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# CHALLENGES TO THE PLANNING OF EDUCATION

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## **ABSTRACT**

Priorities for educational development have evolved markedly in recent years. The themes that currently dominate the agenda are: quality improvement, resource diversification, decentralization, decentralization of decision making and differentiation of programs. With the changing nature of educational development come changing demands on educational planning. Traditionally the practice of educational planning for was largely determined by the demands of planning for expansion of education systems through discrete investments, managed by central authorities. Planning in this context was dominated by traditional "blueprint models" which served well as long as infrastructure development was the dominant priority, but which have not performed well for programs with more qualitative and policy focused objectives.

The three papers in this volume explore some of the dimensions of an approach to educational planning that is better suited to respond to the demands of educational development in the 1990s. The common theme is the need to transform educational planning into a tool of strategic management. They emphasize an approach to educational planning that has the flexibility to help education managers deal with the diversity of formal and non-formal programs, providers and sources of finance, that will characterize educational development in the 1990s. Central features include: (i) systematic learning; (ii) rigorous research and evaluation; (iii) indirect intervention strategies; (iv) in-depth analysis of institutional and management issues; (v) sustained staff development.

Aid strategies will also need to evolve to fit the changing approaches to educational planning. Aid programs will need to be designed to support national (sub) sectoral development programs rather than finance discrete investments. This will require changes in operational policies and practices, a strengthening of the empirical base for action and explicit attention to the training of the next generation of education planners and researchers.

The planning of non-formal education programs has always been extremely ad hoc and suffered from the absence of broadly methodologies and rigorous evaluation of outcome measures. Although there is a strong prima facie case for a broadening of access to literacy and non-formal education programs, systematic planning and evaluation methodologies along the lines suggested is a prerequisite for increased investment.

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## INTRODUCTION

The central contribution of education to development has been rediscovered by economists, development agencies and governments in recent years. The push for education reform is virtually world wide, and includes industrialized countries, developing countries, the former communist countries in Eastern Europe, and the former Soviet Union. Education is seen as essential both to poverty alleviation<sup>1</sup> and the ability of nations to access new technology and build competitive advantage<sup>2</sup>. As a result, many countries have increased their public expenditures on education and donor countries have also increased their aid to education. India, for example, is planning to increase education expenditures from the current level of 4% of GDP to 6% by the year 2000<sup>3</sup>. In countries that are in economic difficulty and are forced to reduce public expenditures, explicit attempts are made to protect education and other social sectors as much as possible from the cutbacks. The most dramatic example of the recommitment of the international donor community to education aid is the increase in World Bank education lending from about \$750 million per annum in the late 1980s to more than \$2.5 billion in 1991.

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<sup>1</sup>The World Bank (1990) *World Development Report 1990*. Oxford University Press, New York.

<sup>2</sup>Reich, Robert B. *The Work of Nations*. Alfred E. Knopf, New York, 1991.  
The World Bank, *World Development Report 1991: The Challenge of Development*. Oxford University Press, New York, 1991.

<sup>3</sup>Unesco, World Education Report 1991. Unesco, Paris, 1991.

These themes of poverty alleviation and competitiveness can be found in many recent policy statements on educational development in the 1990s, such as the World Declaration on Education for All<sup>4</sup> adopted at Jomtien by delegates of 150 countries and external aid agencies; World Education Report (1991) prepared by Unesco, Human Development Reports (1990 and 1991) prepared by UNDP, World Bank policy papers on Primary Education (1990) and Vocational and Technical Education and Training (1991) and several other agencies publications and national action programs.

In developing countries the education reforms currently being prepared support the evolving priorities in education development. National education agenda's are increasingly dominated by four issues.

- First there is a shift in priority from expansion to quality improvement, usually defined as improvements in the learning achievement of students. Low academic achievement, early drop-out and excessive repetition have replaced access as the central concerns of education policy.
- Second, there is a recognition that educational development can no longer be the exclusive responsibility -- financially and educationally -- of the public sector.

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<sup>4</sup>World Conference on Education for All. World Declaration on Education for All and Framework for Action to Meet Basic Learning Needs. Inter-Agency Commission for the World Conference on Education for All, New York, 1990.

**Mobilizing private sector resources, promoting community involvement and encouraging the participation of non-governmental organizations are central elements of the new reform strategies.**

- **Third, the role of central authorities is changing from provision and control to regulation and support. Decentralization of decision making is a common theme. In an increasing number of countries, university administrators and school principals are faced with the opportunities and the burdens of increased autonomy and accountability.**
- **Fourth, the educational programs are becoming much more differentiated and customized to fit the needs of specific target groups. Many countries are launching non-formal basic education programs to reach the poor. Vocational training programs are increasingly designed to respond rapidly to the evolving needs of employers. More and more universities offer short training courses for professionals employed in the private and public sectors. Open universities combining a variety of distance education techniques are increasingly common.**

**With the changing nature of educational development come changing demands on educational planning. The traditional tools for resource allocation decisions --cost**



benefit analysis and fixed coefficient manpower planning -- have turned out to be too simplistic to meet rapidly evolving demands on the education system<sup>5</sup>. Transforming educational planning into a tool for strategic management of the sector will require change in at least three areas:

- developing new and better information systems;
- broadening the focus beyond the public sector;
- establishing context specific micro-planning systems.

Information. The data currently available for policy analysis and planning in education fall far short of what is needed. Almost all countries conduct an annual census of schools which produces information on enrollment, repetition, and the availability of key inputs such as number of classrooms, textbooks and teachers. Financial and cost data are mostly derived from national budgets. Much of the census data is, however, incomplete and unreliable and often only available as national or regional aggregates. Financial data often are especially weak. Actual expenditures often deviate significantly from budgeted expenditures but public accounts often are not available at all or only with a delay for many

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<sup>5</sup> See Middleton, John, Adrian Ziderman, and Arvil V. Adams for detailed allocation discussions on methodologies for decisions on investments in vocational and technical education. Skills for Productivity: Vocational Education and Training in Developing Countries. New York: Oxford University Press. Forthcoming.

years. Data on outputs are extremely scarce and rarely available as a time series that would allow comparisons of student learning over time.

The data problems are magnified several times for non-formal education and literacy programs. Policy analysts and planners for these kinds of program lack even the most rudimentary data. The situation is exacerbated by the weaknesses in the national capacity to undertake research. As a result the capacity of planners and analysts to base proposals for action on a clear understanding of the determinants of the issues to be addressed and draw in a systematic on lessons from experience remains limited.

**Broader Focus.** The increasing discrepancy between the demand for more and better educated people and the continuing constraints on public resource availability have forced many developing countries to rethink the role of the state in the education sector and to consider how public and private efforts can best complement each other. This will require, first, a conceptual distinction between the financing and provision of education services<sup>6</sup>. Second, it leads to the recognition that a separation of public and private efforts will often not be optimal, and that under different conditions, different combinations of public and private financing and provision may be optimal. Ownership may be less important than management arrangements. In many countries, public financing of private schools may be the most efficient way to provide good quality education. Planners and policy analysts are

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<sup>6</sup> Birdsall, Nancy, Social Policy in the 1990s: Pragmatism, Robin Hood, and Other Themes, Washington DC: World Bank, 1990 (Draft).

increasingly faced with the task of formulating strategies that capitalize on the strengths of both sectors.

More effective Micro-planning. Macro-planning exercises become increasingly insufficient as different people need different education and training programs, and as decision making responsibilities are located lower in the hierarchy. The application of findings derived from the analysis of national or regional aggregates to local problems will often be very inappropriate. As education systems move away from the standardized mass production models, they will become a mosaic of relatively autonomous units that respond to a variety of education and training needs linked by information and resource flows. In such a system, planning and analysis can no longer take place only at the center, but will need to become instruments of strategic management for decision makers throughout the system.

The three papers that follow explore some key dimensions of the planning methodology that will be needed to respond to the demands of education development in the 1990s. The first paper, "Planning of Education: Where do We Go?" describes the central features of an approach to educational planning that has the flexibility to help education managers deal with the diversity of education demands that will characterize educational development in the 1990s.

**The second paper, "More than Business as Usual: Reflections on the New Modalities of Education Aid," discusses the ways aid programs can be designed to support the basic education development priorities defined in the World Declaration on Education for All endorsed at Jomtien by delegates of more than 150 countries and aid agencies. It argues for the wider use of sectoral and flexible instruments to channel external aid in support of national long term educational investment programs.**

**The third paper, "From Rhetoric to Action: Implementing Education for All," explores issues involved in the planning of non-formal education programs. The paper emphasizes the need to strengthen the information base for non-formal education and build a capacity for research and evaluation to provide policy makers with an increasingly solid foundation for decisions.**

**Collectively, these papers address different dimensions of the planning methodology that is required to support educational development in the years to come.**

## **PLANNING OF EDUCATION: WHERE DO WE GO?**

### **The New Challenge**

Education is once again becoming a high priority on the international development agenda. An important manifestation of this new interest in education undoubtedly was the World Conference on Education for All (WCEFA), held in Jomtien, Thailand from March 5 to 9, 1990, sponsored by 20 agencies active in international education development. The Conference resulted in an impressive recommitment of the international community to the cause of educational development: the World Bank announced a doubling of its education lending;<sup>7</sup> UNICEF and UNDP also announced plans to increase the priority for education in their programs; many bilateral agencies are expanding support for basic education. Furthermore, the World Declaration on Education for All adopted by the Conference called on countries to enlarge public support for basic education (art. 8) and establish a supportive policy environment (art. 7). Following the Conference many countries are developing national action programs for the implementation of "Education for All" programs.

The dominant themes of the Conference emphasized learning achievement as the key objective of basic education programs, recognized the need to mobilize additional resources

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<sup>7</sup>In fact World Bank lending has tripled compared to the late eighties. In its fiscal year 91, which ended June 30, 1991, the amount lent for education totalled almost \$2.5 billion.

and called for the establishment of broad alliances in support of educational development.<sup>8</sup> This vision of educational development contrasts sharply with the past emphases on enrollment expansion<sup>9</sup> and on reductions in per student expenditures as a way to enhance efficiency<sup>10</sup> in education systems controlled by central government authorities.

The first reason for this renewed interest in education is the mounting evidence that the economic crisis which hit the developing world in the mid-1970s, undermined the often fragile educational progress that had been realized up to that time throughout the developing world. Economic adjustment programs designed in the early eighties did not adequately recognize the stagnation in education as a special problem, and the losses of the 1970s were never made up in the 1980s. For example, in 40 of 95 developing countries for

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<sup>8</sup>World Conference on Education for All. World Declaration on Education for All and Framework for Action to Meet Basic Learning Needs. Inter-Agency Commission for the World Conference on Education for All, New York, 1990.

<sup>9</sup> A series of Unesco conferences in the early sixties (most notably Addis Abeba, 1961; Tokyo, 1962; and Santiago, 1963) focused on strategies for accelerated progress toward universal primary education and were instrumental in triggering a phenomenal growth in primary school enrollments during the 1960s and the 1970s.

<sup>10</sup> This way of thinking remains deeply ingrained in much of the analytical work on education. For example, UNDP's 1991 Human Development Report includes an extensive discussion of the need for reductions in the cost per student in education. On the other hand, Lockheed and Verspoor (1992) argue that in many countries a strategy of increasing per student expenditure and allocating available resource on the most cost-effective inputs is essential to increasing the contribution of basic education to development.

which data were available the proportion of six- to eleven-year-old children enrolled in school declined between 1980 and 1987.<sup>11</sup> In 1985, about 145 million children living in developing countries were estimated to be out-of-school. In low-income countries per student expenditures on education dropped, in real terms, on average by 25 percent between 1970 and 1980, and stabilized at that low level during the 1980s.<sup>12</sup>

Second, basic education and skill development are increasingly seen as key to poverty alleviation strategies for providing poor people with opportunities to become more productive<sup>13</sup>.

