

Private Organizations
- ALER (Latin American Association of Radio Education)
- APICE (Panamerican Association of Education Lending Institutions)
- CLEA (Latin American Council for Adult Education)
- CLACSO (Latin American Council for the Social Sciences)
- ECIEL (Joint Studies for Latin American Economic Integration)
- CPU (Corporation for University Promotion)
- CLAR-CELAM (Latin American Council of Roman Catholic Bishops)
- CHEAR (Council for Higher Education in the American Republics)
- UDUAL (Union of Latin American Universities)
- GULERPE (Latin American Group for the Return and Improvement of Higher Education)

Adapted from: Ernesto Schiefelbein (1978). *Production, diffusion, and use of knowledge through educational networks in Latin America*. Centre for Educational Research and Development, Santiago, Chile (mimeo).

[a] To present a simple version, overlapping has been omitted. For example, the IBRD should also be included as a donor agency. The BID aids ECIEL, CONESCAL, and others.

number of instances by researchers in education, sociology, and political science. A concerted attempt, the best to date, was made to overcome communication gaps between economists and educators. Significant additions have been made to educational research literature, and data are still being drawn upon for analyses and for training.[30]

Complementing the ECIEL research is a broad program funded by the United Nations Development Programme (UNDP) and undertaken by the Economic Commission for Latin America (ECLA). Headed by a sociologist, German Rama, this regional project to study "education and development" has examined alternative models of development and the place of education in them. The ECLA project uses historical as well as other research methods and finds conflict theories a better starting point than incremental theories of social or educational change.

With the growth of research centres and projects, a Latin American literature has grown also. The ECIEL work alone needs more than a meter of shelf space. The UNDP project boasts a more than respectable list of publications, including two useful bibliographies.[31] Several Latin American journals were established in the 1970s providing outlets for publication. These will be discussed in greater detail below as part of an examination of the state of educational research in Latin America in 1979.

The ECIEL and UNDP/ECLA projects have generated enormous amounts of data, much of which has not been analyzed in depth. Several sector studies and censuses of educational systems have produced mountains of data. These sources are not always accessible to all who might wish to work with them, for technical and for political reasons. Still, the data base is impressive.

As a result of these and other initiatives, the base for carrying out research on education in Latin America in 1979 is very different from what it was in 1960 or even 1970. Institutions and individual researchers are active. An indigenous literature is developing. Networks abound. A data base is growing. An empirical tradition has taken root but is being put in perspective as competing ideological and methodological positions are established.

Both the growth of research and its tentative nature should be evident from the general discussion that follows of the state of educational research in Latin America in 1979 in which I will comment on the present research climate, on people and institutions, on training opportunities, and on publications and educational research priorities within the Latin American region.

Educational Research in Latin America: 1979

The Climate for Research

Both the content and style of research depend on the climate within which research is carried out. In 1979, positive effects on the climate for research associated with the increase in researchers are balanced by widespread restrictive political conditions, by a decrease in the rate of educational expansion, by increased uncertainty and reductions in levels of funding,[32] and by an ambivalent attitude toward research on the part of policymakers.

A steady increase during the 1960s and 1970s in the number of researchers has meant colleagues are now on hand to provide motivation, ideas, and

critiques. That increase has also heightened demand for research results, but as an input to subsequent research rather than as an input to policy. A growing research community means there is less need in 1979 to look abroad for professional recognition and advice than in earlier years. Nevertheless, that tendency remains.

A steady advance of authoritarian regimes during the 1960s and 1970s has eroded the pluralistic social democratic environment characterizing the early 1960s. In 1979, only Mexico, Costa Rica, Ecuador, Colombia, and Venezuela claim popularly elected, nonmilitary regimes. It has been increasingly difficult, therefore, to develop in some countries that strain of research questioning basic goals or educational policies. The current climate, even more than usual, favors research directed toward solving technical problems and reinforces the general pressure against problem-raising research. Researchers look toward a different audience — practitioners rather than policymakers. Repressive climates, then, can both facilitate and make more difficult connections between research and policy.

Authoritarian regimes in Latin America are not everywhere the same in their treatment of researchers. The most durable dictatorships, Paraguay and Brazil, are now locations where researchers have some leeway to be critical. This was not always the case and in both settings definite limits still exist on the degree of criticism tolerated. Much more oppressive at the present time is the climate in Chile, Argentina, and Uruguay where military dictatorships (at least the current ones) are not so old and where one finds little space for critical research. Nonmilitary governments can be threatening to researchers as well, as indicated by the present situation in Colombia.

One effect of the changes in the political climate has been to force migration by researchers. Many Latin Americans from southern countries have moved within Latin America — to Mexico, Venezuela and Brazil, principally, but elsewhere as well. Others can be found in the United States or Europe (particularly England). What the long-term results of such mobility will be remains to be seen. An indirect effect may be to increase communication among worlds of research. Whether moves will affect adversely or favorably the level and quality of research produced within the region is not clear. More important, however, are the potential effects within countries of emigration on the research climate itself, on institutional stability, and on training a next generation of researchers. These problems require serious examination. Migration stimulated by political events is probably less pronounced among educational researchers than other less applied social scientists. Still, there is in 1979 an important echo within education of the more general phenomenon.

It is axiomatic to say that the level and conditions of available funding affect the general climate for research. How that occurs is not straightforward, however. The amount of money available is probably less important than the conditions attached to its availability; increasing the amount of money does not necessarily improve the research climate. Indeed, if tied to specific purposes, additional funding can distract researchers from topics they think are important and timely, or if funds come from outside, from topics local governments think are important.

It is safe to say that the level of funding for educational research in Latin America is low (compared with agriculture, for instance). I know of no study of

trends in the amount of money made available for educational research or of the conditions under which the funds are made available, but I would not be surprised to find that research support within education has reached a plateau or, in real terms, is smaller in 1979 and in 1978.[33]

Some untied funds have been available for research, occasionally through universities, sometimes through international organizations. The Ford Foundation, for instance, has provided research money within grants to institutions and has supported research competitions judged by panels of local scholars. Also, a number of the newer research institutions have been very successful at selling the projects they think important as well as responding to what they think are the research preferences of funders. Perhaps the safest generalizations to make regarding funding are: (1) that funds are less often available for empirical research which begins overtly from a structuralist (rather than developmentalist) point of view; and (2) that few funds are available for research that is not related to solving immediate problems. Awareness of such biases helps set a climate for research.

The current climate in Latin America seems to favour a style of research directed at showing how the educational system is working — research done with the hope that exposing deficiencies, often through relatively simple descriptions, will eventually induce change. Such research can be based on analysis of available data, and does not require new field studies. It can be critical without appearing to be so by pointing, for instance, to inequitable distributions. Evaluations of experiments and innovations, if not funded as part of larger reforms are carried out post hoc or done on a very small scale. Sometimes this approach to research turns it into a consulting activity with little value beyond a very immediate input to the organization for whom the consulting is carried out.

It would be logical to presume that the politically and financially restrictive conditions described (which vary widely from country to country) have been very debilitating to institutional survival or to the pursuit of individual research. As of 1979, that does not yet seem to have been true in the field of education.

Researchers

One index of the growth of a research community is the number of researchers on the job who can claim an academic pedigree — a PhD or an MA, for instance. By that index, advances in Latin America have been astounding in the last ten or fifteen years. Perhaps most dramatic has been the case of Brazil. Since 1970, more than 100 Brazilians have received (or are receiving) educational research training abroad at the doctoral level.[34] A recent informal census by the author in Colombia of PhDs or ABDs (all but dissertation) produced 37 names. Not counted in that number are social scientists outside the field of education who have turned or may turn their minds to the analysis of educational problems. Mexico,[35] Chile, Argentina, and Colombia also boast relatively large numbers of education researchers, this despite some brain drain, particularly from the last three countries. Concentrations of certified researchers are growing in Venezuela, Costa Rica, and Peru as well.

The number of PhDs on the job does not tell the story, however. More fundamental questions have to be asked about the kind of education these researchers have received, who they are (their backgrounds, values, aspirations,

etc.), where they are located, and whether they use their research skills.[36] I have not seen a study of backgrounds of educational researchers and generalizing is risky. Still several impressions may be worth recording.

Most researchers seem to come from middle- or higher-class origins. Perhaps better stated, it is rare to encounter individuals who are from lower-class origins who have acquired an academic credential and are involved in educational research. Despite this relative homogeneity, the ideological position of Latin American researchers varies widely.

Academic backgrounds and previous work experience of Latin American educational researchers are extremely varied as well. There is a tendency for those who are the most technically competent and highly trained to be also those who lack practical experience in education. The stronger researchers often combine an academic background in a specialty such as industrial engineeering, history, philosophy, psychology, or increasingly, social science, with advanced work at a North American university in an educational subject (e.g., curriculum development, a planning course, or economics of education). That clustering of traits can make communication with practitioners and policymakers difficult.

Another group of educational researchers has moved from the role of practitioner to that of researcher, bringing along valuable experience. However, theirs is often a weaker academic background than that of colleagues without practical experience and as a result they are less often selected for advanced training, their research training often occurs on the job, and their research skills tend to be weak. Unfortunately, the combination of practical experience and academic training of high quality occurs infrequently.

This discussion emphasizes certified researchers. The research enterprise, however, involves many extremely able individuals who do not hold an advanced degree and, occasionally, who have decided against seeking one. Several researchers at the Centro de Estudios Educativos (CEE) in Mexico, for instance, have opted against additional advanced study for a degree, feeling that to do so would not add substantially to their research skills and knowledge and would be, therefore, an unneeded certifying exercise.

Although few of the recently returned researchers trained abroad can point to roots in the humanities, that tradition is very much alive, particularly in church-related institutions (as in the work of CIDE, CEE and CIE), and because some researchers continue their formation along that line either within Latin America or in Europe. That is less true for Brazil, it is my impression, than for most other Latin American countries.

Perhaps the key question to ask is: Do those trained as researchers use their research skills? A feeling that seems to be shared widely is that highly trained researchers in the Third World move quickly and permanently into administrative positions leaving research forever behind. That happens, of course, but not as frequently in Latin America in 1979 as in other places where the depth of trained talent is not as great, or where institutions are not present to hold them. Although all Latin American research institutions have experienced turnover of personnel — some of whom have moved into administrative ranks — there is surprising stability. How long that situation will continue remains to be seen.

We do not know what will happen as the next generation of researchers, returning from foreign training or graduating from programs at home, finds the

few available positions in research institutions filled. Affecting their future dedication to research and to the institutions they will join, will be the fact that new researchers will not be among the founders of research institutions as is presently the case for the 1970s generation. In addition, there is a tendency for those trained abroad to arrive home with set ideas and an air of intellectual superiority which inhibits needed flexibility, prevents feedback from colleagues, and makes reintegration difficult. These circumstances can undermine institutional stability because personal attachment to institutions (and perhaps to the art of research) is likely to be weaker than in the past. Thus the stability that exists in 1979 may be more apparent than real.

Such movement as there is of researchers into administrative and policy positions, while effectively removing them from the production of research, can make possible more intelligent use of research results. Job shifts can increase the demand for research-based information from those former researchers, now in policy places. Such movement is one method of connecting worlds of research and policy.[37] To what extent there is an increase in the intelligent use of research or in the demand for research of several kinds is, however, an open question worthy of examination.

Within Latin America, the dominance of military managers makes it more difficult for civilian researchers to move into positions of governmental responsibility. The pattern of earlier years in which university professors, among others, moved in and out of government as parties changed is not now so prevalent. Research is more likely to be done on a contract basis during which researchers maintain a temporary association with the government, usually in a technical capacity.

The variety of academic backgrounds researchers bring to the study of education can be illustrated by looking at the staff of two of the region's strongest educational research institutions, the first situated within a university and the second a private research institution. The dynamic director of the Department of Educational Research (DIE) in Mexico, Juan Manuel Gutierrez Vasquez, is a biologist by trade. Included on his staff are five researchers who use their training in hard sciences to carry out research related to the development of science curriculum and the teaching of science. But the staff also includes two educators, two anthropologists, two sociologists, a psychologist, a linguist and a political scientist.

The 1978 annual report of the Centre for Educational Research and Development (CIDE) in Chile lists 39 academic staff. Among those are five with doctorates (one from Canada, two from Belgium, two from the United States) in sociology, philosophy, the economics of education (2), and mathematics education. Three other CIDE staff are doctoral candidates (all from the U.S.) in subfields of education, and three others are currently PhD students (in the U.S. and Belgium) studying economics, applied linguistics, and education. Five staff members hold MA degrees (two Americans, one Canadian, two Chileans) in anthropology, sociology and education (3). Backgrounds of others include work in sociology, social psychology, communications, anthropology, history, and mathematics as well as education.

The array of talent in these institutions suggests they have successfully cut across worlds of research separated by disciplinary boundaries. Such variation within an organization does not, however, assure interdisciplinarity. That

occurs in the heads of individual researchers. Nor does it assure connections to the broader social science world. Nor does having studied abroad mean that connections outside the region will be maintained. Still, the chances that such will occur are increased.

The presence in education research institutions of many individuals with social science training suggests a coming together of the two fields. However, many of those who have studied a social science and who can claim some knowledge of a particular field are, nevertheless, still educationists. The European or U.S. doctorate in the sociology of education has not taken them as deeply into sociology as sociologists. Despite their training, then, they remain on the margin of the social sciences and the social science community.

Research Institutions

Any research institution reflects its origins, its leadership, and its current circumstances. Variation along only these three dimensions makes generalization about educational research institutions in Latin America difficult and probably unwise. Among research institutions active in 1979, one finds very diverse origins. INIDE (Peru), for instance, grew in response to government desire for research to assist planning. The Carlos Chagas Foundation (Brazil) is a private testing organization that broadened its interests to include research. A university reorganization along multidisciplinary, problem-centred lines led to the research program at the Pontifical University Javeriana (Colombia), while the Centre for Educational Research and Development (Chile) began as an organization created to monitor private (mostly church) schools. Educational research took hold in the Paraguayan Centre for Social Studies when that research centre developed a strong enough interest in education to make it a priority for research. The Human Ecology Research Foundation (Colombia) began as a research project that grew beyond itself. Finally, the Centre for the Development of Non-Formal Education (CEDEN) (Colombia), was started as a mechanism for turning attention of local scholars to a neglected theme and as a meeting spot for researchers lying outside established institutional structures.

Indeed, each institution can point to the special circumstances of its birth and growth. Whatever the circumstances, however, most Latin American educational research institutions have had a significant input, usually from the beginning, from outside in terms of the training of the leaders and researchers, support for research projects, institutional funding, and technical assistance.

Both the quality and stability of personal leadership can be crucial to the development and maintenance of research institutions. Government-based research institutions in Latin America have not been able to avoid turnover of leadership, despite ability to attract able leaders from time to time. More is at work to create turnover in these governmental institutions than political change. Good leaders have sometimes felt restricted by bureaucractic demands and frustrated by the occasional suppression or unsophisticated use of research results.

The most discouraging example of leadership discontinuity within governmental research units comes from Colombia where the Colombian Pedagogical Institute (ICOLPE) was born in 1968 and disappeared in 1976. The Department of Educational Research in the Ministry in Venezuela was strong between 1970 and 1974 under the leadership of Ramon Pinañgo, but lost its

momentum thereafter. Peru's INIDE which at one time boasted the largest such unit in Latin America, has experienced several turnovers of leadership and bureaucratic problems which have hampered its work.

Fewer changes of leadership have characterized newer research institutes located in universities or in the private sector, but turnover occurs there as well. For example, the Mexican Centre for Educational Studies (CEE) has weathered four changes of directors in 16 years. Continuity has been aided immeasurably by its Jesuit connection. In Chile, shifts associated with political changes have added to problems of the Interdisciplinary Program for Educational Research (PIIE).

Directors of Latin American research centres are Latin Americans. Almost all have been trained abroad, usually in the United States. Most directors are also able researchers, usually in an empirical tradition, but not always. Several institutions (CEE, for instance) have divided their leadership responsibilities, appointing a managing director and a research director, the latter with technical–professional duties. Where that has not happened (and even sometimes when it has), the energy of very capable researchers has been siphoned off into fund-raising.

The ability to attract and manage funds has been as important as research expertise for the growth and continuity of research centres which differ markedly in their ability to support themselves. In some cases, directors have served on governing councils or committees of regional organizations or have worked as consultants to international organizations. Connections established in these ways have been useful for channeling resources to their own institutions.

A notable feature of the current educational research scene in Latin America is the relatively strong presence of private (nongovernmental and nonuniversity) research centres. In part, the existence of private institutions can be attributed to the instability of universities in Latin America. In part, it reflects a desire for a modicum of independence from government. In some cases, private status has been forced on an institution no longer able to function in a controlled university environment (PIIE is an example). In part, private centres are creations of other social institutions, particularly the Roman Catholic Church.

