

ISSUES IN HUMAN RESOURCE DEVELOPMENT
PLANNING: RESEARCH AND DEVELOPMENT
POSSIBILITIES

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This thematic paper reviews nine major or emerging issues in education and development, and traces implications for social planners or educational planners. Examples of these issues are: the use of manpower requirements forecasts to shape educational plans; the usefulness of rate of return analysis in planning; the issue of equity in the distribution of educational services and equity of learning outcomes; the problems of blending work, training and education; life-long education; nonformal education; beneficiary participation in the planning of programs for meeting basic needs; and the handling of ideology, dialectics and teleological issues in planning approaches that purport to be objective. Coverage is extensive rather than deep.

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ISSUES IN HUMAN RESOURCE DEVELOPMENT PLANNING:
SPECULATION, RESEARCH QUESTIONS AND PROGRAM RESPONSES

1.0 Background Note

This paper addresses major issues that affect the planning of human resource development. The issues, or problems, emerge primarily in the context of educational planning in the developing countries; although in some cases the issues are foreshadowed by problems that are now emerging in the educational systems of North America and Europe. In some cases, the problems have not emerged fully and in clear form, and the issues are in speculative state; in other cases, a fuller conceptualization of the issues has been developed. For some problems a research agenda for studying the issues has been developed; in other cases, pilot projects and program trials are underway. In the time that elapses between the identification of the issues in this paper and the publication of the paper, full-scale programs may be in place to resolve some of the major problem elements behind the issues.

Hopefully, then, some of this discussion will be overtaken by time and events and rendered obsolete by the response of educators and planners. Any identification of issues is bound into a time and place and limited by the narrowed perspective of the individuals and groups who raise the issues; and this element of social dynamics and the rapid obsolescence of social policy research and commentary may be all to the good. It may indicate only that fads and fashions have changed and attention has shifted; but often it means that yesterday's emerging problems are being addressed in the program responses of today or tomorrow.

The issues of equity and social justice and work and education are discussed briefly in this paper and in greater depth in separate papers of this series.

1.1 Issues and Problem Areas Addressed by Planning

In the literature, educational planning has been conventionally described as having three basic approaches: (1) estimation of social demand; (2) manpower planning; (3) cost-effectiveness analysis (Blaug, 1967; Roger and Rucklin, 1971, p. 224). This list can be lengthened to cover about 20 themes, based on a review of recent publications addressed to the question of new issues in educational planning, (IIEP, 1964, IIEP, 1971; OECD, 1973; IDRC, 1976; UNESCO, 1970; Faure, 1972; Platt, 1970).

Many of these themes (eleven) are mentioned by one or two sources,¹ but nine issues were cited with greater frequency: the three "classic" issues already mentioned: (1) social demand; (2) manpower forecasts; (3) cost-effectiveness, plus the following: (4) integrated planning; (5) planning for increased participation at local levels; (6) life-long education; (7) planning for increased equity and social and economic justice; (8) work-related education (including the problem of the educated unemployed); and (9) the broader context of development objectives and ideology.

¹These include issues of new educational media; innovation more generally; case study analysis; problems of assessment and response to "basic needs" of rural and poor areas; public participation in planning; higher education; long-range futures; management and administration (problems of plan implementation); cost and finance; evaluation; and non-formal education. In the United States, in the face of declining enrollments and shrinking school budgets, the topics of decremental planning, or "managing for decline" have become prominent of late.

The last category leads to a vast ramification of issues, the main branches being planning education for "Development," as it has been conceptualized by neo classical economists and implemented through multi-lateral bi-lateral assistance programs from capitalist and sometimes socialist countries, and the critiques, if not the alternative programs of the Marxian and "radical" groups, who operate primarily in the affluent countries of the West. The issue of "deschooling" for the developing countries is raised and debated as an issue primarily by commentators in the richer countries. Education as a form of cultural imperialism, and education as a vehicle for creating social and economic docility and political dependency are also raised, primarily by critics in the richer countries and within some intellectual enclaves in the poorer countries. Though it is difficult to detect mass resonance to the themes raised by radicals and Marxian political economists, the consciousness of some planners and some U.S. politicians and bureaucrats may be rising as a result of discussions of these issues.

Each of these nine main issues will be briefly reviewed. Some have methodological implications which are considered later. Almost all these issues have implications for the design of educational performance indicators. In addition, most bear directly or indirectly on the rationale for non-formal education, reflecting some of the appeal of educational planning aimed at processes outside the formal school system.

2.1 Social Demand

Forecasts of social demand for education usually work from statements of national goals which specify universal, or near universal, coverage of an age group in formal schooling. Targets for schooling, usually through primary and sometimes through middle and secondary levels, are based on demographic forecasts in which the relevant age group is projected, and a given proportion of that age group is set as a coverage target.

The bases for the forecast are the standard components of demography, a base year population, additions to the population through births, reduction of the population through deaths, and net changes in the population (plus or minus) through migration. Fertility, mortality, and migration rates determine the basic population projections.