Third, the recent scientific and technological advances which are increasingly affecting production techniques in agriculture, manufacturing and services have rekindled the interest of economic planners in education. Developing countries increasingly realize that without the human resources necessary to select, adapt and apply these technologies, they will be less and less able to compete in international markets, and their development prospects will be jeopardized. Strengthening skilled worker training programs, improving

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<sup>11</sup>D. Berstecher and R. Carr-Hill, Primary Education and Economic Recession in the Developing World Since 1980: A Special Study for the World Conference on Education for All, Thailand in March 1990. Paris: UNESCO, 1990.

<sup>12</sup>Marlaine Lockheed and Adriaan Verspoor, Improving Primary Education in Developing Countries. New York: Oxford University Press, 1992.

<sup>13</sup>World Bank. World Development Report 1990. New York: Oxford University Press, 1990.

math and science teaching, and building a high quality system of post-secondary education are development priorities that few countries can afford to ignore.

The 1990s are thus likely to be a period of unprecedented challenge and opportunity for educational development. However, the renewed interest is unlikely to be sustained unless the new support and additional resources are put to good use. This will require careful planning of investment programs. Yet, over the past 15 years educational planning has had a well-documented record of poor achievement, caused by what Psacharopoulos<sup>14</sup> refers to as "a series of educational planning mistakes if not outright disasters". Ross and Mählck<sup>15</sup> are less harsh in their recent review of 30 years of educational planning. Nonetheless, they do report the mounting dissatisfaction, already starting in the late 1960s, with the input based "numbers game"<sup>16</sup> planning methodologies, and a challenge to these methodologies by a research based shift towards planning for educational outcomes. The result was the "planning without direction" of the 1970s leading to a dominance of short term crisis management and an emphasis on cost containment in the 1980s.

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<sup>14</sup> Psacharopoulos, G. Planning of education: Where do we stand? Comparative Education Review, 30 No. 4, 1986, p. 560-71.

<sup>15</sup> Ross, Kenneth N. and Lars Mählck, eds. Planning the Quality of Education: The Collection and Use of Data for informed Decision-making. Paris: UNESCO, International Institute for Educational Planning; Oxford, Pergamon, 1990.

<sup>16</sup> Coombs, P. "A Global Universal Enterprise." In Education on the Move (edited by Ontario Institute for Studies in Education). Paris: UNESCO, 1975.



Establishing a clear sense of direction and avoiding the planning failures of the past is essential if educational plans are to become reliable instruments of education management and effective guides for action. This is the critical challenge facing educational policy-makers and planners in the 1990s. A central issue is whether the standard paradigms and analytical tools of education planners are appropriate for the task.

Strategic planning is the foundation of effective education management. Such planning must be decision oriented and not designed to forecast or mastermind the future. As management writer Peter Drucker<sup>17</sup> observed:

Any attempt to do [the latter] is foolish; the future is unpredictable. We can only discredit what we are doing by attempting it ... Strategic planning is necessary precisely because we cannot forecast.

He then defines strategic planning as:

... the continuous process of making present entrepreneurial ... *decisions* systematically and with the greatest knowledge of their futurity; organizing systematically the *efforts* needed to carry out these decisions; and measuring the result of these decisions against expectations through organized systematic *feedback*.

This paper argues that educational planning has not played its role effectively because it has not adequately recognized in its paradigms the nature of the educational enterprise and has not focused on its role as an instrument for managerial decision making.

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<sup>17</sup>P. F. Drucker, Management, Tasks, Responsibilities, Practices. New York: Harper and Row, 1974.

The paper examines the weakness of the dominant model of national planning from these perspectives and suggests elements of a strategic management approach to education planning.

### The Dominant Planning Model

In spite of wide ranging and often heated academic debates<sup>18</sup> on the nature and appropriate methodologies of education planning, practice has in fact been largely based on models which are essentially deterministic and assuming "hard systems" thinking. In these models the planner is viewed as a technical analyst or applied researcher who selects the best policy option out of a very large number of possible courses of action, using cost-benefit analysis, manpower planning or mathematical optimization techniques as instruments of analysis. The model assumes that if the planned actions are carried out, the outcomes will automatically materialize. In the academic community, George Psacharopoulos is one of the most extreme proponents of this approach. He defines education planning as "... the examination of many feasible alternatives and choices among them according to an objective".<sup>19</sup> The model is attractive in that it forces the planner to present problems and define priorities in a clear and structured way. In an era of tight public resources, it is supposed to provide unambiguous guidance on the efficient allocation of scarce resources.

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<sup>18</sup> The Comparative Education Review (CER) has been the forum for many of these discussions. See the CER 19, No. 2 (1975); CER 30, No. 4 (1986); and CER 34, No. 3 (1990). Also, IIEP has regularly organized workshops designed to reexamine the directions of educational planning and has published in its Fundamentals of Education Planning series a wide variety of methods and applications.

<sup>19</sup>George Psacharopoulos, "From Theory to Practice in Comparative Education." Comparative Education Review, Volume 34, No. 3, 1990, p. 369-81.

Yet, the model stubbornly refuses to perform. Psacharopoulos has described a selection of "planning mishaps," blaming them on the neglect of "elementary economics."<sup>20</sup> The flaws of the model and the cause of the mishaps are, however, much more fundamental. First, rational planning is congruent with the command and control management approaches typical of mechanistic organizations.<sup>21</sup> These organizations emphasize specialization of tasks, an explicit chain of command and extensive formal rules and procedures. They work best when the organizational objectives are unambiguous, the tasks clearly defined and the performance feedback loops short.

This view of the educational organization as a tightly linked system that can be manipulated at will by policy-makers using resource allocation decisions and directives as the key policy instruments is being widely questioned. Education systems are "atomistic" rather than unified systems.<sup>22</sup> Karl Weick gives education as the typical example of a "loosely coupled" system<sup>23</sup>. Henry Mintzberg describes education systems as professional

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<sup>20</sup>Psacharopoulos, 1986 and 1990.

<sup>21</sup>Burns, T. and Stalker, G. The Management of Innovation. London: Tavistock, 1961.

<sup>22</sup>Louis, K. S. and Miles, M. B. Improving the Urban High School: What Works and Why. New York: Teachers College Press, 1990. Van Vught, F. Governmental Strategies and Innovations in Higher Education. London: Jessica Kingsley, 1989.

<sup>23</sup>Weick, K. E. "Educational organizations as loosely coupled systems." Administrative Science Quarterly, 21 No. 1, 1976, p. 1-19.

bureaucracies with considerable power with the operatives (teachers and headmasters) at the bottom of the system.<sup>24</sup>

Second, the assumption that educational problems can be clearly defined and that courses of action can be unambiguously identified and easily transferred from one situation to another applies to few tasks in education development, especially when quality improvement and innovation are top priorities. In education, the technical systems (the instruments used to produce the output) are complex and the markets served diverse. Effective teaching strategies require consistent fine-tuning of available inputs to the needs of specific learners. Reaching groups such as rural girls or urban street children will require models of schooling different from those appropriate for the urban middle class. Murnane and Nelson<sup>25</sup> have pointed out the often idiosyncratic nature of teaching. Most successful reform efforts have made considerable allowance for local adaptation.<sup>26</sup> Diversity, rather than uniformity, may be the natural condition of education systems.

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<sup>24</sup>Mintzberg, H. The Structuring of Organizations: A Synthesis of Research. Englewood Cliffs, New Jersey: Prentice-Hall, 1979.

<sup>25</sup>Murnane, R. J. and Nelson, R. R. "Production and innovation when techniques are tacit: The case of education." Journal of Economic Behavior and Organizations. 5, 1984, p. 353-373.

<sup>26</sup>Berman, P. and McLaughlin, M. W. Federal Programs Supporting Educational Change. Vol. VIII: Implementing and Sustaining Innovations. Rand Report R-1589/8-HEW. Santa Monica: Rand Corporation, 1978.

Third, planning has often been practiced without much consideration for implementation. Given clear objectives and well chosen policy instruments, implementation is assumed to be automatic, and best left to the technicians who will do the necessary operational planning. In this view, performance problems are caused by deviations from the implementation plan. In fact, successful implementation requires a continuous process of adjustment and adaptation; plans need to be continuously revised in the light of implementation experience. Under these conditions, organic management systems which emphasize flexibility and adaptability and rely on participatory decision making and horizontal communication are more natural for education systems.<sup>27</sup> Planning for implementation and the selection of strategies that can achieve the desired objectives are key elements for planning definitions inspired by management science.<sup>28</sup>

Strong external pressure for accountability and control - by Finance Ministries and politicians - on public education systems have moved education organizations toward bureaucratic models, emphasizing uniformity and discouraging diversity. They have also tended to push the system toward centralization of power at the top and formalized operating procedures.

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<sup>27</sup>Burns, T. and Stalker, G. The Management of Innovation. London: Tavistock, 1961.

<sup>28</sup>Hellriegel, D. and Slocum, Jr., J. W. Management in the World Today, 3rd ed., Reading, Massachusetts: Addison Wesley, 1982.

Educational planning has been the instrument of choice in this process of responding to the demands of accountability. At the same time the foundation of traditional educational planning in mechanistic organizational structures and planning paradigms -- which conflict profoundly with the dominant technical system and the operational environment in education -- has limited its relevance and effectiveness. To make it an instrument of improvement and innovation, it is essential to move to a process of educational planning that is more attuned to the organic nature of the educational process. It will also require that education systems are restructured away from excessive centralization.

#### Alternatives to Deterministic Planning

Modern business relies increasingly on interactive models for planning and management.<sup>29</sup> These models emphasize the interpretation of practice, information exchange and the interaction of individuals and systems with their environment. They attempt to provide a structured way to tackle ill-structured problems. Their management philosophy and the related view of planning contains important lessons for the practice of education planning. Deterministic models may be able to address questions of space allocation, physical plant construction, cost analysis, transportation assessments, enrollment

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<sup>29</sup>Peters, T. J. and Waterman, Jr., R. H. In Search of Excellence: Lessons from America's Best Run Companies. New York: Harper and Row, 1988.

forecasts and so forth but there is an important set of problems related to instructional objectives, equity and quality for which the interactive planning models are more effective.<sup>30</sup> These latter questions are, however, the critical educational planning issues for the decade ahead. They are the strategic issues that the Jomtien Conference highlighted and that are the concern of education leaders almost everywhere.

Attempts to explore how interactive planning can be applied in practice to development problems, have been mainly with rural development programs.<sup>31</sup> In education, there have been only few attempts to translate these concepts into practical strategies, although the flaws of the deterministic models are widely known.<sup>32</sup> Much of the discussions proposing new approaches to educational planning has been quite abstractly focused on epistemological or paradigmatic issues and of limited help to practitioners.<sup>33</sup>

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<sup>30</sup>Benveniste, G. Mastering the Politics of Planning: Crafting Credible Plans and Politics that Make a Difference. San Francisco: Jossey-Bass, 1989.

<sup>31</sup>Korten, D. C. "Community organization and rural development: A learning process approach." Public Administration Review, 40, No 5, 1980, p. 480-511. Johnston, B. F. and Clark, W. C. Redesigning Rural Development: A Strategic Perspective. Baltimore: Johns Hopkins University Press, 1982.