The strength of private institutions is potentially important for at least two reasons. First, such institutions remain detached from policymakers and can often take a more critical position than if they were located in a governmental institution. (To overgeneralize this point would not be appropriate. Sometimes, nongovernmental institutions can be less autonomous than governmental ones, depending on sources of funding for their research agenda.) Second, private institutions appear more likely to publish their research than are governmental or university institutions. Private groups scrambling for funds must show a product. Governmental institutions are concerned with providing information in-house and, in some cases, to publish research results risks embarrassing governments.

Although Latin American educational research institutions situated outside governmental structures have to grow and survive in increasingly authoritarian climates and although funds have often been scarce, they have proved to be surprisingly durable. The ability of private centres to maintain themselves is

related directly to the entrepreneurial ability of their leaders and to the dedication, perhaps more than the quality, of their research staff. In some cases new institutions have scraped by only because researchers were willing (and able) to make large personal sacrifices, taking low salaries (sometimes going without salary) to stay in the country rather than to emigrate. (Two prime examples are the Centre for Research in the Science of Education (CICE) in Argentina and PIIE in Chile.) In other cases, continuity has been aided by subsidies from the Catholic Church, including support for the priests heading them (the Centre for Educational Research in Argentina and the Bolivian Centre for Education, Research and Action are examples.) Still other institutions draw heavily on staff who have other jobs as well (for example, CEDEN). Temporary funding from international organizations has played a large role (now the case for PIIE).

There are, of course, major differences within the region. The strongest institutions and the greatest concentrations of talent in terms of output and training seem to be in Chile, Brazil, Colombia, and Mexico. These countries seem also to be those which have received the largest amounts of international aid for research, supporting the adage, "Them what has, gets."

Table 2 lists institutions in Latin America exclusively or importantly concerned with research on education. The list includes governmental, university-based, and private as well as international–regional organizations. It could be expanded easily by adding other research institutions not principally concerned with research on education, but involved in such research through the interests of individual researchers. Examples would include the Economics Faculty of the Bolivian National University where Juan Morales labours almost alone, but with support from the ECIEL project. Or the Institute of Sociology at the Catholic University in Chile where Gabriel Gyarmati attends to education from time to time. In addition, institutions might be added which are engaged in educational research as part of their broader involvement in the field of education, either on a contract basis or narrowly centred in evaluations of their own programs. Examples might be research units within the various apprenticeship programs scattered throughout Latin America or within the Accion Cultural Popular (ACPO) in Colombia. Other authors would undoubtedly present a different list.[38]

Publications

Diffusion of research results in Latin America is still limited but an indigenous literature is growing and spreading. This expansion is evident both in the journals published and in the increasing number of separate publications. Characteristics of fourteen educational journals published in 1979 in Latin America are summarized in Table 3. From the starting dates listed in the table it is immediately evident that few publications predate 1970.

The list of sixteen could easily be expanded by adding journals in which educational articles occasionally appear — social science, medical, or psychology journals, for instance. The last two publications in the table fall into this category. Other examples would be the *Revista Paraguayo de Ciencias Sociales* or the *Revista Latinoamericano de Ciencias Sociales*. In addition, educational magazines for teachers could be added, several of which include research reports, and all of which do some translating of research into forms that are meaningful for practising teachers. More specialized publications appear

Table 2. Selected institutions in Latin America concerned with research on education.

Argentina		
CICE	Centro de Investigaciones en Ciencias de la Educación	1967
CIE	Centro de Investigaciones Educativas	1971
CIIPME	Centro Interdisciplinario de Investigaciones en Psicología, Matemáticas y Experimental	1971
Bolivia		
CEBIAE	Centro Boliviano de Investigación y Acción Educativa	1976
Brazil		
Chagas	Fundacao Carolos Chagas, Department of Educational Research	1971
UFMG	Universidade Federal do Minas Gerais, Department do Educacion	—
INEPE	Instituto Nacional do Estudos e Pesquisas Educacionais	—
Brasilia	Faculdade de Educacao, Universidade de Brasilia	—
Chile		
CIDE	Centro de Investigación y Desarrollo de la Educación	1964
PIIE	Programa Interdisciplinario de Investigaciones Educativas	1971
FLACSO	Latin American Faculty of Social Sciences	
Colombia		
Javeriana	Programa de Investigación y Tecnología Educativa de la Pontificia Universidad Javeriana	1973
CEDEN	Centro para el Desarrollo de la Educación No Formal	1973
HERF	Fundación de Investigaciones de Ecología Humana	1967
SER	Instituto SER de Investigación	1973
CEDE	Centro de Estudios sobre Desarrollo Económico	1958
CCRP	Centro Regional de Población	1972
Ecuador		
IIE	Instituto de Investigaciones Educativas	
Mexico		
CEE	Centro de Estudios Educativos, A.C.	1963
DIE	Departamento de Investigaciones Educativas Centro de Investigación y de Estudios Avanzados	1971
INCCAPAC	Instituto Nacional de Ciencias del Comportamiento y de la Actitud Publica, A.C.	1973
UPN	Universidad Pedagogica Nacional	1979
Paraguay		
CPES	Centro Paraguayo de Estudios Sociológicos	1964
Peru		
INIDE	Instituto Nacional de Investigación y Desarrollo de la Educación	1972
DESCO	Centro de Estudios y Promoción de Desarrollo	1965
PUCE	Pontifical Catholic University, Lima, Peru	—
Uruguay		
CIEP	Centro de Investigación y Experimentación Pedagógica	1971
Venezuela		
DIE	Dirección de Planeamiento	1967
CENDES	Centro de Estudios del Desarrollo	—

(continued)

Regional Centres

CEPAL (Argentina)	Comisión Económica para América Latina
CEPAL (Chile)	Comisión Económica para América Latina
PREALC (Chile)	Programa Regional del Empleo para América Latina y el Caribe
CINTERFOR (Uruguay)	El Centro Interamericano de Investigación y Documentación sobre Formación Professional
CEMIE (Costa Rica)	Centro Multinacional para Investigación Educativa
IIN (Uruguay)	Instituto Interamericano del Niño
UNESCO (Chile)	Oficina Regional de Educación
CINTERPLAN (Venezuela)	Centro Interamericano de Estudios e Investigaciones para el Planeamiento de la Educación
CLEA (Chile, Costa Rica)	Consejo Latinoamericano para la Educación de Adultos
ECIEL (Brazil)	Programa de Estudios Conjuntos sobre Integración Económica para Latinoamericana
CSUCA (Costa Rica)	Consejo Superior de Universidades Centroamericanas
Andres Bello (Colombia)	
FLACSO (Chile)	Facultad Latinoamericana de Ciencias Sociales
CLACSO (Argentina)	Consejo Latinoamericano de Ciencias Sociales
CREFAL (Mexico)	Centro Regional de Educación Fundamental y Alfbabetización Funcional de Adultos
CEDEFT (Mexico)	Centro de Desarrollo de Enseñanza y Formación Tecnológica
CRESAL (Venezuela)	Centro Regional de Educación Superior para América Latina

from time to time. The National Service for Training and Employment in Chile, for example, began publication in 1978 of a journal called *Capacitación y Empleo* and the Brazilian Association for Television Education publishes a trimestral journal called *The Revista Brasileira de Teleducacão*.

Notable among the new journals has been the quarterly *Revista del Centro de Estudios Educativos*. The academic caliber of articles in the *Revista* varies but is generally more than respectable. A spectrum of ideological and disciplinary starting points is represented. Each issue includes an editorial, commentary on previous articles, information about institutions, conferences, etc., and book reviews — in addition to the main articles.

The *Revista* is more academic than utilitarian. Not surprisingly, therefore, its paid subscribers total no more than 300, although the distribution is closer to 450. Of the 300 subscribers, approximately two-thirds are Mexican and a portion of the remainder are non-Latin American. Thus the journal has had to be subsidized and its continued existence is still far from assured.[39] In its early years, the *Revista*'s editors were hard pressed to locate sufficient articles from within the Latin American region. A conscious attempt was made to restrict contributions by foreigners. Consistently, over 80 percent of the articles published have been written by Latin Americans. However, books reviewed are often non-Latin American. Over the years, 50 percent of all contributions (including notes, reviews, etc., as well as articles) have come from the staff of the centre itself. To internationalize the journal the current editor, Horacio Chavez, recently visited research centres throughout Latin America, soliciting articles. In addition, the journal has changed its name to the *Revista Latinoamericana de Estudios Educativos*.

Table 3. Characteristics of educational journals in Latin America.

Name of the journal	Topics	Country of publication	Starting date	No. issues per year	No. pages per issue	Average no. of articles	No. per year of	
							pages	articles
Revista Brasileira de Estudos Pedagogicas	Pedagogy	Brasil	1915	4	155	6	620	24
Boletin de Educacion	Education	UNESCO	1967	2	75	6	150	12
CONESCAL	School construction	UNESCO	1965	4	80	8	320	32
La Educacion	Education	OEA	1956	2	130	5	260	10
Universidades (UDUAL)	Higher education	Mexico	1961	4	275	10	1100	40
Boletin CINTERFOR	Technical education	OIT	1965	4	80	6	320	24
Cadernos de Pesquisas Fund. Chagas	Research in education	Brasil	1971	4	160[a]	5	640	20
Revista del CEE	Research in education	Mexico	1971	4	170	7	1190	28
Educacion Hoy	Education	Colombia	1971	6	70	5	420	30
Resumenes analíticos	Education	Chile	1972	4	130	60[b]	520	—
Revista de la Educacion Superior	Education	Mexico	1972	4	140	4	560	16
Tecnologia Educativa	Education	Venezuela	1973	4	150	7	600	28
Estudios Sociales	Social sciences	Chile	1973	4	130	6	520	24
Ensavos ECIEL	Social science research	Brasil	1976	—	—	—	—	—
Forum Educacional	Education	Brazil	1976	4	100	5	400	20
Educação e Sociedade	Education	Brazil	1978	3	190	11	572	34

Source: Ernesto Schiefelbein (1978). *Production, diffusion, and use of knowledge through educational networks in Latin America*. Centre for Educational Research and Development, Santiago, Chile (mimeo).

[a] Each issue has 110 pages, but because of its large size there are about 800 words per page. Each page is equivalent to 1.6 standard pages.

[b] Only the abstracts of articles.

These figures illustrate the still limited but growing nature of both the demand for and production of Latin American educational research of high quality. Until research training programs exist within the region and unless the study of education becomes a recognized subfield within the social sciences, the demand will probably continue to be relatively small.

By way of contract with the *Revista, Educacion Hoy*, published in Colombia and also founded in 1971, is directed toward practitioners.[40] Although funded through a private foundation established specifically for the purpose, the journal owes its existence to the Latin American Conference of Bishops. It is less academic than the *Revista* in presentation and includes information about educational products and experiences as well as research; the authors, however, are not necessarily less qualified. Published six times a year, each issue of *Education Hoy* deals with a particular topic (e.g., education and nutrition, preschool education, educational finance) and includes suggestions regarding how teachers or other educators might make use of what has been presented. About 15 percent of the articles originate outside Latin America, most of which (12 percent) come from the United States.

Educacion Hoy boasts a circulation of approximately 3000 spread throughout Latin America. It has been more successful than the *Revista* in obtaining institutional subscribers including education faculties. It is run on a shoestring by editor Bernardo Toro whose personal dedication to it and whose extensive connections within the Latin American research community have made it go.

Somewhat similar to *Educacion Hoy*, but produced in a national setting, is *Cadernos de Educacion*, published by CIDE in Chile. As will be elaborated below, the market for research among teachers is still a puzzling and undeveloped one. These publications, like the more academic ones, require subsidies.

Two of the major educational journals published in Brazil are the *Revista Brasileira de Estudos Pedagogicos* and *Cadernos de Pesquisas*. *Cadernos* has served primarily as an outlet for researchers in the Fundacão Carlos Chagas which publishes and subsidizes it. Most of the 2000 copies published (4 times each year) are sold through subscription. The journal contains articles, research reports, and themes for debate. Most issues contain an article dealing with educational planning — usually from a foreign writer reprinted in translation. Research reports are of work by Brazilians, are of good quality, and are often biased toward social–psychological research that is experimental or evaluative in nature. Covered in the issues for December 1978 and March 1979 for instance, are: student–teacher interaction, occupational segregation by sex in Brazil, and experiment in changing teacher behaviour, effects of the Keller system on students, an analysis of Brazilian university examination applicants, and retention of student in graduate programs in education in Brazil. Also treated in these same issues as topics for debate are: desocializing education, preschool attendance, educational technology, and testing.

In addition to providing reports of research results, the *Revista, Educacion Hoy*, and *Cadernos de Pesquisas* have a bibliographic role. The *Revista*, for instance, has published bibliographic articles dealing with education in Chile and in Brazil and with the work of Paulo Freire. But other bibliographic sources have appeared as well. Both the ECIEL and UNDP/ECLA projects have

published bibliographies. CINTERFOR abstracts information for publication in its bulletin as does the Latin American Centre for Adult Education (CLEA) in its newsletter. Several centres maintain acquisition lists which are available for distribution; the best are probably the CEE and the Chagas Foundation. UNESCO and OEA have also published bibliographies from time to time, dealing with educational research in Latin America.

Since 1972 over 1600 educational abstracts have been published in *Resumenes Analiticos*. Even more than the journals previously mentioned, *Resumenes* has required a subsidy. At last notice its subscription list did not exceed 100 although its distribution is much broader. Through an arrangement with the International Educational Reporting Service (IERS) in Geneva, these abstracts are beginning to reach a much larger audience outside the Latin American region.

It is clear that outlets are available for Latin American researchers wishing to publish their work within the region. Indeed, finding high quality research to fill publications seems more of a problem than finding outlets. That problem is due only in very small part to a tendency for better Latin American researchers to publish abroad because it is more prestigious. Occasionally researchers publish abroad because they feel their work is more quickly diffused within the region than if published locally.[41] To the extent that is true, it suggests that Latin American publications still lack regional distribution, that most networks established within Latin America are still narrow, or that the wrong audience is being reached. Foreign publication can increase the likelihood that diffusion will occur if an international organization picks up the research results and then feeds it back into the region from outside through its own publications, at international conferences, or through its staff members who travel and work within the region developing and monitoring educational projects.

Increasingly, Latin American researchers are publishing in Latin America. The ECIEL and UNDP projects have provided important outlets. Both the Centro de Estudios Educativos and CIDE have recently published anthologies of research papers. The Corporación para Promoción Universitaria in Chile has also published collections of research. But before these publications can have the desired impact, at least two conditions must change. First, a local research mentality must grow — and with it the market for published research. That is happening as the number of researchers grows and as training programs in education incorporate research as one dimension. Second, the informal networks which support diffusion of published work must be strengthened and broadened and regionalized so that the search for relevant research does not automatically begin abroad. That is happening slowly.[42]

There are other basic problems inhibiting broad diffusion of research: few incentives have existed in Latin America to publish in standard publication channels; universities have escaped the publish or perish ethic; scholarly communities have been relatively small so informal communication has often sufficed; and governments are sometimes too embarrassed to publish research results.[43]

Two Analyses of Published Research

A. An analysis in 1978 by Garcia-Huidobro and Ochoa[44] of 1000 abstracts taken from *Resumenes Analiticos* uncovers some interesting tendencies with

respect to foreign involvement, the institutional locations of research, the form of publication, methodologies used, and topics covered. The continuing international influence on educational research in Latin America is evident from the fact that a surprising ten percent of the research abstracted was neither in Spanish nor Portuguese. Also, more than one-fourth of the publications were produced under the auspices of international organizations (ECIEL, PREALC, OEA, etc.), or were done by foreign scholars working in Latin American countries (almost all of whom were North Americans based in universities). This international presence increases considerably for poorer countries within the region. Outside influence is undoubtedly understated in the analysis because an undetermined proportion of the national research is carried out by institutions obtaining general or project support from abroad. (On the other hand, research produced under international auspices is more likely to be published than other research, biasing the influence upward.)

Almost one-fifth of all research abstracted originated in private research centres, i.e., centres not associated either with the government or with universities. A much higher percentage of research was carried out for, or by, governmental research units in poorer than in richer countries of the region. Because government research units do not depend for their financing on publication and because the studies funded by government are sometimes classified, the amount of research done in government institutions is certainly underestimated. This finding points to what seems to be an increasing influence of governments over the development of educational research.

Not all of the studies abstracted could be called research studies; approximately 30 percent were reports, official documents, teaching materials, or descriptions of a particular experiment and were not systematic in nature. Only one-fifth of the references were in article or book form whereas mimeographed reports of limited distribution were common, constituting over half of the total. Only two percent of the abstracted documents were theses.

The authors of the *Resumenes* analysis suggest that the poor and precarious diffusion of research results in Latin America is probably a function of lack of incentives for publication and communication by researchers, too limited publication outlets,[45] and the tendency for publication to certify work done rather than to communicate it. To these reasons can be added the high cost of publication in many countries. They further suggest that the lack of diffusion affects negatively the process of research itself.[46]

Half of the studies reviewed were classified as empirical. Thirty percent were based on original field studies in which information was collected by questionnaire. Very little systematic work was reported based on direct or participant observation. Although many studies lacked any theoretical grounding, economics or sociology provided a starting point more often than psychology or history. Anthropological research was missing.