Other factors, beside the population size and structure influence, the effective demand for schooling, especially at higher levels: income levels and distribution; private costs of education; non-formal schooling opportunities; job markets and requirements; shifts in cultural norms; political pronouncements affecting social expectations; and the local accessibility of educational opportunities. University application levels, for example, are especially sensitive to non-demographic factors. Rises in tuition and declining scholarship funds have had obvious effects in the United States.

Enrollment trends are often not picked up early in planning cycles, though planners and analysts are attempting to remedy this (National Commission on the Financing of Post-Secondary Education, Financing Postsecondary Education in the U.S., and A Framework for

Analyzing Postsecondary Education Financing Policies, 1975). Estimation of enrollment rate responses to changes in tuitions and scholarship funds through regression analysis is beset with methodological problems, even when large data bases, such as HEGIS (Higher Education General Information Survey) and CFAE (Council for Financial Aid to Education) are available, a point that will be amplified in later sections on research and analysis methodologies which support planning.

Major shifts in social demand have occurred at lower levels of the education systems chiefly in times of significant political change. Indeed, demographic-based planning came to the fore at the time of UNESCO's involvement in educational planning for newly independent nations during the sixties. In that era planners were given a simple mandate for setting educational targets. Political leaders decreed that there would be universal primary education for children in certain age groups, usually 6 to 12; hence, it was only necessary to project the future numbers in the age group and apply a proportion, somewhere close to .95, to the age group. This yielded estimates of school entrants. Entrants and existing enrollments were survived through school levels using wastage or flow rates, and from this step planners estimated enrollment targets to be covered. To the resulting enrollments target, planners applied simple input ratios of student/teacher, student/classroom, to estimate resources required to fulfill the plan targets. In most cases plan targets were never fulfilled, but the planning approach was straightforward (Davis, 1966; UNESCO, 1970).

In the United States in recent years demographic based planning has received more attention as the baby boom ended in the early 1960's and the long slide into declining enrollments followed. Continued

decline is projected up to the 1990's. Demographic based enrollment projections also reveal interesting dynamics, as there are indications, if the U.S. Bureau Series II projections are credited, that the enrollment decline will end, at least for a time. Early grade enrollments will begin to rise (Davis and Lewis, 1977), as live births increase in the present period, and late in the next decade a new increase in enrollments, but not a boom, will occur.

Demographic analysis continues to be important as some nations move from lower to higher stages of development, and developed countries experience social and economic changes which markedly affect population dynamics. Demographers are constantly improving their methods in benefit of planners, although no methodology gets around problems of estimating future fertility changes. More research is needed, also on the sensitivity of demand for education in response to factors other than demographic change.

1.2 Manpower Planning

The history of developments in manpower planning and a review of the current state-of-the-art are covered in greater detail in other papers of this series. Early contributions to theory and models were made by Tinbergen and Bos (1965) and by Correa and Tinbergen (1962). These models traced manpower requirements expressed in general educational attainment equivalents directly from forecasts of national aggregate growth in the economy. Very general estimates of educational output requirements were derived without the intervening step of relating growth in sectors to employment, occupational structure and, thence, educational requirements.

The more conventional approach to manpower requirements planning first forecasts employment within sectors by occupations and derives educational "demand" from education/occupation coefficients. Current

stock of manpower in the work force is wasted over time by death and retirement rates, increased by projections of education and training output and the resultant is subtracted from the projected manpower requirements. The net surplus or deficit of manpower requirements expressed in education equivalence is used as a plan target for the education-training system. Parnes (1962) and the OECD economists (1967) made substantial contributions to development of the method in practice in the Mediterranean project and later in a transfer of the approach to Latin America (Argentina). The same conventional approach was used by Platt and Davis in Chile (1964), and is illustrated in a methodological case in this series. The approach is widely criticized by academic based economists and widely practiced by planners in the field.

Other papers in this series describe the criticisms of the method leveled by university-based economists and reinforce a point made earlier by Davis (1966) that though the method is criticized (Blaug, 1967; Daniere, 1965; Woodward, 1974; and Freeman, 1975), it is at the same time widely used by planners in the developing countries. The bulk of the criticism is centered on assumptions of fixed, and sometimes rigid, occupational structures within sectors and industries, when in reality, occupational distributions within industry could differ by technology, scale, organizational patterns, culture, custom and whim. When coefficients, reflecting the occupation by industry distribution, were lifted from one country or enterprise and plugged into the plan of another, the underpinning of rationality was suspect. The methodology was not improved much by deriving the coefficients from regression analysis which averaged the patterns of several countries, or from historical analysis of past patterns within the same country.

Even had the occupational and educational coefficients had a sounder basis in the original analysis, changing patterns, some technological, others cultural, some whimsical, undermined the projections within brief time periods. The manpower approach was also criticized for ignoring labor price and market influences on demand and supply, and for other simplifications, but the method was applied and used to shape policies, plans and programs, because it was understandable to policy makers and planners, and because alternatives, such as rate-of-return, had blemishes as well. Though demand for manpower studies slackened some in the early 1970's it appears to be back strong in countries which require some quasi-rational basis for setting educational policies according to economic plans. In the United States, manpower planning is done at both the national and local levels. At the local level, the results do sometimes influence policy and program developments, and hope persists that better models, more timely processing of current data, and development of more sensitive trend indicators will yield more accurate results.