<sup>32</sup>See for example, Beeby, C.E., "The Stages of Growth in Educational Systems," in The Quality of Education and Economic Development, edited by Stephen Heyneman and Daphne Siev White, World Bank: Washington DC, 1986; Eide, K., "Approaches to Educational Planning in a Population and Societal Context," Regional Seminar of Experts on Population Dynamics and Educational Planning Working Papers, 1973; and Adams D., "Extending the Educational and Planning Discourse: Conceptual and Paradigmatic Explorations," Comparative Education Review, No. 32, 1988. Beeby focuses on the qualitative aspects of educational planning. Eide focuses on the implications of the breakdown of the notions of "planning in programming organizational behavior in order to maximize its internal consistency". Adams describes several variations of rational and non-rational planning models.

<sup>33</sup>There are a few examples. See Van Vught, F. Governmental Strategies and Innovations in Higher Education. London: Jessica Kingsley, 1989; and Rondinelli, D. , John Middleton, and Adriaan Verspoor, Planning Education Reforms in Developing Countries: A Contingency Approach. Durham: Duke University Press, 1990.

### Practicing Interactive Planning in Education

Since the mid-sixties, management science has demonstrated consistently that production technology has a systematic relationship with organizational structure and planning and management systems.<sup>34</sup> Education planning will need to recognize explicitly the specific nature of teaching and learning, and the implications for the organizational structure and innovation strategies. This means that planners will need to take into account: (i) the wide diversity in educational problems and effective solutions that schools need to deal with; (ii) the uncertainty about the effectiveness of educational technology under a wide range of conditions; and (iii) the critical importance of implementation.

### Diversity

Much of research and planning in education assumes -- at least implicitly -- that schools are similar and that educational treatments and interventions are readily transferable. Diagnosing the incidence of general constraints on educational development, identifying the most cost-effective treatment, and designing strategies for the mobilization of the resources to fund the application are the key tasks of the educational planner in this model.

It is obvious that these assumptions of uniformity do not hold very often, not even in heavily centralized systems. Local factors strongly affect the demand for education and the characteristics of the most effective supply response. The variation in these local factors

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<sup>34</sup>The classic work is Woodward, J. Industrial Organization: Theory and Practice. London: Oxford University Press, 1965.



is usually quite significant -- both in developed and developing countries. Variations in economic conditions and ethnic composition of the school population, linguistic differences and cultural factors all affect the effectiveness of particular models of schooling and educational interventions. For example, the needs of street children in the urban centers of the developing world are very different from the needs of children in sparsely populated rural areas; educational programs for children with illiterate parents have to differ from programs for children of civil servants and college educated parents. Similarly, in developed countries the educational needs of inner-city children cannot be met by programs designed for the children of the sub-urban middle class.

Richard Murnane and Richard Nelson<sup>35</sup> have argued convincingly that this diversity of local conditions of schooling and the resulting limited transferability of educational treatments limit the relevance, for program design, of much of the production function-based education research that is dominant in developed countries and is gaining strength in developing countries. This raises serious questions about the traditional approach to education planning aimed at designing, on this basis, standardized programs of reform and innovation targeted at the mythical average school.<sup>36</sup>

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<sup>35</sup>Murnane and Nelson, *op. cit.*, 1984.

<sup>36</sup> In many instances urban and rural variations are taken into account, but this changes the basic issue only marginally since variations within the urban and rural sectors are still very large.

To be effective, educational planners will need to recognize diversity. They will need to build on local strengths and compensate for local weaknesses rather than try to fit all schools into a uniform mold devised by central planners and researchers. Instead of trying to move schools along the curve of the imaginary national education production function, planners may have to try to devise ways to change prevailing production technology at the school level and move towards a more cost-effective (school specific) production function.

### Uncertainty

The predictability of the outcomes of specific educational treatments is weak. Cross-sectional survey research in education rarely explains more than 50 percent of the total variation in outcomes, and ethnographic approaches are inherently faced with questions of generalizability.<sup>37</sup> In addition, the dominance of local factors in explaining school effectiveness ("diversity") raises serious questions as to the applicability of research findings in a particular situation.

At the "macro-level" the evidence of the relative cost-effectiveness of various inputs is relatively consistent.<sup>38</sup> While this "macro"-knowledge is important and helpful in developing policy options and broad reform strategies, it provides no guarantee that a

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<sup>37</sup>Riddell, A. "An alternative approach to the study of school effectiveness in third world countries." Comparative Education Review, 33, No. 4, 1989, p. 481-97.

<sup>38</sup>Fuller, B. "Raising school quality in developing countries: What investments boost learning." Review of Educational Research. 57 No. 3, 1987, p. 255-92.

particular innovation or policy will bring about the desired outcome in any particular situation.

Education systems are complex, changing them is difficult, and the outcome of attempts at change inevitably uncertain. Effective educational change involves changing the behavior (almost always) and values and attitudes (often) of many thousands, or even tens of thousands, of -- at the very least de facto -- independent teachers and administrators at the school level. This is difficult to do and the experience with -- especially large scale -- educational reforms in developed countries parallels the disappointments in the developing world. At the same time, lessons from success are beginning to emerge: attention to implementation at the school level, wide availability of in-service teacher training and school level professional support, visible instructional leadership by the school principal, adaptation of program design as implementation unfolds<sup>39</sup> and most importantly a will to act demonstrated by a commitment to a vision that all children are educable and to decentralized solutions.<sup>40</sup>

These technologies for educational improvement are clearly "soft technologies" with variable design specifications and outcomes strongly dependent on local conditions. Attempts

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<sup>39</sup>Huberman, A. M. and Miles, M. B. Innovations Up Close: How School Improvement Works. New York: Plenum Press, 1984.

<sup>40</sup>Levin and Lockheed, op. cit. 1991.

to reduce uncertainty in the design and implementation of educational change and reform through standardization and detailed micro-level planning are almost certainly lead to reduced effectiveness.

Although most education planners have recognized that plans typically are out of date by the time they are published, this has rarely affected their approach to planning. To improve the relevance of education planning for policy, planners will need to drop the pretense of perfect foresight, and design plans that in their objectives and most importantly in their implementation strategies recognize the uncertainty inherent in any education plan and, try to manage this uncertainty to the best advantage.

### Implementation

It is now widely agreed in the developed country literature that educational reforms live or die by the success of their implementation at the school level.<sup>41</sup> This has stimulated extensive research of the characteristics of "effective schools"<sup>42</sup> or successful school improvement strategies.<sup>43</sup>

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<sup>41</sup>Fullan, M. The Meaning of Educational Change. Teachers College Press, New York: Columbia University, 1982.

<sup>42</sup>Purkey, S. L. and Smith M. S. "Effective schools: A review." The Elementary School Journal, 83 No. 4, 1983, p. 427-52.

<sup>43</sup>Van Velzen, W. G., Miles, M. B., Ekholm, M., Hameyer, U. and Robin, D. Making School Improvement Work: A Conceptual Guide to Practice. Leuven: ACCO, 1985.

In developing countries, the attention of planners has focused almost exclusively on the design of innovations rather than on their implementation and on large scale reforms rather than on strategies for school improvement. A review of the educational plans of 19 developing countries found an almost universal neglect of implementation issues and a strong emphasis on the definition of broad policy goals and the detailed estimation of the cost of specific investments.<sup>44</sup>

Yet, effective implementation at the school level of reforms and innovations is critical if developing countries want to actively pursue the goals of raising learning achievement and improving access adopted at the Jomtien Conference. Several effective and affordable models for school improvement were presented at that Conference (for example, the BRAC schools in Bangladesh and the Escuelas Nuevas in Colombia). The challenge is to devise strategies for the adaptations and implementation of such models in a variety of different contexts. Such strategies will need to reconcile the different organization and implementation demands of large scale reforms and school level improvement processes, summarized in Figure 1.

Planners need to recognize these tensions rather than impose large scale centrally designed reform programs. The challenge is to design implementation strategies that accommodate and build on school level priorities and concerns within an educational development framework that reflects national goals and constraints.

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<sup>44</sup>Sack R. and Varinhrasek, O. Letting Educational Plans Speak for Themselves: Express Priorities and Trends. Mimeograph. Paris: IIEP, 1979.

**Figure 1: DILEMMAS OF LARGE-SCALE PROGRAMS**

Features of large-scale programs	Constraints of school-level implementation
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**COMPLEXITY**

Complex programs comprising a bundle of innovations with open-ended objectives	Limited capacity to absorb change, work better with simple and well-defined programs
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**COMMITMENT**

Responsive to issues perceived as priorities by central policy-makers and planners	Priority issues at the school level may be different, local commitment to national programs very limited
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**CONFORMITY**

Program design sets out strategies that are to be applied generally	Specific conditions of intervention each school (district) may have limited applicability on a national scale
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**CONSTRAINED RESOURCES**

Emphasis on program adoption, limited resources assistance to the schools	Need for costly long-term school-level external support and locally available training
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**Source:** Verspoor, Adriaan M. Pathways to Change: Improving the Quality of Education in Developing Countries. World Bank Discussion Paper No. 53. Washington, DC: World Bank, 1989.

### New Directions

"Elementary economics" will clearly have to be an important element of more effective educational planning.<sup>45</sup> Any meaningful educational plan will need to analyze the economic costs and benefits of specific investments, and resource mobilization strategies. But it obviously cannot provide the conceptual and strategic framework for managing the diversity, the uncertainty and the implementation issues inherent in educational development. Educational planning cannot be limited to the application of economic theory to educational problems. More sophisticated computer simulations do not necessarily improve the quality of education policy decisions and project design. To provide effective support to policymakers, planners will need to broaden their focus to include concerns from policy and institutional analysis. Educational planning will need to provide the frame for school improvement by drawing on lessons from education research, policy analysis, management science and development administration. Several elements of this "new educational planning" are becoming quite clear: (a) systematic learning; (b) research and evaluation; (c) indirect intervention strategies; (d) institutional analysis; and (e) sustained staff development.

### Systematic Learning

Managing the diversity in educational problems faced by the schools in any country, in combination with the uncertainty about the effect of educational interventions in specific

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<sup>45</sup>Psacharopoulos, op. cit. 1986.

situations, demands that educational plans include mechanisms for the development and testing of several educational innovations in many different school sites. Planned educational change can only be successful if it is consciously designed as a learning process. This implies that educational experiments and pilot projects be given enough time to mature. David Korten,<sup>46</sup> writing about rural development projects, distinguishes three learning stages which are equally applicable to educational innovation:

- (a) learning to be effective: in this stage the question whether the innovation can produce the desired outcomes is investigated;
- (b) learning to be efficient: the focus in this stage is to reduce the cost of delivering a demonstrably effective innovation; and
- (c) learning to generalize: strategies to disseminate a cost-effective innovation to other sites that often face somewhat different problems are put to test.

Evidence from developed and developing countries suggests that this learning process has to be school based, will need to be supported by central agencies and include a process of constant adaptation to local conditions.<sup>47</sup> It also means that planners have to accept that

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<sup>46</sup>Korten, op. cit. 1980.

<sup>47</sup>Berman, P. and McLaughlin, M. W. Federal Programs Supporting Educational Change, Vol. VIII: Implementing and Sustaining Innovations. Rand Report R-1589/8-HEW. Santa Monica: Rand Corporation, 1978.



there always are several ways to solve education problems and that "letting a hundred flowers bloom" may be more likely to result in sustained school improvement and educational development than the uniform application of large scale reforms. An example of a such a learning approach which deliberately tried to vary an innovative program by context is described by Shaeffer<sup>48</sup> in his analysis of the Indonesian student active learning (CBSA) program.