With respect to content of research, the authors conclude that relatively little attention had been given to research on preschools or primary schools, adult education, special education, literacy, private education, nonformal education, or the teacher. One-third of the studies were concerned explicitly with education and society or the social context of education.

The significance of these observations, based only on an analysis of abstracts, must not be exaggerated. Some research is never published

(particularly that done in-house by governmental agencies), some completed research was not available to be abstracted, and coverage is biased with Chile being overrepresented. Research published by social scientists in noneducation journals has been missed by the abstracters as has a fairly extensive literature published in foreign journals, usually in English, but in other languages as well. Moreover, the analysis tells little about the quality of the research abstracted or how it correlates with institutional location, international involvement, disciplinary origin, etc. In a companion work, the authors will delve into the epistemological bases of the research, most of which explicitly or implicitly seems rooted in a positivistic tradition.

Perhaps as telling as the analysis is the fact that the publication by Garcia-Huidobro and Ochoa is itself in mimeographed form. Moreover, it is quantitative and descriptive in its format and uses existing data as the base for the study, a tendency noted earlier for research being carried out in repressive climates. In spite of this, the conclusions are suggestive, as indeed they are intended to be. Some are so strong (the absence of anthropological research, for instance) that further searching would be unlikely to change the conclusion.

The analysis does not tell us much about the dynamics of diffusion or about the implications of the international involvement identified so roughly through looking at the abstracts. Who, for instance, are those who are publishing from bases in international organizations — Latin Americans or others? Are the abstracted research works written by foreigners in English insensitive to the Latin American reality? More so than others? What, if any, are the epistemological differences in the research done by Latin Americans and by non-Latins? If there are none, how does one interpret that fact?

B. An analysis by Toro and Lombana[47] similar to that of the *Resumenes* abstracts has been carried out for 238 Colombian studies. Research tendencies have been described for the period 1960–1978. In contrast with the broader analysis of *Resumenes*, the Colombian study of research did not concern itself with questions of foreign influence on research in Colombia. The studies chosen for analysis were all done within the country. Almost all were in Spanish. Like the more general picture for Latin America, research in Colombia was found to be heavily descriptive, published primarily in ephemeral rather than more permanent forms, and relatively unsophisticated both in the use of statistics and in design (out with a discernible trend toward causal studies and more sophisticated analyses). Studies treated primarily the formal educational system. Little attention was given to preschool, technical, or post-secondary education. The learning process, administration, and the social context of education were the most frequent subjects of research. Few studies dealt with teachers, with the financing of education, child development, or education and politics. Educators and sociologists were most prominent among the writers. Anthropologists were absent.

Several general conclusions have been drawn by the authors of the Colombian analysis.

- Action by the government can influence markedly the quantity and quality of research.[48]
- The market for educational research in Colombia is not sufficient to sustain publications on the basis of demand. The spread of a research mentality among teachers seems called for as do subsidies for the publication of research in more permanent forms.

- Research results do not seem to accumulate. There was little evidence that researchers, when approaching their own projects, took into consideration what had been done before them in the country. This was attributed in part to the poor diffusion of existing research, but also to a lack of continuity.
- Poor diffusion, it was suggested, works against creation of a scientific tradition, against the continuity and accumulation of knowledge, and against the use of research results in the decision-making process. The authors speculated that poor diffusion is related to insufficient demand, to the constraints of mailing, to lack of awareness by researchers regarding possible sources of publication, and to the fact that publication was often looked upon as a means for certifying results, not for communicating them.
- Incursions into the field of education by researchers from other traditions, including medicine and several of the social sciences, had enriched the body of research available in the field of education.
- The private sector of research appeared strong despite the financing problems private institutions must face.

Training Opportunities

Unless provision is made for training a next generation of researchers within a country, dependence on outsiders continues and a national research capacity cannot exist. There are, of course, many forms of training and one need not think only of formal, university-based training. A system of apprenticeships, for instance, might function effectively to provide a continuing flow of excellent researchers within a given national context. At some point, however, one looks naturally for institutionalization of the process of producing researchers.

Latin Americans cannot point in 1979 to many institutions within the region, particularly outside Brazil and Mexico, which are both capable of and charged with training a next generation of educational researchers. Although it is possible to obtain a doctorate in education in several countries within Latin America, the degree is not a research degree; a thesis can be completed without any involvement in empirical research. Mexico provides several good programs of training at the MA level, however, at the National Technological University's Department for Educational Research (DIE) or at the Iberoamerican University. In both the Javeriana University in Colombia and the Faculty of Education within the National University of Minas Gerais in Brazil, a social science component in the curriculum is central. Both institutions have an interdisciplinary approach and both attract students from other backgrounds to study education.[49]

Lacking local options, it is likely that, in the foreseeable future, most researchers in the field of education will continue to be trained abroad.[50] Some will apply Latin-based training in noneducational fields to education. Others will acquire skills through apprenticeship arrangements such as those found at PIIE and CIDE in Chile or at the CEE and DIE in Mexico.[51]

The momentum established with the return of a large number of researchers trained abroad will probably ensure eventual growth of training options for a next generation within Latin America. However, the particular institutional forms that will be used to do so are not yet clear. Nor is it clear what the balance will be among various ideological, disciplinary, and methodological bases for

research that will result. It is not evident how the threat to several national research climates of possible migration by leading scholars will affect the maturing of the next generation.

Whatever the training arrangements that emerge, it is likely that the strong influence of training abroad will continue for many years, both as new waves go abroad to study and as returned students take up their positions as trainers of the next generation. This continuing foreign influence may not be as debilitating as many critics would have one believe. The suggestion is not popular in a time when dependency analyses show that foreign training sustains cultural dependence (by reinforcing students' belief in technical solutions for human problems) and economic dependence (by transferring technology that remains under the control of foreigners linked to local technocrats).[52] I demur for two reasons. First, I have great faith in the ability of individuals to put training in perspective. Foreign training seldom forms the foundation of students' viewpoints and sometimes provides needed distance, allowing them to see their own culture better. Simply switching training into Latin America will not remove the basic problem. Second, I see training taking a variety of forms linked to different ideologies. I refer not only to the contrast between some European training and that in the United States, but to variations in training received in the United States as well. It is not the location of training but its form and content that is important. Content is determined largely by the particular people with whom foreign students work.

An interesting example of variations, even within the same university, is offered by the case of training at Stanford University. A large number of Latin Americans have studied at the Stanford International Development Education Center. Some have studied with Alex Inkeles and through him have been exposed to research in the modernization mode — research that begins from a developmentalist position. At the same time, a much larger group of students has worked with Martin Carnoy whose research reflects a sometimes Marxian view of the world, providing a strong social critique regarding education. Both strains of research have been brought back to Latin America, but whether those who have brought them chose their professors in line with positions previously adopted or were influenced by professors at Stanford is difficult to answer.[53]

Approaching the 1980s

What emerges from the foregoing description and analysis? Looking at the region as a whole, there is cause to be pleased with the growth that has occurred over the last two decades and with the momentum that has been established. Latin America is well along the road to establishing a strong, continuing, and pluralistic capacity to generate research-based knowledge, to experiment, to evaluate, and to systematically describe the workings of education in its many social and institutional settings. There is less cause to be pleased with the uses of research, however, and there is no room for complacency.

Despite dramatic growth during the 1970s, the institutionalized capacity to carry out educational research is still fragile, fragmented, and overly dependent on outside resources. Communication among researchers is still limited, affecting adversely the substance and quality of research. Although many connections exist between Latin American and North American or European

researchers, these are usually personal and restricted. The flow of general research-based information is still a trickle of what it might be. A research mentality has not spread to the training of teachers. Ties between the social sciences and education continue to be weak. The climate of research is less than favorable in many locations. The distance between research and policy seems to have increased rather than narrowed. In short, much remains to be done.

This is a particularly critical time in the growth and spread of a Latin American educational research enterprise. With the climate for research often unfavorable, with funding still uncertain, with researchers returning to find few new positions for research or returning to institutions in which they have less stake because they were not among the founders, with the continuing skepticism regarding many forms of research, and with the growing gap between research and policy, momentum could easily be lost. Because research has grown dramatically in the 1970s, the decade of the 1980s may be a decade of consolidation. Consolidation could mean looking inward. To the extent that dominates the 1980s, whether nationally or regionally, vitality derived from continuing exchange with the outside could suffer. I think that unlikely and expect Latin American researchers during the 1980s to consolidate local and regional gains without undercutting the flow of information to and from outside the region.

To maintain momentum, and as part of consolidation, additional attention must be given to improved communication among researchers. With that in mind, let us look at connections among educational researchers, at the regional level and between the region and outside.

Communication Among Researchers: the National Level

Several promising developments have taken place where there are national concentrations of researchers and research institutions. First among these is a program in Mexico, animated by Pablo Latapí from his position as coordinator of what is called the Orienting Program (Programa Indicativo) for Educational Research of the Mexican National Council for Science and Technology (CONACYT). With government funding, Latapí has organized seminars for both directors of research centres and for researchers, in order to stimulate communication generally, reflect upon the current research agenda, help set a future agenda, take stock of the research done in particular fields, critique methods, and suggest new ones.[54] The Mexican program enjoys advantages which may not make it transferrable. It is run by a well known and respected leader who is personally and professionally involved. It derives assured funding from a national source. It exists in a context where researchers can communicate openly and where the community of well trained researchers and institutions is large enough to make exchanges fruitful. The program attempts as well to bring together researchers and policymakers, and facilitates communication with non-Mexican researchers.

Related to the Programa Indicativo but independent of it are monthly meetings of the Reuniones de Información Educativa (Educational Information Network). This innovative and (almost) self-financing venture, now three years old, brings together during one afternoon each month upwards of 80 researchers and practitioners to provide information about principal events in the field of education. At each meeting, three people are asked to comment on newsworthy

happenings with which they have been connected. A periodic note to participants informs them of recent studies, changes in laws, or publications of interest. These are available from the coordinating office for the price of photocopying. Institutions and individuals pay a relatively modest amount to participate.[55]

Through the Programa Indicativo, more has been done in Mexico than in most other locations to foster communication and interaction among researchers, and between researchers and policymakers. These efforts are recent and are directed toward improving the present state which cannot, according to a study by Vielle,[56] be characterized as one in which interaction is high. Vielle examined several forms of potential direct interaction among research institutions: mutual elaboration or funding of research projects, communication to obtain advice, exchange of researchers. Only rarely did these contacts and exchanges occur. Nor did centres work together to organize events for diffusion of research results. The only type of communication practiced by most research centres was exchange of documents, sporadically, bilaterally, and after-the-fact (i.e. research results, not designs or interim reports). Thus, formal exchanges were not accompanied by other more personal and direct interactions.

In Colombia, institutions and researchers exist and COLCIENCIAS, the Colombian equivalent of CONACYT, has indicated its interest in promoting research in education. The program has not yet taken hold, but another promising development has occurred. With minor assistance from the Ford Foundation, an informal committee concerned with research on education has formed. The committee incorporates individuals from six institutions (SER, CEDE, CEDEN, ACPO, Corporacion Centro, and FEDESARROLLO), all but two of which (CEDEN, ACPO) are social science institutes within Colombia, and all of which have devoted a significant portion of their energy to research on education. The committee includes a representative from the post-graduate training program in education at the Javeriana University. The Colombian experiment is one of the few examples of which I am aware that attempts to facilitate continuing communication among educators and social scientists concerned with research on education.

Brazil is an example of a country with existing mechanisms that could foster communication among researchers in education, but where much remains to be done. The National Institute for Educational Research, which has published a journal for many years and has commissioned particular projects, has never provided much of a professional attachment for educational researchers and is at present a dormant organization. Consejo Nacional do Pesquisas (CNPQ), the Brazilian equivalent of CONACYT and COLCIENCIAS, includes a section dealing with research in the social sciences. Education lies within that but receives little attention. Somewhat more positive, the Brazilian Society for the Advancement of Science, a grouping of professional organizations, holds an annual meeting which often includes a program of presentations by educational researchers. The Brazilian Association of Deans of Education Schools (ANPED) meets regularly and includes individuals with strong research orientations.

In Chile and Argentina, where there are also significant concentrations of researchers, national meetings have been organized on a biyearly or yearly basis. These national *encuentros* have played an important role in fostering

communication among researchers. The most recent meeting in Chile, for instance, managed the difficult and delicate task of bringing together researchers located in private centres, in universities, and in government agencies.[57] National meetings of researchers in education have been held recently in Venezuela (December 1979) and in Colombia (April 1980) as well.[58] These meetings have been attended almost exclusively by researchers from within the field of education proper but incorporate individuals from other fields who have carried out research on education-related themes.

Another development of importance in Chile has been the emergence, in 1980, of a Circle of Reflection dealing with educational problems and themes. Meetings, held once a month, have attracted over 200 individuals, almost all from Santiago. The ideological spectrum of the Circle is narrower than that of the national meetings in Chile, but the representation of researchers from outside the field of education is stronger. The Circle represents an effort to fill a vacuum in public debate, providing, under the shelter of the church-related Academy for Christian Humanism, a critique of current educational policies.

Slowly, then, local professional reference groups are growing at national levels where the number of researchers makes them worthwhile. In other countries, Bolivia and Paraguay, for instance, the need for more institutionalized forms of communication is not present.[59] Informal channels can work well for the few people devoting themselves to research on education.

Communication Among Researchers: the Regional Level

Prior to 1970, there was little contact among Latin American researchers in the field of education. Most contacts went through the United States, then back to Latin America. But there was not much research to communicate at that point.

Now, the situation has changed markedly. Although students continue to be sent abroad for training, more are being educated within the region. As a result, they not only have few or no direct contacts with a research community outside the region, but are largely restricted to contacts with national researchers. The volume of research has grown; there is more to communicate. At the same time, a variety of mechanisms are being developed for intraregional connections among national research worlds — journals, which serve as an indirect form of communication, and growing networks such as those of ECIEL, the UNDP, and the OAS.

One regional experiment — the periodic meetings of directors of a few research centres — deserves additional attention because it has had both constructive and inhibiting effects on communication among researchers. First, the centres involved were few in number and were primarily associated with funding from the Ford Foundation. Although the number of participating institutions increased slowly, it still is perceived by some as a club. Second, the meetings led to personal and institutional competition as well as cooperation. The larger, more established institutions seemed reluctant to share their position with smaller, weaker ones by formalizing a relationship. Size tended to coincide with a Jesuit/non-Jesuit split among the institutions involved, creating further division in the group. Third, some of the most prestigious individuals initially involved withdrew from participation after the first two meetings, weakening the potential regional impact of this group. No leadership emerged that could be

accepted by the group as a whole. Fourth, most of the institutions were strictly educational research institutions and the group did not therefore show an inclination to associate itself with the rest of the social science research community. Fifth, the emphasis in early meetings was too much on administration of research and too little on substance.

Despite the difficulties noted, the informal group of research centres did provide communication across national lines that apparently would not have occurred otherwise. The meetings did lead to the exchange of annual reports and library acquisition lists, and to production of a not too accurate and soon outdated directory of research centres. From the meeting some cooperative research grew which might or might not have grown without it. And, the gatherings provided signals to funders. The most recent meetings, particularly that held in March 1978, in conjunction with the Comparative and International Education Society, have included substantive exchanges as well, based on papers prepared for the meetings.

Substantive lines have provided a basis for fostering connections among researchers within the region. The best example of such an effort is the ECIEL network of institutions. The ECIEL style has been to involve institutions, jointly and from the beginning, in the formulation of research projects to be carried out in the individual countries of the region. Each year the ECIEL has held a meeting during which workshops in each of the substantive areas are held. In addition, periodic meetings are set up to report on research completed or to work out a special set of problems associated with the research. The periodic nature of the meetings has allowed for regular and professional exchange among researchers. Unfortunately, the ECIEL network seems to be dismantling in 1980 as funds for the education project have dried up.

In April 1980, Seminario '80 was held, bringing together researchers from ten countries to analyze the growth of educational research in Latin America during the previous decade and to establish general lines of a research policy for the region during the 1980s. The meeting produced a set of papers and a conference volume is in preparation.[60] Perhaps more important, the reunion served to strengthen informal relationships cutting across national and disciplinary lines delineating worlds of research.

Explicit attention was given at Seminario '80 to problems of communication among researchers at the regional level. It was recognized at the meeting that the changing and ever-growing research scene in Latin America has reached the point where several new ways of providing connections among research worlds should be considered. At the same time, the group felt strongly that regional initiatives should first undertake to help strengthen local research communities. It was agreed also that whatever forms developed to aid communication should be kept as open as possible so that knowledge does not become a monopoly of a small group of privileged researchers.