Several current developments in the manpower planning literature deserve note. One is increasing recognition of manpower planning and benefit-cost analysis as complementary approaches to the same problem, especially when the focus is on specific occupational and training categories. Consequently, the two approaches deserve integrated rather than separate analytical formats. (See Somers and Woods' Cost-Benefit Analysis of Manpower Policies, 1969; also Hardin and Borus, 1971.)

Manpower planners in the Dominican Republic (1974) used conventional demand-supply forecasts, but supplemented the overall analysis with

rate-of-return studies and disaggregated studies of supply/demand differences in sub-national labor markets. Increasing attention is being given to labor market processes as mediators of manpower policy outcomes. Theories of labor market segmentation, in particular, help explain why training programs for "needed" occupations often fail to help the unemployed find jobs. (See Levitan, Mangum and Marshall, 1976; Doeringer and Piore, 1971; Doeringer et al., 1972.)

To improve the fit of manpower requirements forecasts to reality there are a variety of mechanisms for adjusting demand and supply in the workforce without reliance on long-term formal education. Jobs and work can be rationalized and reshaped; price changes in the labor market can reshape supply and demand; non-formal education and training can cut down lag time (particularly notable were the crash efforts in war time that rationalized the organization of work differently and trained accordingly). There is also re-training on the job, and employment support efforts, which cover location of job vacancies and facilitation of entry, relocation of workers, and counseling and job support. The provision of education and training that prepares future workers to adapt to changing job requirements has been the age-old aim of general and basic education; and this idea has been developed recently within vocational education by training for job families or clusters and supplementing basic preparation with piece-wise training and re-training.

With all these mechanisms possible, one might well ask why manpower plans are needed at all? Evidently, manpower forecasts are useful when the gestation period for specific skills is very long; where requirements are high and formal; where there is need to coordinate creation of modern sector jobs along with new

education and training (when this fails there is the pattern of emigration among highly skilled occupations from poorer to richer nations); where the data exists for this kind of planning, and where policy makers and political leaders need some understandable explanation for allocating scarce resources for advanced education and training in the face of manifest needs and shortage of coverage at lower levels of education. In the latter case, manpower planning may be useful but not very socially attractive, and the abuse of the rationale has been noted by planners.

Assessment of the state-of-the-art in manpower forecasting indicates that some forecasts do have reasonable accuracy, or at least the forecasts agree with the way things come out at some future date. Corvalan (1966) assessed several manpower forecasts in Chile and found that some of them came out as forecast. The U.S. Bureau of Labor Statistics has attempted to assess the accuracy of its own manpower projections, in evaluating the ten year forecasts from 1950 to 1960 (1974). Of 108 occupations, only nine were dead wrong; another 24 were substantially off but in the predicted direction (generally because of under-estimates of growth rates in expanding sectors); and the rest were basically accurate. There is enough accuracy in the method so that it persists, and of late the demand for manpower forecasting seems to be rising again, especially for micro level analysis of requirements in special sectors, e.g., health, key industries and modern agriculture.

The need for manpower planning is perhaps greatest in less developed countries: the gaps between supplies and needs are large; key occupations for "modernization" may require educational changes all the way down to elementary school; and there is likely to be a weaker infrastructure of short-term adjustment mechanisms, similar to

those listed in preceding paragraphs.

4.1 Cost-effectiveness Analysis

Issues of educational cost-effectiveness can be addressed by various methods, including benefit-cost analysis, rate of return analysis, and by most studies which assess external efficiency, effectiveness, or educational relevance within a framework of costs and resource constraints. Here, the chief concern is with general trends in the application of cost-effectiveness approaches, and the kinds of new questions being raised about educational "effectiveness" in particular.

Picker, in a report accompanying this series, will outline a set of schemata which indicate how effectiveness can be assessed through examination of a sequence of relevance relationships between educational objectives and outcomes. If this conceptualization holds, it indicates that even the most ambitious and competent studies, for example, the Coleman study of Educational Opportunity (1966), or the International Study of Educational Achievement (1975), have covered only a limited segment of relevance relationships of education to economic outcomes.

It is traditional to look at "costs" in terms of monetary resources, and "effectiveness" in terms of one or more quantifiable measures of progress toward specific objectives (see Figure 1). For actual policy decisions, however, the operational considerations might be exactly the reverse: the most important costs may turn out to be non-monetary costs incurred as side-effects of the intended outcomes; meanwhile, the political push for program implementation may hinge upon monetary benefits to implementors, as distinct from actual services delivered to the ultimate client.