Educational plans will need to include mechanisms for the development and testing of educational innovations. Since it is unlikely that one single reform package or innovation will respond to the needs of all schools, it is important to be able to offer a range of program options, to allow for adaptation to local conditions, and to mobilize local support and commitment for the reform. Consciously promoting redundancy and duplication in education innovation may be the best way to long-term educational efficiency and effectiveness. Lessons from small-scale failures are often valuable and affordable, whereas large-scale failures are always costly.

### Research and Evaluation

Educational planning can only be effective when it is based on good quality data. Most educational plans in developing countries are based on traditional statistical indicators, derived from the annual census of schools, such as enrollment ratio, repetition and drop-out

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<sup>48</sup>Shaefer, S. Educational Change in Indonesia: A Case Study of Three Innovations, IDRC-MR 270C, Ottawa, 1990.

rates, student-teacher ratio, number of books per student, and cost per student. These data are, however, often available only in highly aggregate form, provide information on average values rather than on frequency distributions, have a low reliability and provide only the crudest measure of performance. They are essentially input-oriented and do not adequately support the planning of output-oriented educational development strategies, which typically blend macro-level policy reform with school improvement strategies.

An adequate information base for such strategies will need to include improved traditional education statistics as well as new type data which will measure learning achievement over time and provide insight in teaching and learning processes at the school level. Much of these data will best be collected through sample surveys of students and schools which could replace large parts of the annual census. Understanding can be enriched through observational studies by skilled qualitative researchers.

Educational research in many developing (and developed!) countries is chronically underfunded and typically dependent on the vagaries of external contract research or ad hoc requests for policy advice from government agencies. Few governments have systematically invested in the development of a national capacity for education research by training and supporting a pool of skilled education researchers and analysts who can be called on for consultations, analytical work and advice on policy issues.

The renewed emphasis on learning achievement and quality improvement has made it imperative for every country to develop the capacity to define its own learning goals, measure progress towards these goals and analyze the cost-effectiveness of inputs and teaching and learning processes. Good educational research should help planners understand better what makes schools effective and what processes and programs can be devised to transform poor schools into effective ones. Eisemon, et al.<sup>49</sup> provides a good example of how research based analyses can feed in to the design of a strategy for quality improvement.

Similarly, learning from experience will only occur when the lessons from implementation are carefully monitored and researched. Information on key performance indicators in experimental programs need to be well documented and rapidly made available to planners and policymakers who can then decide whether and which corrective measures are called for.

### Indirect Intervention Strategies

In line with the dominance of deterministic planning models and centralized administrative structures, most education plans have relied on direct interventions as the primary vehicle for plan implementation. Direct intervention strategies typically rely on

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<sup>49</sup>Eisemon, T. O., Schwille, J., Prouty, R., Ukobizoba, F. Kana, D., and Manirabona, G. "Providing quality education when resources are scarce: strategies for increasing primary school effectiveness in Burundi." In Effective Schools in Developing Countries (edited by Levin, M. and Lockheed, M. E.), Education and Employment Division, Background Paper PHREE/91/38, Washington, D.C: World Bank, 1991.

legal or administrative coercion (laws, decrees and administrative orders) and centrally allocated inputs to bring about the desired behavior at lower administrative (school) levels. Success of the intervention is usually measured by the extent to which inputs are effectively distributed and the behavior of teachers and local administrators conforms to the regulations. Direct intervention strategies can be successful when the problems are well structured and amenable to relatively standardized solutions.

Indirect intervention strategies, on the other hand, try to generate school level initiative in addressing educational problems through the use of incentives. These strategies typically rely on enabling and framework setting legislative and administrative measures and financial and professional support targeted to support desired local actions. Financial and human resources are distributed by the central authority among competing local requests for funding on the basis of a set of generally applicable criteria and procedures. Success is measured by the extent to which desirable outcomes are achieved, with the understanding that a variety of treatments may produce these outcomes depending on local conditions. Indirect interventions are most appropriately used for problems that are ill structured, and can be solved only by relying largely on local knowledge and initiative.

International assistance agencies are beginning to shift toward indirect intervention strategies. For example, several World Bank education projects have supported indirect intervention strategies through Sector Investments Loans. Three examples will clarify how this mechanism works.

**A loan extended in 1985 to Brazil opened up a US\$52.0 million line of credit that the national agency responsible for scientific research could draw on to fund proposals for research projects submitted by Brazilian researchers. Funding priorities, review procedures and decision criteria were widely publicized in the Brazilian scientific research community.**

**A recent project in Mali established a primary school improvement fund (US\$6 million). Parent-Teacher Associations have been invited to develop proposals for school improvement and submit these for review to a national coordination committee. Funding priorities, review procedures and evaluation criteria have been established and communicated to headmasters and PTAs.**

**Support for basic training in Yemen (formerly Yemen Arab Republic) has been channeled through a \$2.5 million Basic Training Fund (BTF) since 1975. Local communities submit requests for the funding of training activities to the BTF's Managing Committee. If the requests meet the established criteria, the BTF can provide financial and technical support requested by the community for the implementation of the program.**

**Establishing a line of credit to fund a multitude of locally generated projects which support nationally formulated policy objectives has in several cases proven to be a powerful strategy of indirect intervention and a way to begin to reconcile macro-policy objectives and micro-level educational concerns. They will often allow tapping local resources for educational development much more effectively than direct interventions.**

### ***Institutional Development***

In the decades ahead education planners will no longer be able to ignore issues of organization structure and management process. More interactive planning models will require more organic and decentralized organizational structures. Educational needs are diverse, responses should reflect local conditions, and schools must therefore have the ability and the autonomy to design and implement their own school improvement programs. In many developing countries, however, local organizations - especially schools - are very weak and strengthening them often is a condition sine qua non for school improvement and educational development. Levin and Lockheed<sup>50</sup> found on the basis of examples from Thailand, Nepal and Colombia the clustering of schools a promising strategy in this regard.

Strengthening local capacities and "empowering" teachers and school administrators do not mean a less important role for central level institutions but rather a different one. Shifting the responsibility for many aspects of educational policy to lower levels of the hierarchy will free-up time of central level authorities to focus on those tasks that cannot be delegated and executed at lower levels. Central level authorities will need to define strategic goals for system performance. They will need to retain much of the responsibility for the mobilization and allocation of resources, with particular consideration for equity goals. They will need to create an environment which provides incentives and effective opportunities for local people to tackle local problems. Instead of controlling schools,

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<sup>50</sup>Levin and Lockheed, *op. cit.* 1991.

planners and administrators in central agencies will need to play a supporting and facilitating role by providing professional assistance and performance feedback information to schools and regional and district managers.

Weaknesses in administrative ability have long been blamed for the difficulties that educational development has encountered.<sup>51</sup> But much of the efforts to strengthen education management has focused on strengthening the ability of central planners and managers to implement "control and command" strategies. More sophisticated forecasting techniques, more detailed school censuses and more elaborate computer models have -- together with the provision of large amounts of expatriate technical assistance have been the main instruments. In many instances, however, these efforts have faltered on the rocks of the implementation realities of educational development.

Interactive planning strategies will need to be supported by institutional development strategies that are much broader. Planners will need to incorporate, first, an analysis of the capacity of the educational organization at different levels to implement the planned investments and policy reforms. If these capacities are deficient, remedial measures such as institutional strengthening or redesigning the program must be considered<sup>52</sup>.

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<sup>51</sup>World Bank. "Education Sector Working Paper." Washington, D.C.: World Bank, 1980.

<sup>52</sup>Rondinelli, D. Middleton, J. and Verspoor, A. Planning Education Reforms in Developing Countries: A contingency approach. Durham: Duke University Press, 1990.

Second, institutional development will need to include strategies for the allocation of increased resources and decision making authority to lower levels of education hierarchy. Often these local administration need to be strengthened. For example, in Thailand, the decentralization of non-formal education programs by establishing regional and district offices, staffing them with trained adult educators and giving them the responsibility for the planning and implementation of programs tailored to the local needs, was a major factor in the development of a strong, diverse and flexible program.<sup>53</sup> Priorities for institutional development will usually need to include assistance for:

- (a) School management: A critical first step is to allow and encourage principals and teachers to design and manage school improvement programs and mobilize community support for them. The central place of strong school leaders in improving instructional quality in schools in developing countries is a consistent theme of school level research<sup>54</sup>.
- (b) Professional support: Developing systems of frequent assistance, training, and networking opportunities for exchange with other teachers (and principals) are

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<sup>53</sup>Sunarchai, S. Fifty Years of Adult Education and Mini-Formal Education in Thailand in Adult Education and Development, No. 33, September, 1989, p. 7-25.

<sup>54</sup>Baker, V. T. The Blackboard in the Jungle: Formal Education in Disadvantaged Rural Areas - A Sri Lankan Case. Delft: Eburon, 1988. Tsang, M. C. and Wheeler, C. "Local initiatives and their implications for a multi-level approach to school improvement in Thailand." In Effective Schools in Developing Countries (edited by Levin, M. and Lockheed, M. E.), Education and Employment Division, Background Paper PHREE/91/38, Washington, D.C.: World Bank, 1991.



critical ingredients of school based educational development. In effective schools, teachers are decision makers and team work and collegiality are highly valued.<sup>55</sup> Moving a school in this direction usually requires significant amounts of professional support and training.

- (c) **Research and evaluation:** It is especially important to establish specialized agencies to provide policymakers, teachers and administrators with regular information on, and analyses of, the performance of the system. Shaefer highlights the central importance of research and feedback in the implementation of the CSBA program in Indonesia.

### **Staff Development**

Interactive planning strategies explicitly try to mobilize the energy and the insights of the operators at the bottom of the system, i.e. the teachers and the local administrators. Instead of executors of centrally packaged programs, school based professionals are considered key participants in the design, implementation and adaptations of educational development programs.

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<sup>55</sup>Levin, H. and Lockheed, M. E. **Effective Schools in Developing Countries**, World Bank, Education and Employment Division, Population and Human Resources Department Background Paper PHREE/91/38, Washington, D.C.: World Bank, 1991.

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This means that -much more than has been the case so far- educational plans will need to focus explicitly on strategies to support and motivate teachers and school administrators. In-service training, career development programs, and networks for communication and exchange of experiences for teachers and school administrators are key elements of such strategies.

Planners will also have to tackle issues of salary level and salary structures. Teachers' salaries in many of the poorest developing countries have declined to a point where they are no longer sufficient to provide the basic necessities for the teachers and their families.<sup>56</sup> Issues of teachers' salaries are complex, not in the least because of their linkages with overall civil service policies. Yet, they are so critical that planners will have to raise these issues and analyze the implications of various policy options.

Similarly, the development of a cadre of specialized administrators, researchers and planners needs to be planned for. The education sector is notorious for its neglect of the training of administrators. Only a handful of developing countries, for example, have made deliberate attempts to provide training for newly appointed principals. Most other administrative tasks are learned on-the-job. Training the next generation of education planners and administrators is a major challenge, especially in the context of the strategies and the emphases recommended in the Jomtien *Framework for Action*.

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<sup>56</sup>Lockheed, M. E. and Verspoor, A. M. Improving Primary Education in Developing Countries. Oxford University Press, New York, 1992.

## Conclusion

Driven by rapid technological advances -- especially in electronics robotics and genetics -- the production process in many manufacturing and service industries is changing dramatically. Quality improvement, responsiveness to customer demand and small batch production are some of the key features of this "new manufacturing."<sup>57</sup> Management strategies emphasize the statistical measurement of quality, the critical importance of staff development and motivation policies, the adaption of products to respond to variations in customer demand, and the central responsibility of senior management quality assurance.