Among the new developments considered by Seminario '80 participants was a UNESCO proposal to set up a Latin American network paralleling those already in operation in Asia, Africa, and the Middle East, and focusing on educational innovation.[61] Other possibilities for improving communication that were discussed included: strengthening regional journals and promoting their more active use, initiating intraregional training programs, supporting circuit riders, and forming informal networks set up along substantive lines, tied

together by a Latin American group meeting periodically (not unlike the Educational Research Review and Advisory Group, but at a regional level).

The Organization of American States currently supports a number of regional training programs, among which is an MA program at the University of the Valley in Cali, Colombia. The initiative is good but the quality of the training needs bolstering.

Also in Colombia, the Javeriana University establishing an intraregional masters program that will be largely for students from other countries within the region. The Javeriana program would involve students in the design and conduct of research to be carried out in their respective national settings and would have a heavy social science component in its curriculum.

If and when other training programs are set within the region, it will be important for them to be able to offer certification as well as training of a high quality. That may be a sad commentary but it is realistic if judged by an earlier abortive experiment in which the Centro de Estudios Educativos undertook a regional training program. The Centro provided pratical and theoretical research experiences. Participants were able to work either on a research project of the Centro or one using data from their home setting. Well qualified researchers were available for instruction and students had access to what is probably the best library pertaining to education within the region. For all of that the program faltered, in part because the Centro could not provide graduates with a recognized degree. In addition, the program was expensive so that a few additional dollars could have provided a degree from a recognized university program in the United States.[62]

Researchers, even newly minted PhDs, are often unsure of themselves. They need reinforcement from colleagues, but that reinforcement is not always available. As the research community grows, it is difficult for any one researcher to keep up with what is going on in his field and others as well. Brokers are needed, nationally, regionally, and internationally. For brokers to be knowledgeable and up to date, it is probably necessary for them to travel from time to time as well as for them to rely on the standard bibliographic sources available. These requirements fit the idea of a regional circuit-rider who would act partially as a broker of research. The idea of a circuit-rider will be elaborated in the final chapter and several possible models for circuit-riding will be set out for consideration. There are now within the Latin American region several individuals who have the breadth and motivation to fill the role of a circuit-rider. These individuals would complement and provide a counterbalance to that brokering of information now done by employees of international institutions. These developments should strengthen generation and use of research. Existing publications such as the CEE's *Revista*, *Resumenes Analiticos*, and others should be used more frequently. Researchers should look within the region as well as outside for new ideas and for established reliable methods.

Communication Among Researchers: the International Level

The ubiquitous presence of foreigners in Latin America, the many networks that have developed and the frequency of study abroad have made the problem of connecting worlds of research relatively minor in the early period of research growth in Latin America, at least as far as connections between Latin American

and the U.S. or European research communities are concerned. It might even be argued that connections have been too strong, carrying too great influence in one direction — from North to South — and inhibiting original thinking by Latin American researchers.

Even during this early period of growth, however, connections have been selective. Latin American scholars have tended to depend on that particular network of contacts built up as a result of study abroad or made for them by the international organization funding their research. This has sometimes meant insulating themselves from a variety of other connections that might be equally stimulating and valuable. A few researchers have been privileged to travel and to attend meetings frequently and have broadened their contacts very much. Most have not been able to do that. No organization exists that ties together researchers in the United States or in Europe who have explicit and continuing research interests in education and in Latin America. Thus, there is no easy way to plug in to a broader community. Contacts must be made slowly and over time.

Formal systems for obtaining information from outside the region have not been particularly successful. Latin Americans, perhaps even more than others, tend to depend heavily upon personal acquaintances for their information. In part, this can be explained by the fact that, until recently, information has not been easily available in libraries and bibliographical sources have been scarce. A new generation is being educated to the use of such facilities, but libraries are still not well stocked. Access to such sources as ERIC are possible only in Mexico and Brazil. Moreover, mail is undependable, often expensive, and takes time. Even in the best of conditions, however, formal systems of information dissemination and communication have severe limitations.

It is probably unwise to worry too much about the weakening of connections between the Latin American research community and the rest of the world. However, broadening and regularizing communication is probably in order. If communication within the region can be facilitated, this will occur because, taken in the aggregate, the contacts with foreigners are already broad-based.

Conclusions

From the foregoing, one could extract a long list of observations, some of which may be valid only for Latin America, some of which may be more general. The following seem to me to hold for most of Latin America and should be kept in mind as descriptions are given in the next chapter for other places in the Third World.

- Growth of educational research has been dramatic but institutionalized research capacity is still fragile.
- Distribution of research, researchers, and research institutions is uneven within the region, reflecting differences in country size and wealth as well as history.
- The climate for continuing growth and use of research is only mildly favorable given the repressive political environments, the relatively low level of funding, and the absence of a widespread research mentality within the education community.

- Connections between Latin American researchers and researchers elsewhere are strong, broad in the aggregate, limited for most individuals, and dominated by connections to the United States.
- Connections within the region are weak but a number of promising developments should lead to strengthening of regional communication and interaction during the 1980s. In the process the access by individuals to research-based knowledge from outside the region will be increased.
- Connections, both formal and informal, among researchers at national levels have grown stronger in the last decade providing an important base for regional and international communication.
- Connections between researchers working from bases in educational institutions and social scientists based elsewhere are still relatively weak.
- The gap between the worlds of research and policy is widening in some respects as more critical, questioning research takes its place beside technical research directed at solving problems. The disjunction between research and policy is probably overplayed, however, because governments carry out much more research than is made public and because many indirect channels exist for bringing research results to bear on policy and practice.
- A large and growing body of research-based knowledge of very unequal quality exists that remains scattered, uncritiqued, and largely unknown outside the region.
- A technically oriented, positivistic, survey tradition of research associated with study in the United States has gained enormous ground in the last 20 years, but in general, the role of research has broadened to include a wide variety of traditions.
- An indigenous literature is growing rapidly but will require subsidization for many years. Demand must be created. One cannot yet rely on the printed word as a main vehicle for diffusing research results, even among researchers.
- Private research institutions have occupied an important place but need continuing encouragement and subsidy.
- Networks linked largely to sources of funding have helped fracture as well as facilitate communication among researchers.
- The capacity to train a next generation of researchers is only now beginning to be institutionalized.

Comparisons and Contrasts

The Latin American case provides a basis for comparison and contrast with developments in other nations and regions which have experienced a different history and which are politically, economically, and culturally distinct from Latin America. The same level of detail provided for the Latin American region cannot be presented for other areas, but observations derived from the Latin American analysis can be set against information and impressions gathered in my travels and conversations in other parts of the Third World. It is my hope that, eventually, more systematic treatments will be available for African, Asian, and Middle Eastern regions. Meanwhile, because it is impossible to deal with all settings even in an impressionistic way, I will limit my observations to two locations: sub-Saharan Africa and India.

Sub-Saharan Africa[63]

Because sub-Saharan African nations do not enjoy a common language, religion, or colonial history, generalizations are even more difficult than for Latin America. In 1960, however, most sub-Saharan nations did share the status of new nations with an attendant need to strengthen national loyalties in ethnically diverse populations. They shared also relatively low levels of economic and scientific development and a continuing dependence on foreign manpower in planning offices and at upper levels of the educational systems. The African region was no less subject than others to the educational optimism of the First Development Decade and to internationl ideas about how educational systems should be arranged to produce the manpower needed for economic growth. Thus, for a multitude of reasons, African nations began during the 1960s to expand and reform their educational systems and to increase their budgetary commitments to education.

Between 1960 and 1970, growth was impressive. With enrollments expanding at a rate of more than 6 percent per year, the percentage of age group enrolled in primary schools rose from 42 to 56 percent, in secondary schools from 4 to 11 percent, and in universities, from 0.6 to 1.4 percent — this at a time when the population in general was growing younger. By 1972, the percentage of GNP devoted to education had increased, on the average, to 4.7 percent (from 2.8 percent in 1965).[64] Education in Africa, as in Latin America, was a growth industry. However, enrollment levels were lower, and the variation was much broader in Africa than in Latin America.

The conditions and circumstances of the 1960s that fuelled educational growth also influenced the type of research carried out. At the beginning of the decade, most research dealt principally with the role of education in political culture[65] or with manpower requirements for economic growth[66] and was still

undertaken, in the main, by foreigners. By the end of the decade, a psycho-pedagogical strain of research, carried out by African educators, began to appear, strongly influenced by training abroad. That influence, together with the newness of African social science and the obviously felt need to get on with the pressing job of expanding education, meant that little thought was given to the social dimensions of education. Nor did the social side seem so important at a time when enrollments were low and when schools were serving more as bona fide channels of mobility than as preservers of new status.

With so little educational research having been carried out prior to 1960, even small gains can seem dramatic. One snapshot illustrating both the level and the unequal growth of educational research in sub-Saharan Africa, can be obtained from a project carried out in 1974, in the hope that it would "suggest better ways of articulating the work of research producers and potential users, particularly those in Africa."[67] A major conclusion of the African Education Research Project, which examined 416 studies carried out by African researchers, was that training of researchers deserves priority and that "the dearth of African education researchers is particularly critical in Francophone Africa (Part I, p. 23). The unequal spread of research and its firmer rooting in Anglophone Africa was indicated by the fact that well over one-third of the studies uncovered pertained to Nigeria alone and more than two-thirds came from four Anglophone countries: Nigeria, Ghana, Kenya, and Uganda. Three institutions (the University of Ibadan, Makerere University, and the University of the Cape Coast) accounted for 40 percent of the projects undertaken in Africa by Africans.

What may surprise some readers is that there were as many as 416 research studies identified for the 1970–74 period. Extrapolating to the present, that would mean that at least 1000 studies have been carried out in the 1970s, not including unpublished research done within governments or research by foreigners, and not allowing for the increasing production during the last half of the decade. In any one subfield of education or for any one theme, the amount of research is still small. That statement is corroborated by a recent state-of-the-art review of African research on teaching effectiveness.[68]

The 1974 survey also illustrates (see Table 4) a bias toward research on learning or teaching processes (about two-thirds of the studies) and the overwhelming dominance of educators or psychologists among the researchers (almost four-fifths). Only 7 percent of the studies were carried out by social scientists and only 20 percent examined questions related to political culture or economic development. Educational access was dealt with in 3 percent of the studies.

In 1979, the number of reasonably well established, productive educational research institutions can still be counted on two hands. The list would certainly include, in addition to the three anglophone universities mentioned above, the Institute for Development Studies at the University of Nairobi and Kenyatta University College in Kenya; the Department of Education at the University of Dar-es-Salaam, Tanzania; and CRIDE at the Kinsangani Campus of the National University of Zaire. Less established but vital research units are found within the West African Examinations Council, the Examinations Unit of the Kenyan Ministry of Education, in several Nigerian Universities, and in the Curriculum Development Unit of the Ghanaian Ministry; in the Television Evaluation Unit

Table 4. Research issues and principal disciplines of African education research projects, 1970–74.

Issues	Disciplines				Total	
	Education	Psychology or educational psychology	Sociology, economic anthropology, political science	Other[a]	No.	%
Student evaluation	81	46	1	16	144	31
Communications[b]	91	2	2	25	120	25
Political education–social policies	35	0	14	11	60	13
Teachers	40	7	1	7	55	12
Administration	27	1	6	4	38	8
Education in economic development	23	2	8	5	38	8
Access to education	10	0	1	5	16	3
Total						
No.	307	58	33	73	471	—
%	65	12	7	16	—	100

Source: Adapted from Ross E. Bigelow (1974). *African education research*. Madison, Wisconsin. Part I, Issues and Patterns, Table 6, p. 16. The unit of analysis is one researcher doing one project.

[a] The category Other includes 48 studies for which the desired information was unspecified or unknown.

[b] The Communications category is a hodge-podge including studies of language of instruction, curriculum, and mass media use.

of the Ministry in the Ivory Coast; and at the Institute of Education and at Njala and Fourah Bay Colleges in Sierra Leone. In addition, several applied social science research units have dabbled in education including the Ibadan-based Nigerian Institute for Social and Economic Research (NISER), the Human Resources Research Unit at the University of Lagos, Nigeria, and the Institute for Social and Economic Research (ISER) at Legon University in Ghana.

From these figures and listings, two conclusions seem in order. First, a substantial body of unsynthesized and largely uncriticized research is accumulating, mainly in a psychological tradition. Second, the process of institutionalizing research is still in an early phase. To illustrate the latter point, even in mammoth Nigeria, which can now boast in the neighbourhood of 50 PhDs in education, only two strong education research institutions exist. In Botswana, on the other hand, for lack of qualified people, planning and research are still very much in the hands of foreigners.

The earliest and most prominent institutional locations for educational research in sub-Saharan Africa were Institutes of Education or Instituts Pedagogiques where research was usually academic and often undertaken for didactic or certification purposes. Links to policy were not demanded and were seldom made. Experimental research methods were not applied to program or project evaluation. More recently, however, evaluative research has taken root both in university institutes and within governmental institutions. That tendency is increasing, pushed by the need to monitor and assess the many innovations

put into effect during the 1960s, and by the need to improve planning and to tighten educational management.

In their search for information to guide planning and implementation, African governments have both established units within the bureaucracy and turned to contract research. In contrast to Latin America, research has entered most ministries almost exclusively through planning offices or evaluation units rather than through curriculum development units. (Much of the initial work to develop curricula has occurred at the regional level through such organizations as the Science Education Programme for Africa.) Also in contrast to Latin America, research contracting has not led to growth and proliferation of private research institutions. Contracts go, rather, to universities or to foreign consulting firms. Nor has another major actor within the private sector — the church — played an important role in fostering educational research as it has in Latin America (this despite its prominent influence on education at primary school levels in many African countries). Educational research in Africa, then, seems to be left to universities and governments.

There exists an increasingly symbiotic relationship between universities and governments with respect to research. That growing relationship is indicative of and stems from changes in the climate for research. In the early 1960s what might be called a laissez-faire attitude or benign neglect of research by governments seemed to prevail. Demand for research of any kind was infrequent, even though research in the abstract was allowed to grow and was sometimes encouraged as part of the general development of universities in the region. But most educational research was small-scale experimental research done by individuals, and required little financing. Nor was research particularly controversial or politically threatening, having little to do with access or social consequences and seldom acquiring a critical tone. At the same time, universities were developing within a general tradition of academic freedom and debate. Thus, governments were not threatened by research and researchers were neither indebted to governments nor particularly limited by them.

During the 1970s, however, conditions changed. Expansion and innovation led, as has been suggested, to increasing government attention to planning, research and evaluation. African educational research and researchers began to break out of their psycho-pedagogical experimental box. As survey research techniques took hold, the need grew for financing on a larger scale. As the social sciences grew and as the restraining newness of nationhood started to fade, a critical line of research began slowly to appear. And, in a number of settings political turmoil and repression mounted.

The mix of these elements of change has varied widely from country to country during the 1970s. Accordingly, in recent years climates for research have ranged from totally closed for all research in Uganda under Amin to open support for action research in Tanzania. What seems common to these otherwise disparate climates is an increasing governmental control over research whether by repression (Uganda), by co-option through contracting (Kenya), by bringing educational research inside government (Tanzania and most francophone countries), or by manipulating research budgets of universities (Nigeria). In most locations, the general climate favours evaluative, program- or project-related research. Academic research is not being funded. Outside the special political contexts of the Tanzanian and Somalian reforms and perhaps one or

two others, research-based social critiques and action research are frowned upon.

Despite the increase in the demand for research-based information of an evaluative type, and despite the increase in government research units and in contracted research, funding for research is not readily available. Untied funding is rare. In its first flush of oil discovery, Nigeria increased university research budgets, letting loose large quantities of untied funds. That day of largesse has passed quickly and Nigerian researchers, like others, now compete fiercely for scarce funds. Most untied funds come from foreign sources, but are untied in name only, bringing with them, more often than not, a set of implied if not explicit restrictions.

Whether through tied or untied funds, it is clear that foreign organizations are exercising a strong influence over the development of educational research in Africa. For the most part, that influence on research has been indirect through support for general education projects (with or without a research or evaluation component), through provision of foreign advisors (experts), and through assistance for study abroad. The pattern goes back many years, beginning with efforts of the Phelps-Stokes Fund in the 1920s, and influences are at least as strong as those found in Latin America.

Examples of the indirect influence on educational research are not difficult to uncover. For instance, large grants made in the late 1950s and early 1960s for general university development in anglophone Africa have provided a home for educational research units in Ibadan and the University of Nairobi. Support by USAID for a mammoth experiment in educational television has led to growth of an evaluation unit within the Ministry of Education in the Ivory Coast. The Ford Foundation, as part of a program of support to develop curricular materials in science, financed six Africans for study at the PhD level, all of whom have returned with solid training in educational research.

More direct support for educational research has aided and influenced the growth of particular institutions. The Rockefeller and Ford Foundations, together with USAID, for instance, have been responsible for establishing the Centre de Recherches Interdisciplinaires pour le Développement de L'Éducation (CRIDE), an educational research centre at the Kinsangani Campus of the National University of Zaire.[69] The International Centre for Education Evaluation (ICEE) at Ibadan was funded at first exclusively by the Carnegie Foundation of New York. Its funding base has broadened to include other donors but the ICEE continues to depend on foreign sources for most of its funds. Along with their funding, some donors have emphasized curriculum development, others survey research methods, others tracer studies, etc.