Figure 1
Cost Effectiveness

Type of Factors to be Considered in Computing Cost-Effectiveness			
	Monetary	Other Quantities	Qualitative
Costs	(1)	(3)	(5)
Effectiveness	(2)	(4)	(6)

During the sixties, considerable research went into estimating the monetary rate-of-returns to different types of educational investments. Most studies recognized, however, that many educational benefits cannot be monetized. Consequently, work has tended to shift from cost-benefit to cost-effectiveness studies, some involving non-monetary objectives. One approach emphasizes meeting fixed targets at the least cost, another aims at the maximization of objectives subject to fixed cost constraints. In either case, cost-effectiveness analysis shifts the emphasis to questions of economic efficiency in undertaking educational missions, beyond the more fundamental (but often politically redundant) question of whether to undertake a mission in the first place.

The PPBS approach, popular in the late sixties, reflects this "mission" oriented approach. Despite its numerous critics (such as Hoos, 1972, and Merewitz, 1971), the basic concept of PPBS is kept alive under various newer guises, such as MBO (Management by Objectives), the Logical Framework approach (used by AID in educational planning),

Zero-Based Budgeting, the Goals-Achievement Matrix approach (Hill, 1968; Lichfield, 1970; Hudson, 1974), and other formats.

Social demand analysis, manpower needs estimates, and cost-benefit analysis have made up the core of educational planning since the early sixties. Almost from the beginning, though, other issues have been addressed, largely in an attempt to bridge the varying perspectives of the economists and the educators; the planners and administrators; the people with long-range models and those with day-to-day problems to contend with. This raises the next series of issues for discussion.

5.1 "Integrated" Planning

Integrated planning refers to coordination of plans and practices among different educational programs and related activities. Often, it refers to coordination between primary, secondary, and higher-level education. Higher education has a tradition of autonomy from state control in most countries, but as college education becomes what high school used to be -- a democratic right rather than a path for the chosen few -- it has increasingly come under state sponsorship and control (Halstead, 1974). In the United States, state and federal planning for higher education received major impetus under the Morrill Land-Grant College Act (1863), and again under the Higher Education Facilities Act of 1963. War-time government contracts with universities also set the pattern for close coordination of academic programs with industrial, military, and other governmental programs, to a degree found in few countries outside the U.S. (Kerr, 1963). The Newman study (1971), Fleischman Report (1973), and the Carnegie Reports (1973), were attempts to analyze education in a more comprehensive and integrated fashion than was traditional in the United States. Integrated plan-

ning has increased in many states, and surveys of this work indicate that most states are talking about comprehensive planning, even if performance does not always follow the promise.

The concept of "integrated" planning also refers to overall educational reform, with attention not just to quantitative targets, but curriculum overhaul and new infrastructure -- for example, management, program evaluation, media development, curricular design, and textbook production. There are cases where planning followed reform, as in El Salvador, where it accompanied reform, as in Chile, but as yet few clear cases where planning preceded and shaped reform. Reform initiatives more often are stimulated by politicians with political and social agendas; and planners are brought in to tidy up the rationales.

In some cases, "integrated" planning refers to the linking of long-term plans and short-term implementation, particularly through budgeting/planning. PPBS follows logically from this concern. (On implementation of plans, see Pressman and Wildavsky, 1972; Correa, 1975.)

Another form of integration refers to the coordination of educational planning with national economic planning. This was the impetus in the developing countries, beginning in the mid-sixties, for creating national planning offices in which education was planned as one sector of national economic development, or education was planned under a more general "social sector" which included health and social welfare programs. From viewing education as a sector, came the approach to planning the development of the "national learning network", which was to include formal and non-formal education and training, and from a feat of the imagination never realized in practice came the planning of all those institutions and programs which contributed to human learning in a

national domain.

Following the notion of integrated planning of the education sector came the initiatives, largely based in USAID, for supporting planning with "educational sector analysis" and "educational sector assessment". Robinson (1972) has written, though not published, extensively on "sector analysis", and a major enterprise for carrying out sector analyses was launched in the Latin American region of USAID. Sector assessment is a less ambitious form of sector analysis, in the sense that it is limited to the analysis of existing data, rather than the gathering of new data as in a full-fledged analysis. Both analysis and assessment support planning, although they need not result in conventional educational plans. The most ambitious attempt at sector analysis was undertaken in El Salvador where results were incorporated into a recent five-year plan. Sector assessments have gone forward in many countries, mainly in Latin America.

At the same time that there were attempts to make educational planning and analysis more comprehensive, there were efforts to make educational planning fit localized situations better within national frameworks.

6.1 Localization of Planning

The mid-seventies brought a decisive shift of educational planning roles in the U.S. from federal to state and local agencies, particularly in manpower planning. Under CETA (Comprehensive Employment and Training Act, 1973), SMSA's (Standard Metropolitan Statistical Areas) have been delegated planning authority, since these represent logical units for defining labor markets (U.S. BLS, 1974). In previous decades state-level control meant quite the opposite -- an attempt to bring

central control over otherwise uncoordinated local institutions.