The new directions for educational planning outlined above go very much in the same direction. Just as many businesses are having to deal with the fact that standardized mass production is becoming uncompetitive and needs to be replaced by flexible production technology that allow rapid product changes to incorporate technological innovations and shifts in consumer preferences, education planners will need to move the education system from uniformity to diversity and from standardized treatment to flexible responses to a variety of learning needs. The cost associated with poor quality production estimated by

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<sup>57</sup>Drucker, P. F. "The emerging theory of manufacturing." Harvard Business Review, 90 No. 3, 1990, p. 94-102.

Philip Crosby<sup>58</sup> to be, in many businesses, as high as 5-10 percent of total sales, is even higher in many education systems in developing countries where the cost of repetition, drop-out and remedial teaching are very high<sup>59</sup> representing more than one-third of the education budget in some cases.

Systematic statistical measurement of the learning process indicators and learning outcomes is as critical for quality management in business as in education. Education managers will need to rely increasingly on the professionalism of teachers and school administrators, just as businesses rely increasingly on the knowledge and operational experience of the workers on the shop floor.

Finally, quality improvement in both education and business requires long-term efforts. They can only be sustained if senior managers and education leaders give explicit priority to such programs and remain visibly and consistently committed to them.

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<sup>58</sup>Crosby, P. H. Quality is Free: The Art of Making Quality Certain. New York: McGraw Hill, 1979.

<sup>59</sup>Harbison, R. W. and Hanushek. Educational Performance of the Poor: Lessons from Rural Northeast Brazil. Washington, D.C: World Bank, forthcoming.

## **MORE THAN BUSINESS-AS-USUAL:**

### **REFLECTIONS ON THE NEW MODALITIES OF EDUCATION AID**

#### **Introduction**

It is no longer fashionable to talk about "The World Educational Crisis"<sup>1</sup>. And yet, the number of illiterates was more than 900 million in 1990, an increase of 200 million since 1970. In twenty countries, schools enrolled in 1985 less than 50% of the children between the ages of 6 and 11. There are still more than 120 million children of primary school age that do not attend school (this is double the number in 1970). Two thirds of these are girls. Repetition and dropout remain pervasive throughout the developing world. Of the children entering primary school less than half actually complete it. Few primary schools in the developing world are effective in teaching students the skills specified in the curriculum. In many middle income countries, unacceptable differences in educational opportunities between rich and poor, rural and urban, and male and female persist.

As a result, low income countries have a labor force with less than three years of education on average. Few institutions of higher education in low-income countries generate new knowledge or train the high level manpower needed for development.

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<sup>1</sup>Coombs, Philip H. The World Educational Crisis: A Systems Analysis, New York: Oxford University Press, 1968.

Developing countries account for only 13% of the world's scientists and engineers, and only 4-5% of global spending on research and development. In spite of the persistence of these education problems, budget allocations (as a percentage of GDP) in developing countries remain well below those in industrialized countries. In the lowest income countries, the public expenditures per pupil actually declined by 25% between 1965 and 1985<sup>2</sup>. The crisis that Coombs predicted in 1968 and addressed again in 1985<sup>3</sup> is with us today.

This is a disturbing picture, especially at a time when development is increasingly driven by knowledge.<sup>4</sup> The expectations of a major contribution of education to development, however, contrast sharply with the reality especially in the lowest income countries.

### *The Contribution of Aid Programs*

International aid has not been able to change the course of events. International meetings have set goals and redefined priorities on a regular basis. Over the past 25 years, a well established education aid community has developed, with a busy meeting schedule,

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<sup>2</sup>The source of these data is Lockheed, Marlaine E. and Adriaan M. Verspoor Improving Primary Education: A Review of Policy Options, New York: Oxford University Press, 1992.

<sup>3</sup>Coombs, Philip H., World Crisis in Education: The View from the Eighties, New York: Oxford University Press, 1985.

<sup>4</sup>Castells, Manuel, "High Technology and the New International Division of Labor." Labor and Society, International Institute for Labor Studies, 1989, 14, p. 7-42.

several newsletters, professional networkers and aid watchers. It includes also an international education research community with several respectable journals. But the action has rarely been at par with the rhetoric. In fact, it can be argued that external aid to education has been peripheral to the course of educational development. The magnitude of the educational development task is such that

" ... a business as usual approach to education policies and programs *simply will not work*. In the long term, a failure to take decisive action, to broaden the range, resources and suppliers of basic education opportunities would only deepen the present shortcomings and disparities ...".<sup>5</sup>

Few low-income countries will be able to meet these challenges of educational development alone. They will need to build broad partnerships, including the international aid agencies. But this paper argues that effective participation of aid agencies in these "new alliances"<sup>6</sup> will require the adoption of a set of policies and practices different from those in the past. For aid programs also, more than "business-as-usual" is required.

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<sup>5</sup>World Conference on Education for All, Meeting Basic Learning Needs: A Vision for the Nineties, Background Document, Inter-Agency Commission, New York, 1990.

<sup>6</sup>WCEFA, World Declaration on Education for All, Article 7, Jomtien 1990.

There are at least four reasons why external aid to education has been less effective than it could have been. First, education aid has been quantitatively insignificant. Second, operational practices have constrained the potential impact. Third, the intellectual basis for action has been weak. Fourth, program design and implementation suffered from a shortage of well trained and experienced professionals.

### The Volume of Aid

Since the late sixties about 10% of all official aid has been allocated to education. Stagnation in aid flows during the 1980s meant that education aid did not increase in real terms and stabilized, in 1987 dollars, at about \$4.5 billion per annum.

With a few exceptions (France and some Nordic countries for example), education was until very recently a minor element in most multilateral and bilateral programs. In the World Bank, for example, in the mid-eighties, education represented only 3-4% of the Bank's total lending program. Education was for a long time the domain of a few specialists and peripheral to the concerns of development economists. Conversely, the stagnation in education aid flows meant that external aid became a less important source of funding for the budget of developing countries. In the late 1980s, external aid represented only 6-7% of total education expenditures in the developing world as compared to close to 10% a decade earlier. These estimates are admittedly very rough and conceal considerable variation between countries as well as the differential impact on the recurrent and investment budget. Nonetheless, the figures indicate that in budgetary terms the impact of aid has become increasingly marginal.



**Table 1A: Percentage of International Aid for Education**

<u>Source &amp; Type of Aid</u>	<u>1980-81</u>	<u>1983-84</u>	<u>1985-86</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
Bilateral	12.7	11.9	10.9	10.6	11.0	10.7
Multilateral	NA	NA	5.0	4.3	4.3	5.1
Total	12.7	11.9	15.9	14.9	15.3	15.8

Sources: OECD, 1980-1990; Lockheed and Verspoor, 1992; World Bank, 1991.

**Table 1B: Official Development Assistance for Education  
by DAC Countries**

(US\$ Billion)

<u>Amount of Aid</u>	<u>1980</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
Education (current)	3.5	3.2	4.0	4.4	5.3	5.0
Education (1987 prices)	4.7	4.3	4.5	4.4	4.9	4.7

Sources: WDR 1991; OECD, 1990.

### Operational Practices

The effectiveness of external assistance has been further constrained by the reluctance of many donors to finance local cost and, especially, recurrent cost. This has affected especially support to basic education, which in the first half of the eighties, represented less than 5% of education aid disbursements<sup>7</sup>. Many donors considered direct

<sup>7</sup>Lockheed and Verspoor, *op. cit.*

support to primary schools less efficient than indirect support by concentrating external financing on teacher education and central agencies such as curriculum development centers and planning units.

Moreover, much of the external aid to education is project aid, which finances discrete investments. This model has been perfected by the World Bank. It emphasizes the detailed costing of investment inputs and the careful planning for their timely delivery over a four to six year period. It is largely based on the procedures and investment instruments developed for infrastructure projects. This model served many aid programs well during the time when the provision of physical facilities and equipment was a dominant lending objective. It has been especially effective for the management of large discrete investment projects.

The project model is however much less suitable for broad support for basic education which requires investments and improvement in many widely dispersed schools. There are three main reasons for this. First, effective support for basic education requires assisting a large number of diverse actions that are site-specific and carried out under the responsibility of district or school administrators. These activities cannot be standardized effectively. Furthermore, the funding required is mainly for local currency expenditures and recurrent cost. Supervising their implementation on a large scale is obviously beyond the capacity of any donor agency. Establishing mechanisms for expenditure control and financial accountability towards the donor agency is often problematic. The flexibility to

reallocate resources as lessons from experience become available is often difficult to accommodate in the traditional project model.

Second, the project approach puts a premium on the efficient preparation and appraisal of specific investment projects. Sector-wide policy and institutional issues are often not analyzed in depth and often considered outside the scope of the project. Education investments were often considered in isolation from other social investment and from macro-economic policies. As a result, intra-sectoral synergies were not capitalized on, the long-term sustainability of projects was undermined, and contributions to economic growth remained limited.

Third, Bank education projects traditionally had a time horizon of five years. While this time horizon may be adequate to construct a building, it is most certainly inadequate for the implementation of programs of qualitative reform<sup>8</sup>.

#### Weakness in the knowledge base

The planning of educational development requires answers to the complex questions about the external effects and the determinants of educational achievement, the cost and financing of educational services, the effectiveness of educational interventions, and the implementation of improvement programs. In industrialized countries, especially the US,

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<sup>8</sup>Verspoor, Adriaan Pathways to Change: Improving the Quality of Education in Developing Countries, PPR Discussion Papers, No. 53, Washington D.C.: The World Bank, 1989.

there is a rich literature that informs planners and decision makers about the potential effects and possible pitfalls associated with a particular policy decision. Much of this research is, however, highly context specific and its findings cannot be transferred easily to developing countries. Furthermore much of the research on education in developing countries has focused on questions of external effects, cost and financing and determinants of achievements. Research on the effectiveness and particularly on the cost-effectiveness of specific interventions<sup>9</sup>, and managerial and institutional strategies for implementing them remains limited. A quick count of 82 articles in the Comparative Education Review (CER) and International Journal of Educational Development (IJED) published between 1989 and 1990 illustrates this point<sup>10</sup> (see Table 2).

Table 2: Major Categories of Articles in CER and IJED, 1989-90.

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External effects/employment	8.5%
Determinants of Achievement	8.5%
Cost/Financing	7.0%
Effectiveness	5.0%
Program Evaluation	5.0%
Cost-Effectiveness	2.4%
Others	63.6%

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<sup>9</sup>Lockheed, Marlaine and Eric Hanushek, "Educational Efficiency: What do We Know," Compare, Vol. 18, No. 1, 1988.

<sup>10</sup>These 82 articles do not include reports, presidential addresses, colloquium on theory, and book and essay reviews.

A major constraint on more applied research -- focusing on cost-effectiveness and implementation of interventions -- is the absence of systematic measures of learning achievement. For example, only about 13 of the 193 education projects that the World Bank has supported between FY82 and FY91 included provision for the systematic measurement of learning outcomes<sup>11</sup>. Four out of the 13 projects went into support for examination reform as a way to increase the effectiveness of backwash effects. Few projects were designed to support the development of indicators that compare progress in learning achievement over time. The absence of such data has made it difficult to undertake research on the relative effectiveness of interventions; the absence of reliable cost-data has precluded cost-effectiveness research. For example, Lockheed and Hanushek<sup>12</sup> found that "Studies in which the cost-effectiveness of alternative educational policies have been assessed are extremely rare." The lack of implementation research reflects the conventional neglect of implementation as a design problem.

### Staffing Weaknesses

In donor agencies and in developing countries, the shortage of education development specialists, such as planners, policy analysts and administrators, has increasingly affected the design and implementation of aid programs. This shortage is a result of two factors. First, the declining international support for educational development during the

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<sup>11</sup>PHREE database.