To detail the role of international organizations (with or without funds) in the development of African educational research would be well beyond the scope of this manuscript. It is clear, however, that, as for Latin America and (to a degree) in contrast with India, the main impetus for research came from abroad.[70] It is also true that the many foreign contacts that have resulted in the process provide excellent links between African educators and researchers and the First World.

In a number of cases, the presence of foreigners has had a much stronger influence on the growth of educational research than funds spent to support

research.[71] The presence of Andrew Taylor (from the University of Cardiff) in the Ibadan Institute of Education had a determining influence on its early growth. Tony Somerset has been labouring quietly and sensitively in Kenya over more than a decade to build an educational research competence, first at the Institute for Development Studies and now within the Examinations Unit of the Ministry. These foreigners provide another set of contacts between African researchers and the First World.

Until 1970, foreigners not only funded or advised but also carried out a large share of the educational research in sub-Saharan Africa. Even in the 1970s, research production by foreigners can account for a significant proportion of the research done. In Kenya, for instance, of approximately 200 pieces of writing on education since 1970, less than one-third are by Kenyans.[72] That picture has been changing rapidly,. however, as African researchers studying abroad during the 1960s have returned and as the political climate has changed, making research by foreigners more difficult to undertake.

Foreign influence and connections continue in the person of Africans who studied abroad and have returned. The few francophone Africans who studied abroad in the field of education until very recently[73] studied almost exclusively in France and Belgium. Anglophone Africans abroad were concentrated in universities in Great Britain and the United States. One of the greatest concentrations of anglophone students at one institution has been at Teachers College, Columbia University.[74] The influence of that program is indicated by the fact that former deans of education faculties at Ibadan and Makerere, and the present dean at Dar es Salaam are TCCU graduates. Among the most important British connections have been the London Institute of Education, Edinburgh, and Cardiff.

As in Latin America, exposure to different educational environments abroad has meant exposure to different traditions of research. The contrast between the French and American influences is most dramatic. Francophone researchers have carried back with them a strong philosophical–historical tradition of research. The more technical empirical strain characterizing much of the U.S. training has yet to catch hold in francophone Africa (with the possible exception of Zaire). The Columbia University connection emphasized educational psychology and a quantitative, ahistorical approach to problems internal to educational systems and with little relation to social dimensions of education. That bias is strongly felt in research today even as the research base broadens.

African Connections

Against the very rough sketch presented in the foregoing pages, let us look at communication and interaction among African researchers and with researchers elsewhere. A first point to be made is that, in most African settings, as in the smaller Latin American nations, the number of education researchers is small enough that informal communication channels serve well at a national level. These informal channels may even be semi-institutionalized. That is the case in Kenya where several researchers from the main institutions involved in research in that country have met periodically to discuss their research and related educational problems. Nigeria may be the only country with a group of researchers large enough to merit the formal organizations that exist. There the

Table 5. African educational network organizations by linguistic zone.

Francophone	Anglophone	Francophone and anglophone
Bureau Africain des Sciences de l'Éducation (BASE)	African Social Studies Programme (ASSP)	Association of African Universities (AAU)
Conseil Africain et Malgache pour l'Enseignement Supérieur (CAMES)	Association for Teacher Education in Africa (ATEA)	Association of Faculties of Agriculture in Africa (AFAA)
Conférence des Ministres de l'Éducation Nationale des États Africains d'expression française et de Madagascar	African Curriculum Organisation (ACO)	Network of Educational Innovation for Development in Africa (NEIDA)
	Anglophone West African Regional Educational Research Consortium (AWARERC)	
	International Centre for Educational Evaluation (ICEE)	
	East African Regional Mathematics Programme (EARMP)	
	West African Regional Mathematics Programme (WARMP)	
	Science Education Programme for Africa (SEPA)	

Source: Pai Obanya (1978). *Educational networking in Africa*, a paper prepared for the Research Review and Advisory Group, IDRC, Ottawa, p. 5. (Mimeo)

Psychological Research Association although largely oriented toward education, sits side by side with an Education Studies Association. A Joint Consultative Committee and the Nigerian Educational Research Council bring together researchers and policymakers. Despite the existence of these general formal organizations, channels are largely informal in Nigeria as elsewhere and one or two key individuals are at the centre of communication networks in the country.

Connections among researchers within the sub-Saharan region have grown steadily throughout the 1960s and 1970s. Table 5, taken from a paper by Pai Obanya, classifies 15 major educational networks in the sub-Saharan region according to their linguistic foundation. Most of the organizations listed are either subject oriented (testing, science, mathematics, social studies, basic education, agriculture) or are general education networks, more developmental

or policy oriented than they are research oriented. Still each fosters communication among researchers and, on occasion, may sponsor research. The most explicitly research-related organizations in the region are anglophone organizations: AWARERC, ACO, and ICEE, all of which are creatures of the 1970s.

The Anglophone West African Regional Educational Research Consortium (AWARERC) is an informal grouping of educational researchers and managers in anglophone West Africa. Its immediate roots lie in a regional meeting held in 1976 in Sierra Leone, funded by the Ford Foundation and the International Development Research Centre (IDRC). From that conference emerged the recommendation that a research consortium be established, the main purpose of which would be to develop an education research community within the region, including both producers and consumers of research.[75] Following the mandate of the original meeting, AWARERC activities have included joint research and workshops on research methodology. The consortium also administers funds given on a competitive basis for research or training.

The ICEE, located within the Institute of Education at the University of Ibadan, began in 1972. Under the leaderhip of Professor E.A. Yoloye, the ICEE has developed an institution capable of training at the Masters level a next generation in evaluative research. It has also developed a potentially important network of over 100 graduates reaching beyond anglophone West Africa into East Africa and into francophone Africa.

Through Professor Yoloye, the ICEE activities have been closely related to those of the African Curriculum Organization (ACO). Yoloye has served as coordinator of ACO activities which include skill development workshops and evaluative research in curriculum. The ACO provides a mechanism for periodic interaction among ICEE alumni, bringing in others involved in curriculum evaluation.

The Bureau Africain des Sciences de l'Éducation (BASE), established in 1973, has as its objectives to promote an exchange of ideas and knowledge between educational researchers and producers in Africa and to encourage educational research through contacts and discussions. BASE publishes a journal called the *African Review of Educational Science*. With UNESCO support, BASE has translated into French the previously cited[65] report on African educational research and has organized a meeting of mainly francophone educators. Lacking adequate funding, working a much harder terrain than anglophone soil, and operating from Zaire, BASE would like to serve as a rallying point for researchers, but has not yet been able to do so.

The Network of Educational Innovation for Development in Africa (NEIDA) is the most recent networking attempt in Africa. Formally created in 1974 at the UNESCO General Conference, NEIDA began operation in 1977 from a base at the UNESCO Regional Office in Dakar. The NEIDA network, patterned after its Asian forerunner the Asian Programmes for Educational Innovation in Development (APEID), takes as its first objective "to encourage and facilitate exchange of experiences and the flow of information between the participating countries."[76] The organization hopes thereby to stimulate innovation, aid the transfer of experiences, foster cooperation, and "contribute to developing national capabilities and capacities to analyse their own problems, and to formulate, design, and test possible solutions." A quarterly newsletter, *NEIDA Information*, began publication in June 1977.

To date, NEIDA has provided some useful descriptive information regarding institutions and projects in the region. It has not done much to concern itself directly with research (or even evaluation) and, if it follows true to APEID form, will do little. The descriptive, bibliographic work NEIDA will undertake and its periodic meetings will help set a base for improved communication among African educators and researchers. How much of an increase in interaction will follow and how useful NEIDA will be as a means of diffusion within Africa of research-based knowledge from outside the region through its relations with the International Education Reporting Service, remains to be seen.

All of the organizations mentioned above, with the possible exception of AWARERC, focus on the internal working of educational systems, displaying little interest in their social dimensions. The networks do not include social scientists although some do include individuals who have been exposed to social science literature and methodologies in their training. Thus, elsewhere, the communication between educational researchers and social scientists is thwarted more than it is aided by an education network. Relatively few African social scientists are directly involved in carrying out research on education. That lack of activity and interest is signalled by the fact that the Committee for Development of Social Research in Africa (CODESRIA), while listing Education and Development in Africa among its working groups, did not yet, in early 1979, have a coordinator for that group.

The divorce between education and the social sciences in Africa, not unlike the situation in Latin America, is related to the origins of educational programs in teacher training, a historical fact influencing both the relatively low prestige of education as an area of study within higher education and the overwhelming concern with the internal workings of educational systems. In addition, the transplanted traditions of educational research rooted in psychology helped discriminate against the importance of social influences in education and against application of methods from the social sciences to the study of education. Unlike the Latin American case, however, the social sciences in Africa were not well developed in 1970. Thus, the possibility existed (and exists) of integrating educational research with the social sciences at an early stage in their growth. That does not seem to be occurring generally but has happened in selected locations.

Kenya provides one example of a setting in which education research has become intertwined with other types of research in a multidisciplinary way. The relationship can be attributed in large part to the presence over time of two sensitive foreigners, both with strong backgrounds in the social sciences. Through their writing and teaching, and with support from the Rockefeller Foundation behind them, they have been able to make the connections that are lacking in so many other places.

I have commented already on the changing relationship between research and policy, from one of academic aloofness to a much closer connection between researchers and policymakers. Indeed, the increasing control of governments over research and the rapidity of the shift toward evaluative research, lead some observers to suggest that the scale has tipped too far; that it is time to find ways to support more research for research sake and more of what might be called critical research. When compared with more conventional

research, ''critical research tends to enquire into the nature and objectives of the very process of social and economic development itself; the history and evolution of the process, its present state, and its future movement. In addition, such research assumes that the social process and movement in society, i.e. the development process, is not harmonious, but is based on conflicts and contradictions between different forces within the society''.[77] To establish and maintain a vital strain of independent and critical research over the next decade will be a major challenge for African institutions and researchers.

India

Dramatic gains have been made in Asia in the growth and institutionalization of empirical educational research during the last two decades. The Asian region, like sub-Saharan Africa, defies generalization. The Philippines, Malaysia, Thailand, Korea, and Singapore can each point with pride to a seeming wealth of well qualified talent in the field of education and to dynamic institutions involved in carrying out research. But each is a case in itself, as in Japan with its strong National Institute for Education Research, and India which, by virtue of its size alone can boast an extraordinary research establishment. Indonesia is only now beginning to put together an institutionalized capacity for research in education and in the social sciences. Bangladesh, Pakistan and Afghanistan are at an even earlier stage in the process. China's size, waves of social reform, and recent opening to the West make it difficult to analyze. Unable to do even partial justice to the Asian panorama, I will restrict myself to comments on communication and interaction among researchers within the region and to impressions of the state of research in one country, India.

Looking at the whole of Asia, one must conclude that communication and interaction among researchers is weak. Distances, the newness of growth of educational research, cultural differences, and the underdeveloped state of institutions devoted to documentation and diffusion all contribute to that state. The greatest failure, to my mind, is the lack of connections between Indian researchers and others within the vast region.

UNESCO has attempted to fill a communication gap with Asian Programmes for Educational Innovation in Development (APEID). To date, program and project description has been APEID's strength, while analysis, evaluation and research remain weak, despite the useful publication, *Asian Educational Notes*, and a related abstracting system. UNESCO has also worked with Japan's National Institute for Educational Research to expand communications among researchers within the gigantic and unmanageable Asian region. In conjunction with the international reporting service, the UNESCO regional office in Bangkok has helped strengthen documentation efforts in Asia.

Useful though these activities have been, they have not been as effective as hoped and, particularly with respect to communication of research efforts, have only scratched the surface. The communication of research results that has occurred has been largely of research internal to the educational system. Almost none of the research on the social dimensions of education finds its way into the diffusion system.

Within Southeast Asia, communication and interaction among individuals in the field of education are better than for the region as a whole. There, the Southeast Asian Ministers of Education Organization (SEAMEO) has sponsored a family of regional organizations dealing with such diverse themes as higher education (RIHED), educational innovation (INNOTECH), science and mathematics (RECSAM), language (RELC), agricultural education (SEARCA), and nonformal education (SNEP). All of the organizations include some elements of R&D in their programs but in all cases, the development heavily outweighs the research. Generally, these centres do more to provide interaction among practitioners and policymakers than among researchers. Related as they are to ministries of education, their view of education has tended to be introverted, again neglecting social dimensions of education. In 1978, SEAMEO began to look more broadly at education by discussing program possibilities intended to enhance the quality of life, foster sociocultural development, and improve administration, research, planning, and innovation.[78]

A regional organization that has concerned itself with the economic and social consequences of education is the Committee on Asian Manpower Studies (CAMS) which, since its founding, has included a subcommittee on education. CAMS helps interaction among a relatively small number of researchers in the field of the economics of education and has produced some interesting work relating education to the functioning of labour markets.

Providing further focus within the Southeast Asian area is the five-country group of ASEAN nations (Indonesia, Malaysia, the Philippines, Singapore, and Thailand). An outgrowth of a December 1977 meeting of ASEAN Ministers of Education is the Asian Network of Development Education Centres (ANDEC). This network, among other things, is meant to serve as a resource generator and disseminator of significant educational research findings and development activities.

Overlapping the ASEAN initiative but more explictly focussed on research were two regional meetings held in Southeast Asia in 1978. The first, in March, at Chengmai, Thailand, took the form of a workshop in which a large group of young and mid-career educational researchers and planners met to discuss research and research methods.[79] The second workshop, held in May, in Singapore, was organized around discussions of results from four national assessment studies carried out in the region between 1972 and 1975. That meeting placed major emphasis on analyzing the organization, conduct, and use of research.[80] At the two workshops suggestions were aired for improving communication and interaction among researchers within the region.

Taken together, the above initiatives should strengthen educational research in Southeast Asia if not within the region as a whole. The real value of the associations developed, however, will continue to depend on the strength and quality of the individuals and institutions which participate.

Against this general background, I will look briefly at educational research in India. Why India was chosen will be obvious. By no stretch of the imagination is the choice intended to be a representative Asian country. However, the Indian case allows additional comparison with Latin America and sub-Saharan Africa.

India boggles the mind.[81] Its population is larger than that of all Latin America or all sub-Saharan Africa. There are as many children in the Indian educational system as there are people in Brazil or in Nigeria. Despite its relatively low enrollment ratio for primary schools, approximately 60 percent in 1975, there are more primary school teachers in India than people in Jamaica. The recent national literacy program sought to make 100 000 000 literate. The city of Bombay alone operates primary schools for half a million children, and in ten major languages. Thus, simply counting and sorting become major undertakings. Drawing generalizations from whatever data are gathered or whatever studies are done is risky to say the least.

Because the educational enterprise in India is so vast and varied, a degree of decentralization is required. Indian states figure prominently in the financing, organization, and monitoring of education. Any full analysis of Indian education or educational research should, then, include a state by state treatment. In this manuscript, however, I will give little attention to that important element of political geography.

Viewed nationally, the Indian capacity to carry out research is impressive. Already the country has reached the point where it can train a next generation of researchers. An enormous national literature exists and unusually good documentation of educational research occurs in conjunction with more general documentation efforts (e.g. those undertaken by the Indian Social Science Research Council and by the National Council of Educational Research and Training). Centres of excellence for training and research in various subfields of education have been designated and are functioning. Research is carried out from bases in government, the universities, and the private sector. Funding does not seem to have been a major problem. The country abounds in unused data. When viewed nationally, it is difficult to contend, as in sub-Saharan Africa or in most individual Latin American countries, that the educational research enterprise is weak and fragile, a contention more accurate perhaps at the state level.

The climate for research in India is generally a good one. A tradition of scholarship, publication, and public debate, a variable but relatively open political environment,[82] a critical mass of researchers providing both motivation and feedback, the possibility of funding, and increasing demand for research over the last 15 or 20 years contribute to the positive environment. The inevitable tensions that open debate can produce seem to be buffered well by a bureaucracy able to improvise.[83] As a result, it is possible to imagine diffusion and impact of research results occurring indirectly through public debate in India, an option that is unrealistic in many other nations.

An increasing demand for research can be traced back at the very least to work of the educational Reform Commission in 1964, culminating in reforms in 1966. Since that time, basic data have been needed to draw up and implement a series of five-year plans. Moreover, innovation has been on many tongues, leading to requests by officials for experimentation, analysis, and evaluation. Thinking officials in Indian government are concerned with substance as well as organization and have encouraged innovation and evaluation by private organizations when it would be difficult for the government itself to innovate along the same line. There is a strong desire to modernize within the bureaucracy that brings with it a commitment to the spread of science and technology, despite a realization that many traditional values will disappear in

the process. In recent years, particularly since the advent of the National Adult Education Program (NAEP), increasing attention has been accorded to action research, complementing the more common demand, for evaluative research. Thus, demand exists for several types of research, from systematic information gathering to action research.