(See Halstead, 1974)

Particularly in the context of planning for developing nations, there is another aspect of localization, which goes beyond the downward delegation of authority from central to local experts: there is expression of a need for two-way communication and planning from the "bottom-up". This means, in part, learning from local initiatives, rather than imposing innovations from the outside (UNESCO, 1970). In addition, it reflects a growing appreciation that planners must experience day-to-day realities in the lives of people targeted for improvement. (Hudson et al, 1976; Raper, 1970; Coombs and Ahmed, 1974; Anderson, 1973; Hampden-Turner, 1975; Goulet, 1971) Edgar Dale once observed that the most important ingredient in education is "to enter sympathetically and imaginatively into the lives of others." (Quoted in Tyler and Williams, 1973, p. 31) The same now applies to educational planners as well.

More generally, the increasing emphasis on localization of planning reflects: (a) the gradual diffusion of planning skills; (b) political thrusts toward democratic participation in the planning process; and (c) increasing suspicion that planning models based on highly aggregate data are invalid unless the parameters are "tuned" to local conditions. This last point is critical, and will be taken up in other papers in this series.

7.1 Lifelong Education

A host of commentaries on the importance of "continuing" or "lifelong" education, most notably the Faure Report (1972), have made this a

popular topic in all countries, developed and developing, although in the developing countries planners have been mainly concerned with continuing education directed toward economic ends, re-training and upgrading of manpower, le recyclage de personnel en service, as the term is commonly used in Francophone Africa. Inasmuch as the education and training is often carried on outside of formal schools and for clients older than the school population normally served, for planners "continuing" education is often closely associated with "non-formal" education; and in recent efforts to bring it under study and planning, most of the activity planned is training for jobs, or education blended with work experience and training.

There are several confluent lines of thought on lifelong education. One derives from the idea of work-based education (see Davis and Lewis, 1975). Mincer (1962) has estimated that for the male labor force, on-the-job training is as important (in terms of the size of educational investment) as formal schooling, with a comparable social rate-of-return. Adelson (1971) has examined differential work settings that (apart from capital infrastructure and often without deliberate planning at all) serve to enhance human capital over time, as compared with work settings where human capital "depreciates". Swedish, Yugoslavian and North American experiments in worker-managed production processes also suggest the importance of treating jobs, education, worker capabilities and career possibilities as processes in continual evolution, and not as fixed in a once-for-all certificate of competence. (See Grassman, 1972)

Another premise for the concept of lifelong education derives from studies such as the Coleman Report (1966), showing that inputs associated with formal schooling account for only a modest part of variance in cognitive achievement levels. The effect of the larger

social environment has become more prominent in the literature (see, for example, Jencks et al, 1973), and lifelong education can be interpreted (in part) as an attempt to design that larger environment to enhance learning beyond what formal school can accomplish.

Lifelong education responds also to the realization that people shift jobs in mid-career, often more than once. BLS studies have shown considerable job shifting and inter-occupational, inter-industry, and inter-sectoral mobility, although segmented labor market analysts (Doeringer and Piore, 1971, 1972) would caution that this mobility is the privilege only of better educated workers operating in primary labor markets; whereas the occupants of jobs in the secondary market are stuck for life at low-paying, menial tasks. These workers change only from one bad job to another. Case studies of workers, (Terkel, 1972) do not reveal much mobility -- upward, at least; and follow-up studies of the massive training programs that came out of the War on Poverty, the Job Corps, and the Manpower Development and Training Act, do not indicate that training is a sure path to job improvement, especially for young and underprivileged workers. Still, evidence suggests that continued education and training does associate with continued improvement in job prospects, although the relationship can be influenced by age, race, and social class, the type of industry, social connections, and pure chance. Even if the evidence did not demonstrate that job mobility is created through retraining, people widely believe it in almost all countries, and act on the belief through the pursuit of further education and training.

In affluent societies, education can be considered a "consumption" good and not just an "investment in human capital" (as educational planners used to speak of it, from the economic standpoint of allocating scarce resources). More people are returning to college and university

programs which they could never afford to complete when younger. Planning for service to these groups has been more a concern of institutional planners, attempting to identify and serve new markets. As the enrollment of youth in the normal age-groups for formal study declines, institutions will broaden and reach out to serve a wider age spectrum whose members seek self development through social and cultural studies.

Finally, lifelong education is related to the development of non-traditional forms of education -- correspondence courses, "open universities", non-formal education, educational television and computer-aided instruction, and increasingly diversified training programs in the military. More favorable social settings for lifelong education can also be glimpsed on the horizon: worker sabbaticals (now being experimented with in Sweden -- see Grassman, 1972); wage subsidies for the hard core unemployed (which provides a built-in incentive for firms to raise productivity among workers hired); shorter work weeks and longer vacations; computer-aided "networks" of part-time teachers and learners seeking ad hoc extension-type courses; and stronger roles for government in creating jobs.

In sum, planners have only recently given major attention to "continuing" or "lifelong education", and then primarily in terms of the direct address of programs to training for work and productivity. Economic rather than the consumption benefit of education has been the main concern of planners in developing countries, and this is based on two grounds, neither wholly demonstrated by research evidence; the first, that work-related education prepares people more effectively for productive enterprise, the second that this education and training when carried on outside conventional schools has lower unit costs and

thus greater potential for reaching large numbers in conditions where resources are limited. Neither proposition is wholly supported by evidence, but planners, who long shunned dealing with non-formal education because it was messy and difficult to manage by the numbers, are forced by the weight of conventional wisdom, and the desperate circumstance for some countries where need is vast and resources slim, to attempt to deal with the problem. Most sector analyses and sectoral plans make at least a token effort to address education outside of formal schools.