<sup>12</sup>Lockheed and Hanushek, op. cit., p. 29.

1980s led to decreasing job opportunities in this field, which, in turn, marginalized the doctoral programs. For example, Harvard's doctoral program on International Education which trained many leading education planners and policy analysts barely survives today. The demise of Unesco which in the 1970s had operated an array of training programs at the IIEP and the Unesco regional offices, further contributed to the shortage of well trained professional staff in developing countries. Second, the stagnation in educational development meant that new people and new ideas found their way only slowly in the international education programs. Philosophical and descriptive traditions only slowly made room for empirical and analytical approaches. As a result, the evolving demands of educational development have often not been reflected in these training programs.

### **The Challenge of Jomtien**

The timing of the WCEFA was fortuitous. It came at the time when concerns about (i) the effects of structural adjustment on the education opportunities of the poor intensified; and (ii) the impact of the technological revolution triggered a renewed interest in human development.<sup>13</sup> The Conference managed to set the stage for educational development in the nineties in three important ways. First, it redefined the conventional input focused and central government dominated paradigms of educational development by proposing a new paradigm that emphasizes learning as the goal of investments in education and recognizes

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<sup>13</sup>World Bank. World Development Report 1991, Washington, D.C.: World Bank, 1991.

the essential contributions to the education process of several partners such as parents, teachers, students, communities and NGO's. Second, it called on developing countries to prepare country specific plans of action for the implementation of the WCEFA goals. Third, it called on the donor community to increase aid to basic education.

Many countries have prepared WCEFA action plans, and donor agencies including the World Bank are increasing allocations to basic education (see Table 3). While these are very positive outcomes, formulating new plans and increasing aid allocations will not be enough. The plans need to reflect the new WCEFA paradigm and aid strategies should be designed to overcome the obstacles discussed above. Effective Jomtien follow-up cannot be realized by expanded conventional aid programs. That would be a serious mistake which could jeopardize the new commitment.

**Table 3: World Bank Lending for Basic Education, FY81-FY91  
(US\$ million)**

	Africa	Asia	EMENA	LAC	Total
FY80-84	103.9	183.3	44.3	130.0	461.5
FY85-90	249.5	340.9	532.9	154.9	1,496.9
FY91	48.1	290.8	-	275.7	614.6
<b>Total</b>	<b>401.5</b>	<b>815.0</b>	<b>577.2</b>	<b>560.6</b>	<b>2,573.0</b>

Source: World Bank Database.

The central focus of the assistance strategies will have to be on the provision of support for programs of qualitative improvement. This creates a set of new demands for assistance strategies. On the basis of a review of bank lending for basic education, five recommendations for the design of basic education programs have been formulated<sup>14</sup>:

- Support the locally determined processes such as school improvement, community mobilization and school location planning that drive educational development;
- Invest in those inputs that are most cost-effective;
- Test carefully how a particular investment package works out in a particular setting and monitor outcomes constantly;
- Strengthen the institutional capacity for strategic planning and management at the national or regional level and for operation planning and implementation at the district and school levels; and
- Design projects to allow for flexible response to a wide variety of local needs and unplanned events.

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<sup>14</sup>Adriaan Verspoor, Lending for Learning: Twenty Years of World Bank Support for Basic Education. PRE Working Paper, no. 686, Washington, D.C.: World Bank, 1991.



The main dimensions of the post-Jomtien aid strategies are reasonably clear. The four principal ones are: (i) a shift to sub-sector programs of external assistance; (ii) a broadening of the purpose of aid programs to make them a vehicle for sharing ideas and experience as well as for transferring resources; (iii) the inclusion of clear incentives for evaluation of learning outcomes and applied research; and (iv) the strengthening of training programs for the next generation of education planners and researchers.

### Sectoral Assistance

Distortions in the sectoral policy environment and weak institutions will compromise even the best designed investment projects. The effectiveness of external assistance will increasingly depend on the ability of donors to engage with each country in analysis and dialogue on sector wide policy issues and design assistance programs that support institutional development and policy reform. This implies that sector approaches will have to become routine in the design of assistance programs and in policy analysis. Eventually sub-sectoral assistance programs, providing broad support to a time-slice of a longer term educational development program, will have to replace the conventional project as the dominant vehicle for assistance to basic education. High quality analytical work will be needed to provide the empirical basis for these operations.

In the World Bank this approach, known as "Sector Investment Lending" has been used in several instances. The benefits of this type of lending can be substantial. A review of the early experience with it in the education sector concluded that the Sector Investment

Loan has effectively supported the development of key institutions for research, planning, policy analysis, and program implementation. Furthermore, it has improved decision-making capability, and encouraged the application of more objective criteria to investments in education.<sup>15</sup>

The sector investment instruments differ from the traditional project loan in several ways:

- They are based on a broad (sub)sectoral development program. A ten-year action program (such as the one called for by the World Conference on Education for All) specifying policy measures, institutional development priorities, investment programs, and recurrent cost implications would be a good example of a sub-sectoral development program; implementation will often be supported by several donors.
- National staff take full responsibility for sectoral analysis, project development, appraisal and supervision of the implementations of the specific investments (sub-projects) that are the constituent elements of the subsectoral program.
- The responsibility for the appraisal and supervision of projects is usually discharged through an agency for the government, known as the intermediary.

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<sup>15</sup>Johanson, Richard. Sector Lending in Education. EDT Discussion Paper, no. 18, Washington, D.C.: World Bank, 1985.

- **Bank appraisal focuses on the sub-sectoral development program --especially the underlying policy framework-- and the effectiveness of the institutional arrangements of sub-project preparation, appraisal, implementation and evaluation. Bank implementation support focuses essentially on the intermediary through annual and bi-annual review meetings.**

**The Sector Investment Loan is, in fact, a line of credit for (sub)sectoral development that allows implementation with maximum flexibility and responsiveness to local conditions.**

**(See Box 1.)**

**In many countries, however, the national institutions are not yet equipped to carry the responsibility for a full-fledged sectoral investment loan. In those cases, the sector investment loan mechanism has been adapted and limited only to those elements where national agencies exist and are sufficiently experienced to manage a subsectoral investment program. The management of school construction programs are increasingly being designed this way. Furthermore, several projects have established school improvement or training funds to support local initiatives in the context of projects that are for other components designed along more traditional lines.**

**The distinction between a traditional specific investment project and a sector investment project is, thus, not clear cut. In fact, there is a continuum of design options from which each country will have to choose in the light of prevailing local conditions and the dominant characteristics of the project.**

**Box 1: Evolution in the World Bank's Approach to Lending for  
Primary Education: The Malaysia Case**

Examples of the evolution of investment instruments can be found in Bank-financed projects in all regions of the world; project experience in Malaysia is illustrated here as a case in point.

The World Bank has financed nine projects in Malaysia since 1969, totalling US\$405 million at the primary, secondary and higher levels, as well as in technical/vocational and teacher training. In the primary sector, *Malaysia Education II* and *Education III* (1972 and 1974) included construction of a radio studio and supplies of receivers and equipment. This expanded the coverage of existing primary level educational broadcasts used to strengthen education delivery by under-qualified primary teachers.

Two years later, *Malaysia Education IV* assisted the Government in improving its capability to plan school construction by consolidating and reviewing national school building programs. Population data and information on existing facilities were studied to provide a national school mapping plan. At the same time, construction and equipment was provided for 848 primary schools in under-served areas of the country. To meet projected deficits in supplies of trained teachers, a new teacher training college was built, and an in-service training program was established for uncertified or poorly qualified primary teachers.

In 1986 the World Bank supported the first "primary and secondary education sector program" to accelerate policy reforms (*Malaysia Education VIII*). The project financed the first five-year phase of a ten-year educational investment program developed under the Fifth Malaysia Plan. Project funds were used to assist in carrying out the Government's Plan of Action covering infrastructure investments and 20 reform subprojects for institutional development at the national and state levels. During project appraisal, the Government and the Bank agreed on criteria for the subprojects, and performance indicators to monitor and evaluate their successful implementation. Funds were then released in tranches against evidence of satisfactory implementation.

Following the successful implementation of the first subsector project, a second subsector project (*Malaysia Education X*) was approved in 1989. Designed to support the same policy objectives, it will expedite the next stage of the Government's Plan of Action. The project will operate in a similar manner, with approval and implementation of national and state-level subprojects by the Malaysian authorities, and subsequent performance monitoring by the Bank staff.

### **Transferring lessons from Experience**

It is increasingly clear that sharing lessons from experience and strengthening institutional capacities is as fundamental to development as the transfer of financial resources. This is particularly true in education sector which is, above all, experience based, attitude and contact intensive. This places a premium on intellectual cooperation and the exchange of ideas between fellow professionals from different backgrounds.

Educational development is highly context specific and characterized by "sensitive dependence on initial conditions"<sup>16</sup>. Few programs can be transferred from one setting to another<sup>17</sup> and every country will need to develop and test its own strategies. Educational development thus takes place under conditions considerable uncertainty. Incremental approaches which test a range of technical design and policy options, which expand the coverage of those programs that work and slough off those that don't, have been found to work best under these conditions<sup>18</sup>. Educational development therefore needs to be conceived deliberately as a learning process fueled by information from other context where similar problems have been addressed and by information on the outcomes in different local settings.

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<sup>16</sup>Gleick, James Chaos: Making a New Science, Viking Penguin: New York 1987.

<sup>17</sup> Murnane, Richard and R. Nelson, "Production and innovation when techniques are tacit: The case of education." Journal of Economic Behavior and Organizations. Vol. 5, 1984.

<sup>18</sup>Verspoor, Pathways, op.cit.

Effective intellectual collaboration will require a rigorous documentation of lessons from experience in a wide variety of contexts. It will also require a dialogue across disciplines (in particular economists and educators) and the application of a range of research and evaluation approaches to the design and implementation of educational development programs.

### Evaluation of Outcomes

The importance of evaluation and research as means to supporting reform and innovation has long been recognized. Coombs<sup>19</sup> blamed much of the resistance to change on the absence of a strong empirical or developmental (as opposed to descriptive and philosophical) research tradition in education. Bank projects have consistently supported evaluation and research: between 1982 and 1989, 116 out of 146 projects appraised included financing for 436 studies. The results were however disappointing: only 42% of these studies were actually completed and of these less than half could be retrieved from the project files<sup>20</sup>. A recent review by King suggest that the experience of other donors is not much better than the Bank's.<sup>21</sup>

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<sup>19</sup>Coombs, op.cit.

<sup>20</sup>Marlaine Lockheed and Alastair Rodd, "World Bank Lending for Educational Research 1982-89." PRE Working Paper Series, no. 583, 1991.

<sup>21</sup>King, Kenneth, "Building Capacities in the Developing World: A Review of Experience in the Field of Education." PHREE commissioned paper, (Draft).

In addition to low implementation rates the impact of this project supported research has been constrained by the low quality of much of this work. Many are impressionistic. In the name of capacity building the importance of the process has--often with undesirable consequences-- been emphasized at the expense of the quality of the product. Few are based on a methodology that is widely accepted in the professional community and are suitable for publication in refereed journals. This has hampered dissemination and sharing of experience in the international education community.

The reasons for this dismal record of applied research are quite straightforward. First, much of the effort has been on the design and implementation of studies, rather than on capacity building. Few projects included a deliberate strategy to support the graduate training of education researchers from developing countries on a significant scale. Second, applied research is complex, requiring often extensive field visits and the use of a multiple research methods<sup>22</sup>. Third, the research and studies components are typically small, representing in World Bank supported projects, 1-2% of total project costs<sup>23</sup>. Fourth, the agency staff responsible for project supervision are usually not themselves familiar with research methodologies and implementation strategies, and often reluctant to hire specialized consultants to advise on the implementation of small project components. Fifth, the studies frequently produced answers to yesterday's questions and only about 5-6% of the

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<sup>22</sup>The government of Norway and the World Bank supported an applied research project in fifty schools in three countries called "How Schools Improve." The project took four years to complete and cost more than \$500,000.