The demand for academic research comes primarily from other quarters than the government. A professional community and the certification process within higher education generate most of that demand. Still the government is an occasional direct consumer of such research and, even the National Council for Educational Research and Training (NCERT) funds some basic research.

In the past, funding has not been a factor limiting research activity in Indian education. During my visits in 1977 and 1978, social scientists consistently said that a reasonable research proposal could find funding. The nature of the available funding leads to a qualification, however. Funds from the government sometimes have not been sought because researchers feel they will lose independence. Also, available funds are usually for field research, related expenses including typing of the final products, and even for distribution, but salaries are not covered. Thus, researchers must often try to squeeze out time from regular duties rather than devote themselves full time to a research project. This is not unlike the situation found in some parts of Latin America.

In addition to a favorable climate, available funding, and existence of a demand for various forms of research, India can point to a well established infrastructure. Among the four national research councils is the Indian Council for Social Science Research (ICSSR). That organization was headed for many years by J.P. Naik who had previously served as Secretary to the Indian Educational Reform Commission. Education, therefore, has had an important place in the organizational, bibliographical, documentation, data collecting, and funding efforts of the ICSSR. The University Grants Commission (UGC) and the NCERT also provide important support for research.

The UGC and ICSSR worked together to establish centres of excellence in the field of education. These include a PhD program in educational research at the Centre for the Applied Study of Education (Baroda), an economics of education centre at the University of Bombay, and a centre for the sociology of education at the Tata Institute (Bombay).

Documentation of educational research in India is unusually good. That is in large part due to the extraordinary effort undertaken by the ICSSR resulting in a 23-volume survey of research in the social sciences. One volume is devoted to education. The surveys in economics, sociology, anthropology, and psychology contain chapters on those disciplines as applied to education.

A data base for educational research exists in the survey of education carried out every five years covering all levels of the Indian system. In addition, periodic household surveys are undertaken. The Operations Research Group in Baroda, for instance, carries out regular surveys, primarily for marketing purposes, which include education data. A social indicators project within the ICSSR is generating additional data; V.N. Kothari from the economics faculty at the University of Baroda was given the task of working on social indicators for the field of education. To process these data, both United States and Soviet computers of the most advanced types are available in major urban centres. The large NCERT is able to claim a computer of its own.

In comparison with most other Third World nations, or even regions, India's research literature is well developed. The field of education alone boasts almost 100 journals, several in local languages. In addition to the *India Educational Review*, published by NCERT, both the *Journal of Higher Education* (a UGC publication concentrating on the scholarly study of higher education) and *New Frontiers in Education* (published by the All India Association for Christian Higher Education) are more than respectable journals. In 1977 NCERT was experimenting with a less scholarly journal trying to get research results out to two million practitioners. In Gujarat State, a journal in the local language, Gujarati, is in its 32nd year. In the economics of education, an Indian reader has been published. The Tata Institute has initiated a series in the sociology of education. Prodipto Roy, of the Council for Social Development, has coedited a volume on social science research methods.

Although the foregoing suggests a long history of institutionalized educational research, even in India most educational research institutes are relatively young. The National Council was founded in 1961 and the National Centre for Advanced Study in Education (Baroda) in 1964. The centres of excellence are products of the late 1960s; the Tata Institute (Bombay) program in the sociology of education began to function in 1968. The Indian Institute for Education (Pune) came into being in 1976 and the program of research in education at the Staff College (Hyderabad) began in 1975.

As in Latin America, private research institutions have an important role to play in India. The government, for instance, has contracted some research to the independent Council for Social Development in Delhi, related to ongoing evaluation of the NAEP. The mammoth evaluation of distance education using a television satellite (SITE) included a study by the Operations Research Group in Baroda. State governments have asked the Staff College in Hyderabad to assist them with problems of educational management. In Tilonia, a group of young professionals is involved in action research as part of an extremely innovative educational program.

Viewed nationally, India appears talent wealthy. That seems as true for education as for other fields. It seems possible to find at least one well qualified Indian who can carry out a sensitive, sophisticated analysis of almost any problem. Still, talent is scattered and often stretched thin. And sometimes the same individuals are called upon over and over again as new topics come into view, making the picture of available talent seem brighter than it is.

It is commonplace to hear in India that the intellectual world is a small world within a larger one, small enough that capable people in one location and field are likely to know what capable people in other locations and fields are about. That is certainly true at the top. Small invisible colleges exist in India much as they do within the large and varied intellectual community of the United States where those who are most prominent in a field tend to know and communicate with each other. However, one has no information regarding the second layer of talent or, for that matter, the third and fourth layers.

My guess is that research depth has increased significantly in recent years, making small world statements more elitist that in the past. A further impression is that although good researchers are still found infrequently within state-level institutions and in lesser known universities, the depth of talent is increasing rapidly, something that must occur if research directed at more than knowledge

for knowledge sake is to diffuse through the population rather than remain the monopoly of an elite. It does not seem contradictory, therefore, to assert that researchers are available in India to work on illuminating the difficult problems of education in that difficult environment while, at the same time, to assert that researchers are in short supply.

These impressions about the availability and depth of talent need to be tested further by looking within different fields and at the mix of ideologies and methodologies represented in the stock of researchers. Within the field of education itself, the number of firmly placed, bona fide social scientists is relatively small. Psychologists and curriculum developers seem to predominate, much as in the African example. The NCERT roster of researchers, for instance, includes an occasional sociologist or anthropologist, but they are rare, particularly as one moves from Delhi to NCERT's regional colleges. The staff of CASE is composed of educationists, psychologists, and social psychologists. A recent review of research on teacher effectiveness in India failed to turn up treatments of that educational issue in other than pedagogical terms, despite, for instance, the important roles of teachers in rural communities.[84] Most educational research is carried out as part of MA or PhD programs, remains narrowly pedagogical, and often has little relation to immediate problems facing Indian education. For all of that, attention by social scientists to the study of education is occurring and, again because of India's size, occurring with surprising frequency.

The application of the tools of economics, sociology, political science, and anthropology to the study of education occurs infrequently if judged in relation to the time and energy social scientists are devoting to other topics. However, (again in the aggregate) an extraordinary amount of applied research is going on at locations such as: the Tata Institute, Jawarala Nehru University (JNU), the Operations Research Group, the Television Centre (Pune), the Indian Institute of Education (IIE) (Pune), the Administrative Staff College, the University of Bombay, and various management institutes.

Each time an Indian social scientist decides to do research on education, there is of course, an opportunity cost because another set of issues gets neglected, at least temporarily. As the social science community expands, trade-offs will be fewer and the field of education may be better able to claim sustained attention. Thus, one way to expand the potential capacity for educational research is simply to expand the general social science bases within India.

There is no field called the anthropology of education in India, and no centre of excellence, but anthropologists are working at the NCERT, at IIE, at the JNU Centre for Educational Studies, at the Television Centre in Pune, and at the Staff College. Moreover, the Department of Anthropology at Orissa has cooperated with the Department of Psychology in a research project dealing with early childhood socialization and early education practices. My impression is that these are exceptions and that more generally, anthropologists within India have given little thought to education, despite the current thrust in nonformal education. I did not find any attempt to pull from the rich, anthropological literature containing many case studies of Indian villages, research results pertinent to education. Obviously much remains to be done, but the base on which to build is relatively strong.

Sociologists are not only working on educational problems at the designated centre of excellence, but also in a wide range of other locations. I have not had a chance to look closely at the application of sociology to education to see what topics are being pursued, but interests seem to focus on macrosociological issues such as education and caste, a topic that has received concentrated attention from prestigious scholars. Sociological analysis is less likely to be applied internally to examine, for instance, the administration of schools or classroom organization. The economics of education is a rapidly growing field.

A next generation of researchers who will worry about education is being formed in India in universities, in deemed universities such as the Tata Institute, and at NCERT's National Institute of Education. The centre of excellence for educational research, CASE, falls within the Faculty of Education at the University of Baroda. In 1978, CASE enrolled approximately 20 graduate students from all Indian states, and had produced 85 doctorates since 1969. The economics of education program in Baroda enrolled 10 students in 1977 and the sociology of education program of the Tata Institute, 7. At Nehru University, the Centre for Study of Education promises to turn out a host of research-oriented students. Several hundred PhD theses in the field of education have been completed in recent years. In addition, social science programs are growing, producing an ever larger pool of individuals available to do research on education.

The quality of training is difficult to judge. The few contacts I had with students while in India left me with the superficial impression that quality of mind as well as of the training varies widely. It would be interesting to study what the policy of designating centres of excellence has done to raise (or lower) the quality of research being done on education. Does labeling such centres isolate the subfield from major disciplines in a way that leads to less rigorous training? Does it bring together the field of education and educators with social scientists in a better way than in the past?

Many Indian researchers in education have been trained abroad, usually in Britain, but more recently in the United States as well. Nevertheless, I was impressed by the degree to which educational research seems to have taken an ahistorical, positivistic, extremely quantitative, survey–research orientaton. Little Marxist analysis or conflict theory seemed in evidence.[85]

By virtue of size and ideology India, more than most nations, has moderated the potentially overpowering effects of foreign presence and influence as its educational research community has grown. Sheer size has produced quickly a critical mass of talented individuals within the country who can carry on a dialogue among themselves without having to go outside. A long tradition of scholarship and of publication has combined with size to help build and reinforce communication and interaction among Indian scholars, avoiding the need to publish abroad.

Ideology has been at least as important as size. The rhetoric of dependency theorists characterizing the community of researchers in Latin America has not marked India's researchers. New nationalism has led to strong control over and restrictions on the flow of foreign funds and researchers to India, particularly in the last decade or more. Moreover, Indian organizations and researchers that depend too heavily on funds from abroad for their research are looked at with a

questioning if not suspicious eye by other Indian researchers. The push to go abroad for study, although strong, is as often as not related to a desire to emigrate.

Training abroad of Indian researchers, frequent participation in international meetings, and the continuing Commonwealth ties help keep India's connections to the First World very much alive. These connections have been reinforced by the usual flow of international experts, and by occasional participation of outsiders in research in India or the participation by India in international studies.[86]

Although Indian researchers seem to maintain reasonably good communications with researchers in the First World, and although connections within Indian worlds of research seem better than most, there is a major communication–interaction gap between Indian researchers and those in other Third World settings. That gap exists despite presence of Indians in most international forums, and despite the fact that most Indian researchers work and publish in English.

Several reasons may be offered to explain why results of Indian research are not appreciated more widely. Not least of these is the simple fact that internal demands leave little time or desire for Indian scholars or bureaucrats to attend to exporting results. That is, of course, true for most Third World countries. Beyond pressures of time and limited desire, however, are problems of distance, and of the size, history, and culture of India which seem also to make it so remote from other developing countries that the relevance of research done there is sometimes rejected out of hand. In some Third World circles, I have encountered what can only be labeled a prejudice against Indian researchers who, it was alleged, seemed too often to know all the answers and to be, publicly, too critical of others' work. Thus cultural sensitivity can be as great a problem among that group of nations lumped as Third World as it is between Third and First Worlds.

Finally, the Indian case illustrates how inadequate are formal and passive forms of communicating research results. Although a large number of Indian studies find their way into bibliographies and awareness lists, there is little evidence from my travels to suggest that the references are used. They are not viewed as pertinent.

Within India, informal communication networks among researchers concerned with educational problems seem to be functioning, often in a personal way through key individuals. Indirect communication through journal articles and in the press is well established.

As suggested in previous pages, India, more than most other Third World nations, has attempted to relate education to the social sciences — through centres of excellence, by inducing some of the best social scientists to turn their minds to education from time to time, and by documentation efforts. Research institutes in public, private, and university sectors have brought together social scientists and educational researchers on their staffs. Still, social science has not been integrated into the educational establishment. Centres of excellence have, in fact, helped establish rather than close a gap. Again, communication and interaction seem to depend more on personal connections than on organizational devices.

It is my impression that communication between policymakers and educational researchers in India has been relatively good. The high quality of top Indian civil servants has something to do with that as does the tradition of open debate. In my conversations I was able to discover a number of concrete cases in which research results had been actively sought and drawn upon when setting policy. The 1966 reform is an example. So is the National Adult Education Program, launched in 1978. Again, an important process of translation is needed, particularly if researchers are located in universities where the reward system favours academic research written up in academic language. Some academics write for nontechnical audiences by contributing to such prestigious publications as *Economic and Social Weekly*, but education articles are infrequent. The main translation occurs through individuals.

In the Indian case, I may seem to be placing too much emphasis on the role of key individuals acting as informal research brokers. Undoubtedly, that assessment is coloured by my own contact with J.P. Naik. Serving as secretary to the Indian Educational Reform Commission and then as head of the Indian Council for Social Science Research, Naik built a series of contacts that spread across India and across disciplinary research–policy lines. He reached out into the international community as well. In brief, Naik has been (and is although he has now retired as head of ICSSR) a research broker par excellance, by translating research into policy through his participation in policymaking and through his writing, by reinforcing formal channels of communication, and by drawing on his own unbelievable network of informed contacts to put people in touch with each other. In his brokering efforts, Naik has been aided by the existing research infrastructure in India, only part of which he helped build, by the relatively elite nature of the research occupation, and by his own practical experience both as a rural teacher and as government civil servant. But without Naik or an equally dynamic and dedicated soul, the connections would not be made and the research community would not be as developed as it is.

What makes India so unusual and what makes the failure to draw more fully upon Indian research results so disappointing is the fact that research of high quality, and sometimes related to unusual innovative efforts, is being done within a country that shares with other nations of the Third World extreme problems of poverty, inequities, and language difficulties. The combination of research capacity and social distress suggests that Indian educational research and researchers should have a great deal to contribute to others.

Conclusions

The cases presented suggest that, in general, institutionalized research in the Third World is: new, growing rapidly, under-financed, uncoordinated, fragile, still dominated by a tradition of psychopedagogical research, unable to train locally a next generation, subject to international fads, dependent on First World concepts and methodologies, and living on its potential. With few exceptions, growth is tied to foreign assistance and often to key individuals within a country or a region. Direct, informal contacts are still more important for diffusing research than is the written word. Everywhere, potential consumers of educational research remain a small and select group; a research mentality is not spread widely within nations.

There is a general tendency (within the First World as well), for governments to seek greater control over the research process and its results. How that control is exercised varies widely. Using tied funds, developing in-house research, and contracting are all potential and partial means of controlling research. Depending on the country, they reflect either a legitimate desire to bring research closer to policy and practice or the unfortunate but natural desire to avoid embarrassing criticism — sometimes both. Too often, however, the direct threat of sanctions against researchers provides the control.

The strong presence of private research institutions in Latin America and India contrasts with their virtual absence in sub-Saharan Africa. It is tempting to relate these differences to the degree of research independence or to the amount of critical research found in those areas. To a small degree, the inference would be appropriate. But it is not the institutional arrangements per se that foster independent or critical research. It would be a mistake to conclude that assisting the creation of private research institutions elsewhere, where none exist, would provide researchers with more independence (just as it is a mistake to assume that research done from within governments will necessarily have a stronger influence on policy than research done outside).

Although an experimental, psychopedagogical tradition dominates educational research, there are clearly variations by country and region in the degree to which social science had made inroads on that tradition. Sub-Saharan Africa, which lacks a developed social science community, stands out as the area where links are weakest. It also, however, provides an opportunity for educational research and research in the social sciences to grow apace, something they have not done in other regions of the world.

Despite the noted differences in the numbers of researchers and research institutions, and despite the absence of private research centres and a social science tradition in Africa, it is evident that variations by country within major regions of the Third World, are greater than variations among them. The climate for research, its institutional forms, concentrations of talent, methodological

preferences, the problems treated, and the mode of diffusion differ widely, even within the relatively more homegeneous and developed Latin American region. Size, resources, and the peculiar history of each nation shape educational research more than does location.

This manuscript began with a proposition that promoting communication and interaction by developing a variety of connections between separated worlds of research can lead to improvement in the generation and use of research in the field of education. But a number of caveats were noted. Networks have the potential for restricting, propagandizing, reinforcing unequal relationships, and inhibiting local invention. Another caveat should be mentioned that is so obvious it is often forgotten: communication and interaction are empty without something to communicate. A first task, then, is to see that researchers are producing results worth communicating. To spend time, energy, and scarce funds elaborating schemes to collect, synthesize, and diffuse a very small volume of low quality research would be a waste. To the extent that such efforts take away from the production of good research rather than strengthen or reinforce that process, they should not be pursued. These caveats should be kept in mind as concluding comments are read.

At this point, I wish to refer the reader back to conclusions presented in point form in the Introduction. The basis for most of those observations should now be clearer. I do not propose to elaborate on all the conclusions presented earlier but will instead concentrate on those most directly related to communication and interaction among researchers.