This leads to a final set of educational issues. They relate less to education as an isolated activity, than to the responsiveness of education to specific problems of social and economic development.

8.1 Equity and Social Justice

The distribution of educational opportunities is a recurrent theme in the planning literature. Often, it appears as simply one item among a list of other educational objectives, as in the present review. Occasionally, reference is made to specific social movements which give "equality" realistic force as a touchstone of social policy. The 1974 Annual Report of the U.S. Commissioner of Education mentioned equality in reference to then-current developments in promoting the rights and opportunities of women. Affirmative action programs in education and employment seek to secure greater equity for members of ethnic or racial groups. Many developing countries have large ethnic, tribal, linguistic or religious minorities who must receive more equitable distribution of social services and social and economic opportunities. Acts to assist the Scheduled Castes and Tribes in India aim to promote greater equity; legislation and social welfare programs designed for

Indian population in Latin American countries have similar aims; and there are increasing attempts to improve inequitable distributions based on tribal differences in Africa. Planners are mandated by foreign assistance agencies to assess basic needs of the rural poor and respond to these needs with new program initiatives.

The general shift of the seventies has been away from economic growth as a sole planning objective, and toward social objectives -- social justice, provision of basic needs, quality of life (Faber and Seers, 1972; Faure, 1972; Dag Hammarskjold Foundation, 1975). The shift has perhaps been manifested more in rhetoric than action, but there are promising signs: Tanzania's Declaration of Arusha (1967) was an explicit acknowledgment of the biases of that country's first Five-Year Plan toward greater social inequality, and it attempted to deal with this problem by a radical shift in priorities, not least in the field of education. The IIEP has recently identified equality of opportunity as a major research theme to be pursued in the late seventies. (IIEP Bulletin No. 1, September 1976, p. 1)

International technical assistance agencies, including OECD, the World Bank, UNDP, UNESCO, and AID, are focusing more explicit attention on the "Fourth World", variously meaning the "25 poorest" nations (characteristically small and landlocked) or the "35 most seriously affected" (those without a share in the growing political strength of the Third World, for lack of oil and mineral resources to bargain with). Within the poor countries, AID has, under the Congressional Mandate, singled out the "poor majority" as the group that must receive demonstrable benefit from technical assistance and grant and loan programs. The rhetoric has shaped planning and programming and presumably will influence implementation and outcomes measured by distributive indicators. In

the nine-question format and schema prepared by AID to guide program planning, analysts are required to provide detailed sets of information to identify and describe the poor majority, their learning and other needs, and the constraints on reaching them with educational services provided under any AID supported assistance program. These requirements, enforced by the assistance agencies, but also covered by laws and regulations of the countries themselves, e.g. Indian Laws for Scheduled Castes and Tribes, have forced planners to develop new schemas, new information formats, new indicators and new analyses.

There is also new recognition of the role of More Developed Countries in hindering more equitable development, through exotic development programs favoring the already-rich (see U.S. General Accounting Office, 1973) technology biases (Dickson, 1975), inappropriate consumption standards (Schumacher, 1973), arms exports, control of media, trade policies, and other indirect policies. Some agencies carrying out research on these issues have also sought ways to inject their findings into policy-making processes. The Economic Commission for Latin America was a forerunner in this tradition; more recent examples are the Intermediate Technology Development Group (London) and the Science Policy Research Unit, based at Sussex University.

One of the most significant contributions to the equity issue came out of the Coleman Report (1966). Contrary to most expectations, the Coleman analysis found that minority (i.e., non-white) populations were not facing a major problem of unequal treatment in terms of access to educational resources, at least as measured in this study. Yet minorities were found to be lagging further behind in achievement with every increment in years of schooling attained. In view of these findings, the authors of the report took a major step in redefining equality to

mean equal educational outcomes, and not simply equal exposure to educational inputs (teachers, books, classrooms, and other learning facilities). The extent to which equality of outcomes can be a guaranteed right in education, a social desideratum, or goal against which to measure successful plan attainment, will be treated in another paper in this series. In any case, equity and equality of outcome as goals offer planners new challenge in their work, and it is certain that plans and planners will be forced to deal with these issues far more thoroughly than in the past.

The Coleman Report and other research, Rotter (1962), also confirmed that a key variable determining educational achievement is the student's sense of efficacy, or control over his/her destiny. This signifies a broadening of educational planning to address other factors in the student's environment, besides schools, that affect achievement, particularly factors determining the sense of being "an effective person."

These developments are another example of the blurring of lines between educational planning and the larger context of policy-making for social transformation. This is seen in another educational issue which has come to the fore in recent years -- the connection between education and work opportunities. The problem addressed here is the gap between schools and jobs that manpower planning has failed to bridge.