<sup>23</sup>Lockheed and Rodd, *op.cit.*

Bank studies included learning achievement among the outcome measures<sup>24</sup>. A recent project in the Philippines provides, however, an example of good practice (see Box 2).

The international education community can no longer avoid to seriously address the evaluation issue. Aid ministries in the industrialized countries and finance ministries in the developing world cannot be expected to provide additional resources for educational development, unless it can be demonstrated that investing these resources is indeed making a difference. Emphasizing capacity building for policy analysis and research can have a ripple effect and be instrumental in improving the cost-effectiveness of total national expenditure on education. Those countries ready to implement evaluation and research rich programs should be given increased priority in education aid allocations.

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<sup>24</sup>Lockheed and Rodd, *op.cit.*



## **Box 2: Measuring Educational Outcomes: Achievement Testing in the Philippines**

Without the ability to assess educational outcomes, the impact of specific interventions on the educational process cannot be known. The *Philippines Second Elementary Education Project* addresses this issue by including an annual assessment program of elementary student performance in order to routinely provide achievement data.

The National Elementary Student Assessment Program will produce annual information on: the performance of students in selected grades (2, 4, and 6) and subjects (language, mathematics, science, and social studies); on home and school characteristics that relate to educational performance; and, in the long run, on sector performance over time. The assessment will allow for comparisons by geographical area, socio-economic status, gender, type of community, type of school and other characteristics that address important issues of resource distribution. The results of the assessment will be disseminated through the publication of subject reports. Thirty-thousand booklets describing annual assessment objectives will be distributed to school principals, teachers, and national and regional leaders. Technical reports and other publications will serve research and policy analysis purposes.

One important element of the program is the clear delineation of roles and responsibilities, coupled with the close collaboration of several Bureaus, Regions, Divisions, Districts and Schools. The Project will be managed by the Under Secretary for Research. The Director of the Research and Evaluation Division of the National Educational Testing and Research Center (NETRC) will have principal responsibility for day-to-day operation. All instruments for the national assessment would be developed with the assistance of the Center for Educational Measurement. The Bureau of Elementary Education and the Department of Education, Culture and Sports will also provide information and statistics. Two committees have been created to advise the NETRC, a National Advisory Committee, on policy matters and a Technical Advisory Committee on overall design and implementation.

The program also recognizes the need for cooperation at the school level. Regional meetings will be convened to train school personnel in administration, and quality control visits will be organized during administration. Summaries of results will be mailed to schools to act as scripts for staff meetings and to encourage discussion of the results.

Evaluation and applied research are complex and require considerable technical skills. Therefore they should become a central part of aid programs and implementation of evaluation components a condition for further assistance. The experience of the US is illustrative in this respect: the federal government tied funding and requirements for evaluation to prestigious programs of educational improvement (implemented at the state and local level), which created an environment that associated monitoring and evaluation with educational change, and also provided the means through which institutional capacity could be established and professionalized<sup>25</sup>.

At the same time the pressure created by evaluation requirements should be combined with explicit and well funded assistance for building local capacity for research and evaluation, including the measurement of learning achievement.

### Training Planners and Analysts

Implementation of this agenda for external aid will require that international agencies, Ministries of Education and other recipient institutions are staffed by planners and analysts who are familiar with recent knowledge and the state-of-the-art methods of planning and analysis. The paradox of educational development is that the Ministry of Education which, in many countries, manages 20% or more of the national budget and employs 30-40% of the civil servants, is among the weakest public agencies in terms of the

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<sup>25</sup>John Middleton, James Terry and Deborah Bloch, Building Educational Evaluation Capacity in Developing Countries. PPR working paper no 140, Washington D.C.: The World Bank 1989.

research, planning and managerial capacities. These capacity issues can not be addressed by providing technical assistance experts and short term training of national staff. It will require broad based and long term program of training, support and international professional cooperation focused on institutions rather than on individuals or on specific products. This means that international funding for the training of education planners and analysts from developing countries will need to be stepped up. At the same time, donor agencies will need to invest in the training and professional development of their new recruits and currently serving staff.

But increased funding will only yield the expected results if adequate training opportunities exist. But opportunities for postgraduate study in disciplines related to educational development are few, and that do exist are located mainly in the developed country universities. If we are to take seriously the task of capacity building for the planning and management of educational development a coordinated effort to support the development of a few high quality graduate training programs in the developing world should be high on the international aid agenda.

### Conclusion

The international aid agencies need to recognize the limitations on their ability to meet the challenges of educational development in the 1990s. Many of these limitations are self-imposed and reflect tradition rather than reason. A critical evaluation of these practices is a first step towards increased effectiveness.

Expanded support for basic education requires policies and practices that depart from business-as-usual. It will require that countries are willing to consider policies and practices that have constrained educational development in the past decade. Where the education sector remains the vehicle for distributing political patronage rather for bringing about learning, aid will remain ineffective. Departing from business-as-usual will require that governments have the courage to implement policy reforms -inside and outside the sector. It will also require that agencies have the courage to target education aid to help governments that adopt sound policies, rather than on countries that are their foreign policy priorities. Only in such a context will it make sense to implement the new approaches of policy focused support for broad programs of educational development which put into practice recent advance in planning models and in methods for and research and analysis. Above all it will require the training of a new generation of education professionals who are not only comfortable with the traditional skills of the planner but who also are well versed in the new skills of policy research and analysis. They will need have the skills necessary to compare policy options in terms of cost-effectiveness, assess the consequence of policy choice, analyze institutional and management issues and design appropriate implementation strategies.

The WCEFA highlighted the importance of new partnerships. These new approaches to aid will live or die by the extent to which the agencies are successful in building and sustaining new partnerships for the design and implementation of aid programs. At the end

**of the day only those program that are owned and operated by institutions and people in the developing world will be able to make a lasting contribution to educational development.**

# **From Rhetoric to Action: Implementing Education For All\***

## ***Introduction***

The Jomtien Conference on Education for All put basic education back on the agenda of international development assistance. While this renewed commitment is a step in the right direction, the challenge for implementing the EFA program remains daunting:

- The number of illiterates is more than 900 million in 1991, an increase of 200 million since 1970. One in five of adult men and one in three adult women in developing countries remain illiterate.
- Educational attainment of the workforce remains very low throughout the developing world. In countries with a per capita GNP of US\$580 or less (defined as low-income), mostly in Africa and South Asia, adults between the ages of 30 to 44 have less than 4 years of schooling on average. In countries with a GNP per capita between \$581 and \$2,335 (lower middle income), adults have less than five years of schooling on average.

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- **There are still more than 120 million children of primary school age that do not attend school. This is double the number in 1970. Two thirds of these are girls.**
- **Repetition and dropout remain pervasive throughout the developing world. Of the children entering primary school, less than half actually complete it. Few primary schools in the developing world are effective in teaching the students the skills specified in the curriculum.**
- **Extreme disparity in educational opportunities between rich and poor, rural and urban, and male and female persist.**

**The two major goals set out at Jomtien were to provide much broader access to learning, and to reverse the stagnation of educational progress that threatens development in many countries. The Conference called on developing countries to prepare country-specific plans of action for the implementation of these goals. It further exhorted the donor community to increase aid to basic education.**

**While countries have prepared WCEFA action plans, many donor agencies, including the World Bank, have increased allocations to basic education. Bank lending for education increased from \$1.1 billion in FY88 to \$2.8 billion in FY91<sup>1</sup>. This increased the share of education lending in total Bank lending from 5.9% to 12.2%, the largest increase in Bank history. The share of primary education reached more than one third of total Bank lending.**

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<sup>1</sup> **Bank fiscal year runs from July 1st to June 30.**

All of these recent projects give priority to improving the quality and relevance of education. Many are also beginning to address the need to strengthen the education system's capacity to assess and monitor the quality of student learning, and the relevance of training programs to labor market demands. Eight FY91 projects include measures to support student achievement testing. This expanded Bank effort is expected to be a catalyst for much needed and broad-based aid flows to the primary education subsector.

### *The Central Elements of the Strategy*

To meet the goal of attaining education for all, countries need to consider three areas of strategic investment: assuring universal access to good quality primary education; providing adult literacy education; and mobilizing demand for education.

#### 1. Universal access to good quality primary education

Universalizing access to good quality primary education will stem the flow of young people that continues to enlarge the pool of illiterates. It requires shifting the emphasis of educational policy to: improving educational quality, assessing outcomes, linking education with other human development investments, mobilizing community support, and increasing resources for education.<sup>2</sup> These are examined in turn.

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<sup>2</sup> This section draws heavily from Marlaine Lockheed and Adriaan Verspoor, *Improving Primary Education: A Review of Policy Options*. New York: Oxford University Press, 1992.



- **Quality improvement must be the critical priority for primary education development. Quality is defined as the acquisition by students of the core knowledge and skills specified in the national curriculum. The cost of poor quality is very high. It is measured in terms of repetition, dropout and remedial teaching, amounting as much as 20% of the educational budget in some countries. Investing in cost-effective, quality-enhancing inputs such as textbooks, adequate instructional time, effective teaching, and nutritional supplement can improve learning.**
- **Second, the outcomes of education -- the extent to which schools produce completers that have acquired literacy, numeracy and problem solving skills -- has to be the key performance measure of primary education. This focus will make the cost per graduate rather than the cost per student the focus of efficiency improvements. In many low income countries, increases in the cost per student (by increasing the supply of quality-enhancing inputs) will reduce repetition and dropout, thereby reducing the cost per graduate. The establishment of assessment systems that provide information on trends in student performance and monitor the impact of policy intervention will help improve educational planning and management.**
- **Third, the impact of investments in education is amplified when related human resource development policies reinforce them. Better health and nutrition in early childhood will improve the academic performance of children in school. Treating children's health problems in school can result in a much improved potential for learning, often at low cost.**

- Fourth, mobilizing the support of communities and parents is critical to school improvement. Parent/teacher associations or school management committee can help improve enrollment and maintenance. They can also help mobilize community resources for school improvement and expansion. Communities can provide resources that often cannot be efficiently tapped by national government, particularly those that are in kind or are too irregular to be depended upon.
- Fifth, many low-income countries need to increase expenditures on primary education. This may be accomplished by reallocating resources from other sectors (such as the military and privatization of public enterprises) to education. In addition, the international community will need to do its part by increasing aid to education in order to reverse the trend of stagnation.

## 2. Promoting Adult Literacy

The positive association between literacy, especially women's literacy, and productivity, family welfare and children's educational attainment is well documented. Literate women have greater self-confidence and a greater capacity to influence family decisions, participate in community organizations, and voice their opinions on social and economic matters. They are much more likely to practice family planning, make correct use of child health care techniques, present children for immunization, and ensure better child nutrition. In addition, they generally understand the benefits of sending children, including daughters, to school, and preventing their daughters from being married off at an early age.

They also have a greater willingness to mobilize credit, to use banks, and to participate in and establish a business.