At the outset, I stressed the inadequacy of standard models of diffusion emphasizing the movement of information rather than people and rarely relating the uses of research to conditions of its production. I noted also the importance of informal networks, of direct and personal interaction, and of information brokers, and criticized the overemphasis on large, impersonal, scattershot methods of communicating research results through formal documentation services. Finally, I indicated three sets of connections commonly assumed to be weak: between researchers in the First and Third Worlds; among researchers in the Third World; and between researchers in education and in other fields.

Connecting Worlds of Research: the First and Third Worlds

The previous chapters and the appendix provide ample evidence of strong ties between researchers in the First and Third Worlds. In all regions, foreign study and foreign funding and presence have helped establish connections. Variation occurs, however, in the depth and breadth of the connections and in the degree to which they are one-way and dependent rather than reciprocal and collegial. Variation also occurs in the research traditions and methods strengthened as a result of the established connections.

Too often the connections made are either personal and restricted (often the case where foreign study has occurred) or related to funding of research by foreign organizations; the general flow of information between First and Third Worlds is not as frequent or open as the relatively quick appearance in the Third World of the latest method for analyzing time series data or of identifying basic needs. The fact that foreign ideas are often transmitted through funders or through overseas universities puts a particular onus on both to be sensitive to

more than one current of opinion, both internationally and nationally, and to build in flexibility without succumbing to fadishness.

It maybe that some of the existing connections between First and Third Worlds of research need first to be disconnected so that less dependent, more collegial relationships will emerge. Alternative mechanisms for fostering such collegial communication and interaction, less tied to funding, need to be tried. Alternative forms of training are needed as well.

Current international preoccupation with establishing a new economic order and with human rights reflects, more than it directs, changing international relationships. Within the general context of these changing First–Third World interactions, the connections between First and Third World researchers in education are also changing slowly. Although returned foreign students and international experts continue to provide important connections, proportionally fewer students are being drawn from within the Third World. With the growth of local research communities, the desire to look abroad for publication, advice, and intellectual reward, is moderated. Both the international changes and the increasing interaction and communication among researchers at national and regional levels should facilitate and restructure international flows of ideas between First and Third Worlds.

Connections within the Third World

A critical mass of researchers taking education as their principal theme is present in some Third World nations. Interaction among those researchers at the national level is increasing and, from the examples provided, it is clear that informal connections are being used in a number of innovative ways to build more formal and extended bases for interaction among researchers and with policymakers. These national developments are crucial for the growth of nondependent links among countries and across Third World regions.

Connections within regions or within subregions are growing also. Latin America seems to be the most active in this respect. There, interaction is beginning to occur on a sustained basis and is crossing narrow network lines set earlier by connections to particular funding agencies or to particular training institutions abroad.

Although informal and intraregional interactions are gaining strength, connections across regions of the Third World are still rare and very weak. Before that interregional interaction can profitably occur on a larger scale, and in more formal ways than at present, strong regional networks and organizations should be in place. The recent bringing together of the regional social science organizations from Latin America (CLACSO) and Africa (CODESRIA) attests to the enriching nature of such encounters and to the need for even stronger organizations before they can fulfill their potential. However, individual exchanges related to specific projects on research themes have proven to be extremely effective.

Training educational researchers at the MA level abroad but within the Third World occurs only rarely. That training provides a basis for strengthening direct ties among Third World researchers. In some regions study outside home countries is beginning — at the ICEE in Nigeria or at Javeriana University in

Colombia, for instance. Experimenting with training in other regions would not be problem free (cultural differences among nations of the Third World require at least as difficult adjustments by foreign students and travelers as do Third–First World differences), but the effort seems worth making.

Connections within and among regions are often made through international circuit-riders, associated with international agencies, who pick up information as they go and pass it on. Association with the organizations for whom they work and often First World origins, provide circuit-riders with a perspective that is not always in tune with those from whom they are obtaining, and to whom they are diffusing, information. Third World researchers should have opportunities to function as research brokers on a regional and international basis.

Because the rapidly growing amount of educational research in each major region of the Third World remains scattered and largely uncritiqued, there is an important need to pull together and actively diffuse results. Substantive reviews of research within countries and within regions can provide a basis for dialogue among researchers and, in the process, strengthen research communities.

Connections between Educational Researchers and Social Scientists

In previous pages, I have pointed both to the relative isolation of educational researchers from colleagues in the social and natural sciences, and to a number of examples in which efforts have been made to bridge that communication gap. If the social and physical antecedents and consequences of education in its many forms are to be analyzed properly, much more attention will be needed to improve the interaction between educators and others. If social dimensions are to receive their due, it will be necessary for the social sciences to become a more integral part of the training of educational researchers. And it will be necessary for the literature from the social sciences to be made more accessible. Very little has been done within the Third World to extract from that literature important treatments of educational problems.

Fitting together ideas originating in the field of education and those originating elsewhere occurs, ultimately, in the heads of individuals. Simply bringing together groups of educators or educational psychologists with a group of anthropologists is not enough. Languages of discourse are different and dialogue is difficult. It remains for individual social scientists to be enticed into active and sustained attention to education in combination with educational practitioners, and for those with intimate experiences as practical educators to enter the realm of social science. Such combinations of skills and perspectives continue to be rare. The following general needs seem clear.

- There is an unfilled need to synthesize, critique, and actively diffuse the growing but scattered body of educational research carried out in Third World settings.
- To overcome the isolation of researchers and to aid the impact of research, there is a need to foster communication across geographic, disciplinary, and methodological lines and among researchers, practitioners, policymakers, and funders.

- In strengthening communication, direct and often informal contacts among researchers are particularly fruitful. New mechanisms are needed for bringing together and promoting dialogue among researchers in the Third World.
- Research brokers are extremely important in the process of making connections among researchers and in translating and diffusing research results. Thus, there is a need for selective and targeted diffusion to and by research brokers who combine knowledge of research and practical experience in the field of education.
- There is a need to integrate better research in education with research in other areas.

These ideas, consciously or unconsciously, have provided an underpinning for activities of the Educational Research Review and Advisory Group. That modest experiment in connecting worlds of research has now functioned quietly for more than three years. The RRAG has commissioned research syntheses and has pursued a strategy of directed diffusion — largely through the participating brokers who make up the group. It has brought together informally individuals who combine, usually within themselves, experience in research policy, practice, and funding and who represent different geographic, disciplinary, methodological, and ideological points of view and it has assisted the development and critical analysis of research climates and connections at national and regional levels. The informal nature of the mechanism has provided flexibility. The fact that it sits outside governments, international agencies, and universities gives it a needed independence. Ties to each of those worlds facilitate communication among them. The Group is collegial, including First World as well as Third World participants.

Although this manuscript did not begin as an apology for the RRAG, it has ended that way. Reflecting upon the experience of the group and in light of the foregoing, the apology seems more than justified. Even more attention will need to be given to synthesizing, communicating, monitoring, and brokering as the education research community grows during the 1980s. The RRAG experience should therefore be sustained, learned from, and used to stimulate new initiatives in the coming years.

Notes

1. Alfred Yates, ed. (1971). *The role of research in educational change, a report sponsored by the UNESCO Institute for Education*. Pacific Books Publishers, Palo Alto, California, p. 35.

2. For example, education program staff members from donor agencies, meeting in Geneva in November 1978, and again in November 1979, took research and strengthening research capacity as the focus of their discussions. Also by way of example, the recently completed sector paper of the World Bank gives much more attention to research than it did in the past (The World Bank Education Department Staff (1980). *Education: sector policy paper*. The World Bank, Washington, D.C., U.S.A.).

3. Research, in this monograph, is viewed as a process of systematic and disciplined generation of knowledge — in this case, about educational facts and problems. The results of research must be arrived at and reported in a manner permitting others to judge validity and reliability for themselves. Its systematic, disciplined nature distinguishes research-based knowledge from common sense, randomly accumulated experience, or intuition, all of which are valid sources of knowledge as well. Its requirements for verification distinguish research from most journalism and social criticism.

Defining research so broadly, however, is not enough; to lump all research together in discussion is to court misunderstanding. One way to distinguish among types of research is in terms of the different purposes research is intended to fulfill. Such distinctions are useful because the purpose of a research undertaking embues it with a specific character and momentum, affecting its relationship to policy and practice. A classification of research, by purpose, which I have found helpful and which I have kept very much in mind when writing this monograph is that of Jean Pierre Vielle who distinguishes: (*a*) research intended to produce new knowledge about education systems and the variables they comprise; (*b*) research undertaken to inform policy and planning decisions, including choices regarding the design and implementation of programs; (*c*) research designed to produce new technologies or systems; (*d*) action research aimed at attitudinal and behavioural changes among those participating in the process and leading to social and educational changes; and (*e*) research on research, developing new knowledge about how research is generated, developed, diffused, and used. Any research project can serve several of these purposes simultaneously. The various types of research also complement each other and are appropriate in different circumstances.

I will also view research as more than just a way of thinking or of ordering experience. It is also a social process. Each major phase of a research endeavour — conception, design, conduct, and dissemination — is influenced by the social identity of, and the relationships among, people doing and using research. Further the process and outcomes of research are conditioned by the way in which it is organized and by the larger social and political circumstances within which it is embedded. Recognizing the social nature of research is central to the arguments to be presented.

4. Ronald G. Havelock, et al. (1979). *Planning for innovation through dissemination and utilization of knowledge*. University of Michigan, Center for Research on Utilization of Scientific Knowledge.

5. R.G. Havelock and A.M. Huberman (1977). *Solving educational problems: the theory and reality of innovation in developing countries*. UNESCO, Paris.

6. The work of Pablo Latapi and Jean Pierre Vielle, in Mexico, avoids these difficulties. See Latapi (1978). *A note on the diffusion of education research*, and Vielle (1978). *The impact of research on educational change*, both written for and available from the Research Review and Advisory Group through the IDRC offices in Ottawa, Canada.

7. For example, the International Educational Reporting Service located within the International Bureau of Education in Geneva, produces a newsletter, *Innovation*, and an *Awareness List*. Other examples are the Non-Formal Education Exchange which also publishes a newsletter from its base at Michigan State University, the now-defunct education finance network which was located at Berkeley, the communications newsletter published by the Academy for Educational Development in Washington, the participatory research network associated with the International Council for Adult Education and based at the Ontario Institute for Educational Studies in Toronto, and the UNESCO-related networks in S.E. Asia (APEID) and in Africa (NEIDA).

8. For a summary of that literature and its application to education, see Roger Pritchard (1978). *Information networks and education: an analytical bibliography*, a working document prepared for UNESCO, Paris and, by the same author (1978). *Informal networks*, a paper prepared for the Research Review and Advisory Group, IDRC, Ottawa; Barclay Hudson (1976). *Knowledge networks for educational planning*. USAID, Washington, D.C.; Per Dalin (1978). *Networks for educational change*. IMTEC, Oslo.

9. In addition, a major conclusion of the 1967 conference (Yates, see note 1) on the role of research in educational change was that much more attention needed to be focussed on reaching and aiding research brokers.

10. For the previous 5 years, 1972–1976, I worked as a program officer in the Office for Latin America and the Caribbean of the Ford Foundation, dealing also with research on education, but primarily within the western hemisphere. The Foundation experience was much more focussed on specific programs but I will draw heavily on it also in this report.

11. Although I will draw on my experience as coordinator of the RRAG, I write in a personal capacity; my views are not intended to represent those of other Review Group members.

12. The reader is also referred to: Stuart Maclure (1980). *The Research Review and Advisory Group: Activities and Findings 1977–1979*. IDRC, Ottawa.

13. In writing this chapter I have profited from the comments of many individuals, but particularly of Agustin Lombana, Jeffrey Puryear, Ernesto Schiefelbein, Pablo Latapi, Grazziella Corvalan and Claudio Castro.

14. Founding dates are included in the listing of research institutions in Table 2 and in the listing of publications in Table 3.

15. There are, of course, exceptions. A strong empirical tradition in Chile, for instance, can be tracked back to 1929 when Dr. Irma Salas returned from her period of study abroad, published a sociological study analyzing the social backgrounds of Chilean Students, and began training Chilean researchers.

16. These figures are taken from: Luis Ratinoff and Máximo Jeria (1979). *The state of education in Latin America and development priorities*, the Interamerican Development Bank, Washington (mimeo). This document presents the most carefully worked set of data I have seen on enrollments and financing of education in Latin America between 1960 and 1975. Based on analysis of the data, the authors suggest priorities for countries within the region.

17. See, for instance: Seymour Lipset and Aldo Solari eds. (1967). *Elites in Latin America*. Oxford University Press, New York.

18. It would be wrong to overemphasize importation. Manpower methods were already being applied in Argentina and Chile, for instance, before OECD technicians arrived.

19. Toward the end of the decade and in the early 1970s several Latin American researchers trained in the United States used human capital models to analyze economic consequences of alternative educational investments. Their work, more than that done by foreigners, generated local debate.

20. This experiment is described in Ernesto Schiefelbein and Patricia Cariola (1979). *Development of a national educational research capacity: a comparison of three programs undertaken in Chile*. A paper prepared for the Research Review and Advisory Group, July 1979.

21. The geographical distinction made here between training in the United States and in Europe is, of course, an oversimplification. Training at the London School of Economics, for instance, put students in one tradition and at Cambridge, in another, despite both being located in England.

22. Three programs in the United States played particularly important training roles in the 1960s and early 1970s: Harvard's Center for Studies in Education and Development, Chicago's Comparative Education Center, and the Stanford International Development Education Center.

23. For example, the Planning Office in the Ministry of Education, Chile, was able to muster rapidly basic data guiding the expansion and reform of education under the government of Eduardo Frei, beginning in 1964. See Schiefelbein and Cariola, cited in note 20, above.

24. Stanford hosted an unusually large number of Latin Americans. On several occasions meetings of graduates were held within the region. Moreover, Stanford professors traveled frequently to Latin America and were involved in research there.

25. Personal conversation with Jorge Hoyos, S.J., Vice-Rector academico, Javeriana University, Bogota, Colombia, May 1979.

26. The Ford Foundation (1970). *A report on a conference on the educational experience in Latin America, Buenos Aires, May 25–29 1970*. The Ford Foundation, New York, September.

27. For a review of the OAS program, see volume XXII (1978) of their journal, *La Educacion*. Among other articles in that edition is one by Oswaldo Kreimer titled *La investigación educativa en Latinoamerica y el PREDE, sumario y perspectivas*, summarizing OAS involvement in educational research over the last decade.

28. It is extremely difficult to define from the USAID budgets the amounts actually spent for research in the Latin American region. What can be said is that as the total Latin American budget climbed from 44 million dollars in 1960 to 230 million in 1980 (no adjustment for inflation or changes in the value of the dollar abroad), funds specifically allocated for ''Education and Human Resources (EHR) rose from 8 to 43 million. During the decade of the 60s, it was estimated that approximately 7% of the EHR funds were used in R&D projects. During the 1970s, that percentage was closer to 40% and for FY1980, the estimate was 23 million dollars or 53%''. How much of the 23 million is to be spent within the region (rather than in the U.S.) and for R&D projects that involve more R than D is another question. Information regarding USAID's involvement in research was kindly provided by Helen Ortiz of the Latin American Bureau.

29. A mimeographed paper available from the Research Review and Advisory Group, IDRC, Ottawa, Canada, 1978.

30. A bibliography available from ECIEL (Caixa Postal 740, Rio de Janeiro, Brazil) lists 16 publications dealing with the determinants of educational achievement, 15 dealing with educational costs, 9 dealing with education and the labour market, and approximately 75 other publications of a general nature such as the methods of calculating educational costs or dealing with special topics such as nutrition, literacy, or technical education. Unfortunately, the education project of ECIEL has gone into eclipse in 1980 for lack of funding.

31. Angelica Copetti Montiel (1978). *Bibliografia sobre educacion y desarrollo en America Latina y el Caribe*. UNESCO/CEPAL/PNUD/DEALC/13, Buenos Aires, June; and by the same author (1978). *Bibliografia universidad y desarrollo en América Latina y el Caribe*. UNESCO/CEPAL/PNUD/DEALC/13, Buenos Aires, August.

32. See Ratinoff and Jeria, cited in note 16, above, pp. 27 and 105.

33. German and other European aid seems to have increased. The Ford Foundation has cut back drastically. OAS has about maintained its absolute level of support, and USAID has withdrawn from many Latin American countries. The International Development Research Centre (Canada) has recently become more active.

34. These figures are drawn from the files of the Ford Foundation.

35. In his study of educational research in Mexico, Jean Pierre Vielle identified 102 individuals with doctorates working in education research institutions in the public sector (49), universities (27), private centres (12), foreign organizations in Mexico (6) or documentation centres. Jean Pierre Vielle (1979). *La capacidad y el impacto de la investigacíon educativa (Mexico, 1979)*, Reporte Final del Proyecto PNIIE-RIE. Mexico City. Red de Investigaciones Educativas, A.C., p. 30, Table IIIc.