9.1 Education, Work and Employment

The U.S. Office of Education Annual Report (1974) cites a current Gallup survey on why people want education for their children. The first reason given is "to get a better job." Reflecting a similar concern, the Faure Report (1972) proposed a shift in emphasis of educational planning away from aggregate economic objectives toward more specific social objectives with major attention to employment. This

concern seems to have arisen from the growing evidence that unemployment can persist even among persons with advanced training geared to national needs. According to Turnham and Jaeger (1971) the average education of the unemployed has been rising in less developed countries. With this problem in view, Edwards and Todaro (1972) have made a strong plea for educational investments complemented by parallel investments in job-creation activities.

Davis ("Education and Work", Harman, 1976) reviews the limitations of formal schooling in preparing people for work. One problem for policy makers is that though formal schooling may have little relevance for preparing people for work and production, it does provide a powerful psychic return -- expectation of enhanced opportunity -- which impels parents and children to demand more formal schooling however badly it prepares students for work, and however unlikely school credentials are to lead to attractive employment.

While planners and policy makers recognize that education has other aims in addition to preparing workers, there remains the problem of changing schooling in order to improve the relevance of education to work and production. One possibility is to bring schooling and work closer by blending the two in the education and training of workers. China offers the longest, though not continuous, experience in the blending of work and education, with large trials of work cum education beginning in the Yen-an period (Seyboldt, 1969) and running through the present (Jen-min Jih-pao, articles appearing 1973-76). China with mobilization around a broadly accepted ideology has blended work, education and political and social ethics in a way that seems to prepare workers better for a certain range of work requirements. It is less

clear that this success carries over to educating people broadly for advancing basic science and enhancing knowledge (see "Planning Education for Employment" paper in this series).

In China over the years there has been cyclic movement away from formal schooling and toward work experience and then back toward formal education again. In the Western countries, where there is no mobilization based on an accepted central ideology, planners may have to try other routes. One possibility is the redesign and re-structuring of work and jobs to provide more psychic satisfaction to workers. Some of the possibilities along this line are covered in Work in America (a report of the Special Task Force to the Secretary of Health, Education and Welfare, Cambridge, Massachusetts: The MIT Press, 1973). There are also a large variety of programs for blending work and education, and these are reviewed by Davis and Lewis (1975). Planners and program developers are only recently beginning to develop knowledge of the range of program possibilities, outside of standardized and formalistic schooling, that address the problem of increasing the effectiveness of schooling in the preparation of workers.

Gordon (1972) states that underlying the approaches to labor market analysis and manpower planning are three distinct economic paradigms. The human capital, neoclassical approach holds that employment problems arise from the individual worker's lack of competitive skills to fit an open labor market. These skills are developed through education and training. The skills and knowledge acquired through education and training can be viewed as investment in human capital, in that they enhance productivity and contribution to marginal product, which is reflected in increased earnings. There is some recognition of business fluctuations

as a source of the problem, but policy emphasis is on training and other forms of "human capital formation," to reduce structural unemployment.

A second approach focuses on the segmented character of labor markets. (See Cain, 1976). Piore and Doeringer (1971) refer to dual labor markets; Okun (1975) to a "two tier" model; Bluestone (1970) to a tripartite market (core, peripheral, irregular); Levitan, Mangum and Marshall (1976) to a "multiple" model (professional, mainstream, marginal, and submarginal). Labor markets are not unified and open, but divided, or segmented, into primary and secondary enclaves; and workers, even with education and training, are not necessarily able to progress from secondary markets where poor and low paid jobs predominate to primary markets where pay and rewards are higher. Education and training cannot break down these barriers to mobility which are determined by social class differences, ethnic biases and the use of other selectivity criteria than skill generated by education and training. All emphasize the demand side of the labor market, and tend to see training as only one part of a larger policy package. Training must be reinforced with job creation and development, worker support, job restructuring, design of new careers, wage subsidies, anti-discrimination measures and affirmative action. Only with these additional supports will disadvantaged workers attain mobility and break out of poor, secondary jobs. Public service jobs may be needed as employment of a last resort.

A third school of analysis builds on the segmented labor market approach, but focuses on the more pervasive social, political and economic structures governing labor markets. This radical (or structural)

school emphasizes the importance of class differences and capitalist social organization in explaining the failure of marginal workers -- even with training -- to be absorbed into the economy. Research is directed to assessing the effect of the class variable on outcomes which education is supposed to affect, e.g., employment and occupational status, promotion, mobility and earnings.

Though the practice of planning does not yet appear much affected by radical analysis, and public and private pressure for increasing amounts of formal education seem even less affected, the critique will presumably influence planners and policy makers by forcing more conscientious examination of neo-classical assumptions and pious hopes. Policy recommendations emanating from the radical school are not clear, short of major social transformation or the generation of ideologically based social movements committed to finding solutions within well-bounded territorial communities. (The Watts Labor Community Action Committee is a possible example. See Hampden-Turner, 1975.) One theme often expressed by radical analysts, however, is the impossibility of purely local solutions, particularly given the role of multinationals in modern economic systems.¹

10.1 Ideological Bases of Analysis and Planning

Such issues may appear tangential to educational planning. Nevertheless, questions of ideology and worldview, and their underlying theories of social and economic development, have come to be seen as

¹Multinationals, apart from controlling strategic resources, lack the territorial identity to impel a sense of responsibility or political accountability to the communities they affect.

inescapable issues of planning for the seventies and eighties. It behooves educational planners, therefore, to acquire increasing sensitivity to the context in which plans are formulated and implemented. Policy is not cast simply in the mold of technical formulas, but hammered out of contending social priorities, untested theories of social change, and unspoken ideological positions. This leads to the next and final educational planning issue to be considered.