However, these findings actually come from studies of the effects of schooling, such as years of education or levels of educational attainment, not of the effects of literacy programs per se. There is little evidence on whether adult literacy programs, which are usually discrete and short-term programs provided outside the formal educational system and without a regular salaried teaching staff, can change motivation and behavior in the same way as formal schooling.<sup>3</sup>

The World Bank has supported adult education and training programs since 1970, but the results have been mixed. About 49% of the Bank supported programs included literacy components. These were programs delivered through the broadcast media, mobile units, and adult education centers. About 80% provided practical skills training, predominantly agricultural skills and family life skills, as well as specific skills, such as water management. A small portion provided income-generating activities, for example, marketing and business management.<sup>4</sup>

About 30% of the projects included evaluation components, but the focus was on assessing the effectiveness of the delivery mechanism and on the number of clients served,

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<sup>3</sup>Preparing the Future - Women, Literacy and Development, Action Aid Development Report, No. 4, 1990.

<sup>4</sup>Adriaan Verspoor, Lending for Learning: Twenty Years of World Bank Support for Basic Education. PRE Working Paper Series, no. 686, Washington, DC: World Bank, 1991.

not on learning outcomes. Because non-formal components have been small, little attention has been given to their preparation and supervision. Many of these projects had a disproportionate share of implementation problems, such as the lack of films and slides and spare parts. Furthermore, where teachers in the regular school system were engaged to teach adults, they were often poorly prepared to meet the special demands of mature learners. The disappointing outcomes of these earlier investments have been the major factors in the decline of Bank lending for adult education since 1985.

The most successful operations fell into one of three categories. They focused on a specific and well identified need (for example, water management in Mauritania), provided training to special interest groups on request (Thailand and Yemen Arab Republic, for example), or combined income generating programs with literacy (Indonesia, for example). Importantly, successful basic literacy programs also enjoyed strong government backing, and had relatively large components which provided necessary supports. For example, projects in Mali and Indonesia focused on strengthening the national management and implementation capacity, and on providing adequate assistance for materials productions. (See Box 1.)

Four lessons stand out in the experience of the Bank with adult education and training programs:

- Community development, nonformal education, and literacy programs are intertwined. It is so far unclear to what extent the positive effects of adult literacy

projects are triggered by literacy per se. Still, programs that aim at developing specific literacy skills in isolation, without combining these with other practical and income generating skills development, are not likely to be successful. Further, because sustained economic activity will almost always lead to a demand for literacy, projects that combine new enterprise with literacy can attain two major objectives. That is, they can raise literacy and contribute to the alleviation of poverty.

- **Piloting of program design, delivery strategies, and instructional materials is essential. Assessment of learning achievement and evaluation of program effectiveness are needed in order to get outcomes and determine implementation strategies. If outcomes are not measured, reductions in budget allocations have no known cost.**

**Box 1: Learning and Earning: Nonformal Education  
in Indonesia and Yemen Arab Republic**

The low level of adult literacy in many countries is a major constraint to development. Nonformal education provides basic literacy in conjunction with health, nutrition and vocational training to the large proportion of illiterate adults and out-of-school youth. Two of the successful Bank-supported programs are on-going in Indonesia and Yemen Arab Republic.

The Bank has loaned over \$100 million to help PENMAS, the Indonesian Directorate of Community Education, to provide a core of complementary training programs in basic literacy, family life education, and vocational training. In 1977, the first year of Bank lending, PENMAS enrolled about 400,000 learners. By 1983, five million learners had been assisted by the program, of which 4.4 million were in basic education classes, and the remainder in vocational training and small business development.

The Small Business Component (called Learning Funds) experimented in the creation and operation of small-business enterprise. The learning funds supply matching grants to production groups in over 500 different types of business. Training in marketing, simple accounting and business management techniques is provided with the loan. As the loans are repaid, the money is supposed to help start new groups, with technical assistance supplied by existing groups. It is estimated that the individual rate of return to investment (the rate of growth of individual income compared to the rate of growth of the cost of training) is about 25%.

In the early 1970s, an experimental nonformal component was included in the First Education Project to Yemen. Known as the Basic Training Scheme (BTS), the program relied on District Training Centers (DTCs) to disseminate basic vocational skills and literacy training. The initial implementation problems associated with new staff, uncertain official support and low mobilization were overcome in later projects, which emphasized a bottom-up approach and responsiveness to village needs. Community councils were created which advised DTCs on relevant training in response to demand--offering more courses for women, or shortening the length of courses to accommodate a larger number of enrollees.

A Basic Training Fund (BTF) was initiated to enable DTCs to foster and establish village units in surrounding areas. The fund allows for requests from Directors of DTCs to establish satellite training centers. Items financed include civil works and equipment and furniture. Recurrent costs are met by the DTCs. Individually, the items financed by the BTF have been small, but they have had a major impact as catalysts of change and development in rural areas. By 1983, over 75 villages had education centers funded from BTF. Participation rates in Adult Education programs increased from 2,200 in 1980 to 22,000 in 1983.

- **Successful programs have built-in mechanisms to respond flexibly to requests for training from the beneficiaries, on the basis of clearly spelled out procedures and criteria.**
- **Attending to management and institutional issues is critical. Where programs have worked, there have been significant investments in building administrative and managerial capacity.**

### **3. Mobilizing Demand**

**So far we have focused our discussion on the supply side. An equally important part of the strategy is to stimulate the demand for both adult literacy and formal schooling. The direct cost (in terms of tuition) and indirect cost of education (in terms of loss of child labor at home or foregone earnings by adults) are very high, particularly for the poor. Thus the promotion of adult literacy and the universalization of primary education must address these obstacles before it can mobilize demand. One strategy for lowering the cost of education is to provide scholarships, particularly to girls and rural children. Another is to have flexible schedules to accommodate children who must work for their families. Employing the mass media to explain the benefits of education to parents and communities can also contribute to increasing the demand.**

## Strategies for Improving Quality

Jomtien-inspired basic education programs will need to recognize qualitative improvement as a central priority. In most countries, the majority of children attend school at some point. The challenge is to provide schooling that results in learning and a motivation to continue attendance. The nature of the challenge can be seen in a study of enrollment ratio figures between 1980 and 1987 which highlights the extent of the dropout problem (see Table 1).

The study showed that in 1980, the existing enrollment capacity in Grade 1 corresponded approximately to the number of children of official entry age in Africa, and exceeded it by 28% in Asia and by as much as 86% in Latin America<sup>5</sup>. Most importantly, it revealed that a high proportion of those entering Grade 1 dropped out before the final grade of the cycle (45% in Latin America, 40% in Africa, and 35% in Asia excluding China). It is clear, then, that the design of programs that focus on learning improvement must be fundamentally different from the design of the expansion-oriented programs of the 1970s.

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<sup>5</sup>Birger Fredriksen, Increasing Foreign Aid for Primary Education: The Challenge for Donors, PHREE/90/30, Washington, DC: World Bank, 1990.



**Table 1: Enrollment ratios (including and excluding repeaters) in the first and final grades of primary education, 1980 and 1987. (Percentages)**

	<u>Enrollment Ratio Grade 1</u>				<u>Enrollment Ratio Final Grade</u>			
	<u>Including repeaters</u>		<u>Excluding repeaters</u>		<u>Including repeaters</u>		<u>Excluding repeaters</u>	
	<u>1980</u>	<u>1987</u>	<u>1980</u>	<u>1987</u>	<u>1980</u>	<u>1987</u>	<u>1980</u>	<u>1987</u>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Africa	103	89	84	72	58	57	47	47
Asia	128	132	107	110	75	83	69	77
Asia ex. China	118	124	98	103	61	71	53	62
Latin America	185	177	140	138	68	69	64	65

**Note:** The ratios relate a continent's enrollment in, respectively, Grade 1 and the final grade of primary education (including or excluding repeaters) to the population corresponding to this grade. The ratios for Asia exclude China and Japan.

**Source:** Fredriksen, 1990.

Quality improvement strategies usually require significant up-front investments before efficiency gains can be captured. Few low-income countries will be able to mobilize all the resources needed for large-scale implementation of these strategies. They will need external assistance. But to be effective, aid programs must be restructured by modifying current operational practice and by strengthening research and evaluation at the country level.<sup>6</sup>

#### **A. Modification of Operational Practice**

Three major operational practices need to be modified in order to respond to the current educational crisis in a more effective and flexible manner. First, it is necessary to

<sup>6</sup>See the discussion in Chapter 2.

shift the emphasis from investments in specific projects to programs of educational reform and development. Second, it is necessary to focus on institutional strengthening. Third, it is necessary to provide aid for recurrent and local cost financing.

1. From Project to Program

To be effective in providing external assistance, donors must take a sectoral approach and support institutional development and policy reform. Broad support to a time-slice of a longer-term educational development program will have to replace the conventional project as the dominant vehicle for assistance to basic education. High quality analytical work will be needed to provide the empirical basis for these operations.

2. Institutional Strengthening

Strengthening the planning, decision making, budgeting, financial management, monitoring, and evaluation capacity of the formal and nonformal systems of education and training is key to the sectoral approach of development assistance. Where programs have worked, there have been significant investments in building administrative and managerial capacity.

Institutional analysis and strengthening has rarely been given adequate attention in preparation and implementation of adult literacy programs. Yet, successful programs paid considerable attention to the development of specialized agencies (Nonformal Education Department in Thailand, National Board of Nonformal Education in Yemen Arab Republic). The implementation was phased over a decade or more, allowing the responsible

agencies to learn from experience. Without a well defined institutional framework, adult education programs can be easily run as an appendix to the formal system, lacking the support and supervision needed for successful implementation.

### **3. Support recurrent and local expenditures**

Education is not a capital intensive enterprise, and does not require massive infusions of foreign exchange. However, it does need to be sustained, by recurrent expenditures, which pay salaries and maintain school libraries, laboratories, and buildings. For example, teachers' salaries account for as high as 90% of the total educational budget in some countries. In many instances, these recurrent expenditures are central to a long-term push to build the human capital. But donor agencies have an intuitive -- often irrational -- reluctance to finance recurrent and local costs, even where this is demonstrably the most cost-effective way to support education. Much thinking in the aid community continues to be based on practices that are derived from infrastructure projects. This will not do for an expanded program of support to basic education.

### **B. Strengthening Research and Evaluation**

Implementation of a new agenda for external aid will require building a knowledge base that can inform planners and policymakers about the potential effects and possible pitfalls associated with a particular policy decision. Research in adult literacy is particularly deficient. Most of the research cited as proof of the positive personal, social and economic effects of literacy are actually based on a correlation between years of schooling and these

phenomena. There has been no systematic attempt to assess what the results of literacy acquisition have been. Neither is much known about what it is in schooling that produces all the positive effects that have been reported so widely in the literature.

Clearly, the idea that literacy in and by itself will result in positive social change is not supported by research evidence. However, research into what complementarities are necessary is virtually non-existent. To move ahead, it is necessary to address fundamental questions such as: Do adults have advantages over primary school students in acquisition of cognitive skills and general knowledge? How does an individual benefit from improved literacy? (For example, would a literate farmer know how to apply insecticide and fertilizer correctly without causing environmental damage or personal health hazard if he/she does not also have some rudimentary scientific concepts?). If literacy programs do not consciously embody practical knowledge (such as personal hygiene, family planning techniques, and how to negotiation through institutions to obtain credits or set up business), can the acquisition of literacy alone counteract already adopted habits and create enabling capacity? These types of questions have important implications for the design of literacy programs.

Furthermore, as Bank experience has shown, evaluation (including the assessment of learning achievement) is critical to the systematic process of learning about what works and what does not. Literacy programs must be accompanied by assessment mechanism to show whether or not participants can make use of their acquired literacy skills for some practical purpose. A more solid research base providing evidence of operational success is important

to generating wide public and private support. Those countries ready to implement evaluation and research programs, learn from experience, and invest resources efficiently, will be able to capture an increasing share of education aid allocations.

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