36. A paper by Bernardo Toro, Rafael Campo, and Robert Myers prepared for the Research Review and Advisory Group and titled *Educational research capacity: the Colombian case*, November 1979, makes this point forcefully with respect to Colombia suggesting that: many PhDs are not productive, unable to wean themselves from sophisticated technologies used during their study or unable to do more than apply mechanically what they have learned; and many non-PhDs have acquired, by virtue or intelligence and experience on the job, first-rate research skills.

37. On this theme see Pablo Latapi and David Court (1979). *The research process*, a paper prepared for the Educational Research Review and Advisory Group, IDRC, Ottawa, April.

38. In Argentina alone there exist approximately 130 institutions that claim to be involved in educational research. A list of the most active and productive Mexican institutions compiled by Jean Pierre Vielle, runs to 30 institutions, (see: *Panorama de la investigación educativa en Mexico*, Programa Nacional de Investigación Educativa, Consejo Nacional de Ciencia y Tecnología, Mexico, September 1979). Suggestions for additions to this list can be sent to the Research Review and Advisory Group, IDRC, P.O. Box 8500, Ottawa, Canada.

39. The *Revista* was subsidized originally by the Ford Foundation and most recently by the German Foundation Misereor and the Mexican National Council for Science and Technology. The address of the *Revista* is: Centro de Estudios Educativos, Av. Revolución 1291, Mexico 20, D.F., Mexico.

40. Information about *Educación Hoy* is taken from Jose Bernardo Toro A. (1978). *La diffusion de la informacion cientifica en America Latina: el caso de la revista* Educacion Hoy, a paper prepared for the meeting of the Comparative and International Education Society, Mexico City, March 14–18 (mimeo). The address of *Educación Hoy* is: Calle 78 No. 12–16, Apartamento 102, Apartado Aereo 90036, Bogota, Colombia.

41. As an example, Ernesto Schiefelbein reports that his work on repetition rates received little attention when published in Spanish in Latin America but was picked up quickly when published in English in the *Comparative Education Review* in the United States.

42. Anecdotal evidence comes from the Javeriana University in Colombia which has only in 1979 added the *Revista del CEE* to its library. That decision, I speculate, is not unrelated to the participation for the first time by Javeriana staff in a meeting of directors of Latin American research centres held in March 1978.

43. For a compact treatment of this problem see Fernando Monge (1979). Making information accessible, in *Give Us the Tools*, edited by David Spurgeon, IDRC, Ottawa, pp. 16–174.

44. Juan Eduardo Garcia-Huidobro and Jorge Ochoa (1978). *Tendéncias de la investigación en America Latina*. Centro de Investigacion y Desarrollo de la Educación, Santiago, Chile, January. Preliminary version (mimeo).

45. Existing journals are constantly on the lookout for articles.

46. That may be true today because the academic community has expanded. In the recent past, it is not necessarily the case because informal channels among a small number of researchers can work very efficiently — even better than more formal channels of diffusion.

47. Jose Bernardo Toro A. and Agustin Lombana M. (1978). *El fenómeno de la investigación en educacion en Colombia (1960–1978), algunas tendencias y caracterís-ticas*, a report prepared for the Ford Foundation, Bogota, Colombia.

48. Following a series of governmental actions in 1968 (including the creation of the now defunct Colombian Pedagogical Institute) there was an increase in the volume of research. Decentralization began to occur as well. Whether for independent or associated reasons, university participation in research began to grow, more attention was given to analysis of the social context of education, and more sophisticated research techniques were applied.

49. Brazil boasts 22 MA programs in education, almost all of which require empirical research for the thesis.

50. A study of MA programs in education in Latin America is being carried out by PIIE in Chile, funded by the Organization of American States.

51. Institutions with senior and junior researchers pair them in projects. Senior researchers have an explicit responsibility to help train junior researchers in the course of the research projects.

52. For one discussion of these issues, see Hans Weiler (1978), *Discovery and dependence: the uneasy relationship between American universities and the Third World*. Keynote address prepared for delivery at the Western Regional Conference of the Comparative and International Education Society, Los Angeles, California, October 19 1978, Stanford university, Stanford, California (mimeo).

53. Commenting on the above, Beatrice Avalos suggests that most who studied abroad in the 1960s went where they could. She cites a strong influence over Chileans who went to study abroad in France or Belgium in the 1960s. By the 1970s, however, people had a better notion of where they stood ideologically and were probably less susceptible to influences they did not themselves choose.

54. The program has an important and active dimension on research that includes: elaboration of a theoretical model and of hypotheses regarding the impact of research and innovation; an inventory and analysis of research institutions and the relationships among them; an analysis of documentation networks and publication facilities; and

experimental seminars (with follow up) to foster interaction among researchers and between researchers and policymakers.

55. The address of Reuniones de Información Educativa is: Barranca del Muerto 362, Despacho 4, Mexico 20, D.F.

56. See Jean Pierre Vielle (1979). *La Red Nacional de Centros de Investigacion Educativa* and *La capacidad y el impacto de la investigation eductiva*, both reports of the Programa Nacional Indicativo de Investigacion Educativa, Consejo Nacional de Ciencia y Tecnologia, Mexico.

57. The meeting, organized as a national-level input to a regional meeting, took as its theme the organization and conduct of educational research. The papers and results of discussions at the meeting are published in a conference volume.

58. For results of these meetings see: Ministerio de Educacion-CINTERPLAN, *Jornadas de trabajo sobre investigacion para el planeamiento de la educacion, informe final*, Caracas, Ministerio de Educación, December 1979; *El futuro de la investigación educacional en Chile: conclusiones y resumenes de los trabajos presentados en el seminario nacional, Santiago, 10–12 de enero, 1980*. (Available from the Centre for Educational Research and Development in Chile); and, Instituto SER de Investigación, *Seminario nacional de investigación educativa, Abril 9–11 1980*. Instituto SER, Bogota (forthcoming).

59. For papers describing the educational research communities and educational research in Bolivia and in Paraguay, see: José Subirats (1979). *Educacion e investigacion en Bolivia*. CEBIAE (Centro Boliviano de Investagacion y Accion Educativas), La Paz, (mimeo); and, Grazziella Corvalán (1980). *Alcance e impacto de la investigacion y communicacion educativas en el Paraguay*. A paper prepared for Seminario '80, April 14–18, 1980. CPES (Centro Paraguayo de Estudios Sociologicos), Asuncion, Paraguay (mimeo).

60. The conference papers will be published by the Centre for Educational Research and Development (CIDE) in Santiago.

61. See: *Estudio preliminar sobre las necesidades y las posibilidades de una red de cooperación regional para las innovaciones educativas para el desarrollo en America Latina y el Caribe*. A paper prepared for the Regional Conference of Ministers of Education, Mexico, December 4–13, 1979, UNESCO, Paris, November 1979 (ED-79/MINEDLAC/REF. 4).

62. The Mexican Secretary for Public Education did agree officially to titles, but no students sought validation. Another problem for the CEE program resulted from the fact that students recruited were at very different levels of preparation. Moreover, CEE did not integrate the students directly into the work of the centre.

63. In writing this section on sub-Saharan Africa, I have drawn principally from: participation in meetings of Anglophone African researchers in Lagos (1975), Sierra Leone (1976), and Ghana (1977); visits to Nigeria and Kenya (1978); conversations with Professor E.A. Yoloye, Dr. Miala Diambomba, and Dr. Tunde Palmer; and a series of documents, citations for which will appear in subsequent footnotes.

64. UNESCO (1975). *Education in Africa: evolution, reforms, prospects*. UNESCO, Paris. A Background paper prepared for the Conference of Ministers of Education of African Member States, Lagos, 27 January–4 February 1976; ED 76/CONF. 206/COL. 14, pp. 5 and 9.

65. Without pretending to provide proper citations, works by the following authors come quickly to mind: Apter, Abernathy, Coleman, Prewitt, Weiler, Cowan and Scanlon.

66. For instance, see selections dealing with Africa from Frederick Harbison and Charles Myers eds. (1965). *Manpower and education*. McGraw-Hill Book Company, New York.

67. Perhaps significantly, the review was carried out by a foreigner. See: Ross E. Bigelow, *African education research*, Madison, Wisconsin; June 1974. Part I: Issues and patterns; Part II: Project classification; Part III: Continuing research resources. Bigelow's work has recently been translated into French and is available from the B.A.S.E. The project, which included a search for information from 30 sources in Africa, Europe, and North America, uncovered 416 studies undertaken between 1970 and 1974, almost all of which were country-focussed, 70 percent of which pertained to West Africa and 30 percent to East Africa. One-third of the projects were undertaken outside Africa, by Africans. The Bigelow volumes provide an invaluable starting point for a student of education in Africa. In addition to listing and analyzing African research during the early 1970s, the work provides in Part III (compiled by Eliza Dresang): a list of 73 institutions and organizations in Africa, Europe, and North America with publications relevant to African Education research; a list of nine information retrieval systems; a list of 51 periodicals relevant to the study of education in Africa; and an annotated bibliography of 195 bibliographies useful to the person interested in published and unpublished works on African education. The first three lists include addresses.

68. K.E. Ozumba (1978). *State-of-the-art review of teacher effectiveness research in Africa*. A paper prepared for the Research Review and Advisory Group, IDRC, Ottawa. The author was able to identify only slightly more than 30 studies dealing with the topic.

69. For a discussion of the CRIDE case see: Ralph Harbison (1979). *Developing national capacity for research on education in West Africa*. A paper prepared for a meeting on Developing Research Capacity, New York, June 1979. (draft); and a comment on Harbison's paper by Miala Diambomba who questions the particular development strategy followed.

70. I do not wish to discredit local initiatives. Nor do I wish to imply that there is no fit between what foreign funders and local educators or researchers see as important. As one African told me, "there is so much to do and almost all of it is important." Not unaware of the adage that "he who pays the piper calls the tune," the African Ministers of Education nevertheless recommended in 1976 that foreign funding be increased.

71. Chukwuemeka Ike's book, *The Naked Gods*, provides a vivid account of the negative side, portraying in fictional form the too close to true role of foreigners in the development in Nigeria of a teachers' training college, U.S. style.

72. David Court (1979). *Social science research and training in East Africa: a Rockefeller Foundation program*. A paper prepared for a meeting on Developing Research Capacity, New York, June 1979 (draft), p. 4.

73. The Francophone West African Education Research Training Program of the Ford Foundation is now providing funds for training of francophone researchers in Canada (Laval) and in the United States.

74. Approximately 40 individuals from Sierra Leone, Ghana, and Nigeria alone obtained graduate degrees from TCCU between 1961 and 1977 under the auspices of the Anglo–African–American Program and its successor, the African Fellowships Program. Harbison, see note 71, p. 4.

75. Victor O.I. Johnson ed. (1976). *Report of the Anglophone West African Educational Research Conference, Freetown, Sierra Leone, 7–12 June, 1976*. University of Sierra Leone, Institute of Education, Freetown, Sierra Leone. An implementation committee was also set up.

76. Network of Educational Innovation for Development in Africa, *Information*, No. 1 (June 1977), No. 2 (March 1978), and No. 3 (June 1978).

77. The quote is taken from: Cadman Atla-Mills, et al. (1978). *Social science and the development crisis in Africa, problems and prospects*. A paper prepared for the CODESRIA/DSRC Conference on Social Science, Research, and National Development in Africa, Khartoun, 4–8 November.

78. See T.K. Koh (1978). *Educational needs of the SEAMEO countries: an overview paper*, a discussion paper prepared for the SEAMEO conference on medium-term education needs.

79. The workshop was organized by the Thai National Education Commission. The resulting report is a valuable compendium of research and conduct in the region. See: *Report in Southeast Asian Educational Research Workshop, 13–17 March 1978*. Bangkok Office of the National Education Commission, Sukotnai Road, Bangkok, Thailand.

80. See Susanne Mowat (rapporteur) (1978). *The genesis, conduct and utilization of educational research*. A report on a workshop reviewing four national education assessment studies — Indonesia, Malaysia, the Philippines, and Thailand. The Research Review and Advisory Group and the International Development Research Centre, October.

81. The comments in this section are based primarily on conversations with a wide range of Indian educators, researchers, and administrators, during visits to India in March 1977 and May 1978.

82. Some slippage occurred during the emergency imposed by Indira Gandhi, but the effect on research was minimal. During my visit in March 1977, Gandhi, had just been voted out of office, producing a feeling of buoyancy among most people with whom I spoke contrasting, I was told, with a malaise that had gripped the same people months before. Even before the elections, newspapers began to open up. Afterwards, and with the lifting of the emergency, the public forum seemed open and critical. With the return of Gandhi, that relative openness has continued, at least to the date of this writing.

83. In plural India, balancing freedom and control is potentially even more difficult than in most settings. The Indian bureaucracy seems to deal with that tension better than most others. While some would attribute this to a good English upbringing, I was led to wonder about a possible parallel between the operation of Indian bureaucracy and the performance of classical Indian dance or the singing of *ragas*. These art forms are defined and constrained by classical rules, but successful performance depends upon the ability of artists to improvise.

84. P.N. Dave and J.P. Dave (1978). *The determinants of teacher effectiveness in India: a review of the research*. A paper prepared for the Research Review and Advisory Group, IDRC, Ottawa, Canada.

85. Most work in the economics of education, for instance, has been done within a neo-classical, human capital framework.

86. For example, participation in the International Education Achievement Study.

Appendix

The Educational Research Review and Advisory Group

The origin of the Research Review and Advisory Group can be traced to two meetings, held in 1972 and 1973, at which individuals from funding agencies and research institutions reconsidered the role of education in development and, accordingly, the role of international agencies in assisting educational development. Questions were raised about whether and how additional research might be harnessed to the task of providing more and better education for more people in developing nations, given the extraordinary pressure educational demand had already created on scarce resources.

The formation of the Group also responds to a challenge presented in the closing lines of the widely distributed, frequently quoted Faure Report:

> We propose that agencies assisting education, national and international, private and public, review the present state of 'research and development' in education with a view to strengthening the capacities of individual countries to improve their present educational systems and to invent, design, and test new educational experiments appropriate to their cultures and resources. (Edgar Faure, ed. 1972. *Learning to Be*. UNESCO, Paris p. 263)

From early discussions, from subsequent soundings taken at a series of regional meetings of educators and researchers, as well as discussions with educators in many locations, a number of commonly held beliefs emerged. Communication among researchers, practitioners, policymakers, and funders was poor. Priorities guiding the funding of educational research within the Third World were seen as imposed from outside. Little attention was being paid to the synthesis of existing research results or diffusion of these to developing nations. This was particularly true of research originating in the Third World. Finally, no mechanism existed for systematically identifying gaps in knowledge that might be filled through a concentrated program of research.

Responding to these challenges, the International Development Research Centre (IDRC) agreed to fund the formation and activity of the Research Review and Advisory Group. A grant was made extending over a 30-month period ending in June 1979, subsequently extended to December 1979. The Ford Foundation contributed to the project by covering the salary of the project coordinator for a two-year period.

A small staff consisting of the coordinator, periodic consultants, and a secretary, assists the Group from a base at the IDRC offices in Ottawa. The main tasks of the coordination, once it had overseen the process of selecting members to the Review Group, have included: supervising commissioned work; keeping up to date with research and researchers, partly to acquire new ideas and partly to gain comprehensive understanding of the range of research presently

being conducted; preliminary selection and treatment of new topics for review; and maintaining communication and continuity between meetings. Necessarily, in view of the many and geographically dispersed research contacts to be established and maintained, a significant proportion of the coordinator's time during early phases of the project was spent travelling.

To date the Group has met four times to discuss selected research topics, to commission and(or) evaluate reviews and papers, and to arrive at collective judgements regarding the state of research in the thematic areas reviewed. These deliberations have led toward production of the Group's major report, which is forthcoming. Some members have taken an active role in the production of reviews and papers.

Serving as members of the Review Group in 1979 were:

William Fuller
The Ford Foundation
Dacca, Bangladesh

Wadi Haddad
Ministry of Education,
Lebanon and
The World Bank
Washington, D.C., U.S.A.

Jacques Hallak
International Institute for
Educational Planning
Paris, France

Kenneth King
Centre of African Studies
Edinburgh, Scotland and
International Development
Research Centre
Ottawa, Canada

Pablo Latapi
Prospectiva Universitaria, A.C.
Mexico City, Mexico

Errol Miller
Mico College
Kingston, Jamaica

Pote Sapianchai
Office of the National
Education Commission
Bangkok, Thailand

Ernesto Schiefelbein
Centro de Investigacion y
Desarrollo de la Educacion
Santiago, Chile

John Simmons
The World Bank
Washington, D.C., U.S.A.

E.A. Yoloye
Institute of Education
University of Ibadan
Ibadan, Nigeria

Others who have participated directly are: Ruth Wong (Singapore) a Group member until September 1978, and Gelia Castillo (the Philippines) until December 1978.

Coordinators of the Group have been: Susanne Mowat (from January 1, 1979), Robert G. Myers (until December 31, 1978), and Beatrice Avalos (assistant coordinator from April 12 to December 12, 1977).