11.1 The Development Context

Simmons (1974) has argued that there are three basic theories to describe the effect of education on individuals and the economy, each with distinct implications for educational planning.

a) The human capital theory has tended to dominate thinking in the planning field with emphasis on the cognitive effects of schooling and the effect of education on productivity and wages.

b) The progressive theory recognizes the effect of schooling on noncognitive outcomes, and the importance of molding preferences toward shared social objectives.

c) The structural theory holds that in an industrial society, there are basic contradictions between the production of a work force ("the primary function of education") and the fullest development of individual capacities. The implications of this theory suggest that "basic changes have to be made in the structure of the firm and other economic mechanisms before the dysfunctions of the school system will disappear." (Bowles, 1976, p. 9)²

²Note the parallel between theories of education and theories of the labor market that are referred to earlier.

This typology may be an economists' eye view of Brameld's schema (1955) which sorts educators' philosophies according to the ends attributed to education: i) Reconstructionism, ii) Progressivism, iii) Essentialism, and iv) Perennialism. Brameld's reconstructionists and Simmon's Structuralists would use education to effect deep structural changes in society. Brameld's and Simmons' progressives would use education to shape knowledge and attitudes which would move slowly, but nonetheless surely, to change society, however it is structured; and this goes back to earlier formulations of the ends of education which were advanced by Condorcet (1791).

Essentialism holds that schools should transmit the basic culture and social laws of a civilization; and Perennialism holds that education should emphasize the eternal principles of goodness, truth and beauty. Here Brameld's scheme does not parallel Simmons', and time will tell how deep or lasting an effect the so called Human Capital approach will have in shaping education. In a few years the disputes of the manpower versus rate of return advocates will sound as outmoded as the disputes of medievalists who got bogged down in controversy over minor matters of dogma or ritual.

Educators would argue that these are disputes among economists in the first place, and no one but economists ever argued (Bowles 1969, has analyzed two sides of this issue) that schools were primarily concerned with preparing people to fill the bill in the work force. Schools have never done this very efficiently, if that indeed was their game, and any rudimentary perusal of goals and objectives stated by educators (the Cardinal Principles, Bobbit's Curriculum Objectives, the ley organica of many Latin American countries, Gandhi's nai talim, and the objectives

of Educational Reform as stated in Chile (circa Frei) and El Salvador, are not heavily freighted with goal statements about producing workers through schooling.

For many professional educators, with whom planners must work, production function analysis is ludicrous; objective functions based on minimization of costs are abominations, and manpower planning, a mug's game played with politicians to increase the perceived practicality of education and hence the allocations. Educators have had quite different objectives: fashioning of the whole man, the making of the humanist, cultural enrichment, liberation of the spirit (not necessarily through revolution) and the fashioning of the citizen. It was precisely because these goals were so intractable to systematic assessment and quantification that planners looked into the economists' "bag of tricks" in the first place.

It is important to note, however, that educational planning, which a decade ago fell in with neoclassical economists' notion of human capital formation, now finds itself addressing the political and social context of development more explicitly (see Hallak, 1974). For example, in a nation giving major emphasis to self-reliance, like Tanzania, educational planners will have different objectives, data needs, and programmatic options to deal with than planners in other countries. (On the role of education for self-reliant development see Breeden, 1970; the Dag Hammarskjold Foundation, 1975; Anderson, 1973). Similar approaches are undergirded by the work of dependency theorists (Furtado, 1972; Frank, 1969; Baran, 1969), as well as the radical critique, but there is, as yet, relatively little change in the state and general practice of the art, which still has not fully caught up with rational planning and neo-classical analysis.

There are also major differences in over-all strategies of social/economic development that directly bear on educational planning. The distinction between "top-down" and "bottom-up" planning has received considerable attention since the late sixties, and implications for educators are beginning to be drawn, particularly for the less traditional "bottom-up" approach. (Hudson et al, 1976)

In sum, educational planning theorists are being forced to come to grips with ideological conflicts -- "excellence" vs. equity, local needs vs. national needs, self-reliance vs. dependence. The influence on planning practice is less clear, though there are concerns expressed. Resolution of these conflicts begins at the level of politics but it also hinges on the design of educational processes, the social commitment of individual teachers, and the social institutions which employ (or discard) graduates of the system. Planning theorists can rarely speak of the school anymore as a closed system or separate entity, though it continues to be separate in fact and treated as such by schoolmen. Educational planning may come to be seen more realistically as a process woven into the larger fabric of social forces, to change or preserve the past.

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