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EDUCATION AND HUMAN RESOURCES DEVELOPMENT*

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Some Conceptual Issues

The relationship between education and human resources development is not a new concern. Whether perceived in narrow economic terms or from a broader perspective, it has been historically a basis of all education systems. In more recent times, the overriding concern of colonial administrations to establish schools to produce western trained personnel and a colonial elite underscored the priority given to the development of local human resources to meet colonial needs (Furnival, 1948). In the aftermath of the Second World War, education was perceived in economically developing countries and in ex-colonial societies as a key to the 'development' achieved in industrialized societies. 'Modernization' theories saw the need for the individual in 'traditional' societies to acquire 'modern' values and behaviour patterns so that socio-economic development could be accelerated (Inkeles and Smith, 1974). Ethnocentricity was inbuilt in this conceptualization, as the modernizing norm was western society.

The association between education and human resources development was articulated most clearly by the human capital theorists in the 1960s. Economists who had tended to give low priority to education as 'consumption', discovered that the improvement of the labour force through education was a form of capital investment for economic growth (Schultz, 1983, 1980; Becker, 1964). Education was identified as the most important 'residual factor' contributing to economic growth (Denison, 1967). Harbison claimed that there was a positive correlation between enrolment and economic growth as measured by GNP. Proponents of 'rate of return' and 'cost benefit' analyses focused on the economic returns of investment in education. It was argued therefore that the education system must produce the type of labour force necessary for economic growth. Hence, manpower projections that matched rigidly labour market skill requirements and the output of the education system, became a 'game' of numbers in educational planning.

Human capital theorists overlooked non-quantifiable and non-economic factors that affected the relationship between education and employment and incomes, such as abilities and motivation, family background, socio-economic structures and global economic pressures. Nevertheless, this theory and its corollary that 'mismatch' between educational output and the labour market was the cause of unemployment in economically developing countries with expanding education systems, such as Sri Lanka, have influenced the World Bank and other development-oriented agencies over the last

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three decades, dichotomized social and economic development and evaluated education exclusively in economic terms.

In the 1970s, in response to increasing inequalities and consequent disillusionment with the distributional aspects of economic growth, the 'new international economic order' and 'growth with equity' emerged as unsuccessful strategies to redress the balances. It was accepted also that the living conditions of a population or human resources were also indicators of development. Since 1974,the 'basic needs' approach, or the improvement of the quality of life of the masses of the people through the satisfaction of their needs such as food, shelter, education and health, gained international currency. Education was seen further to be a facilitator of the promotion also of other critical areas of life such as health, population and environment.

There were neo-colonial overtones and social class bias in some of the thinking underlying issues raised in the last two decades. Minimal basic needs have been perceived to be adequate for the 'masses' in economically developing societies while industrialized countries had the privilege of 'open-ended' development. Others argued that schooling raised aspirations and caused 'qualification escalation' in economically developing societies (Dore, 1976), raising questions regarding 'limits' to education and human resources development in low income countries. Curriculum 'relevance' has been associated with human resources development, resurfacing the colonial prototype of dual and unequal systems of education in the urban and rural environments.

It is not surprising that the 'new' sociologists of the 1970s claimed that education perpetuated the status quo and reproduced inequalities in society and in the economy (Bowles and Gintis, 1976; Bourdieu and Passeron, 1977). Even the current international concern for 'education for all' is largely limited to literacy, universal primary education and the continuing education of the disadvantaged outside mainstream education (UNESCO, 1986). It was only towards the end of the 1980s that ESCAP moved towards an integrated plan in the Region that hopes to bridge the gap created between the economic and social dimensions of human resources development (ESCAP, 1988).

It is significant in this context that the perceptions of education and human resources development of Sri Lankan policy makers and administrators found expression in a different sequence from conceptualization at international level. In the wake of political changes in the 1930s, education was seen in local policy formulation as a fundamental right, as a mechanism to reduce inequalities created by colonial policies, and as an agent of socio-economic mobility (Sessional Paper XXIV, 1943). The underlying concept of human resources development went beyond the limits of the international basic needs of the 1970s and 1980s to visions of open access to the commanding heights of the social and economic order.

It was only with rising unemployment in the 1960s and the influence of human capital theories on local educational planners that manpower projections were envisaged

to provide the framework for human resources development and the output of the education system evaluated in economic terms (White Paper, 1966; Five Year Plan 1972-76). The social dimensions of human resources development were progressively accorded low priority and human capital theories came into conflict with equity issues. Even the concept of 'education for all' promoted at international level had few echoes in Sri Lanka at official level till 1990.

In this paper it is intended to depart from this segmented approach and to examine the role of education in human resources in a holistic framework that encompasses integrated personal or human development as a goal of human resources development, as well as the contribution of human resources development to socio-economic development. From this perspective,

(i) education provides the opportunity to all, irrespective of class, gender, region or any other variable, to develop cognitive abilities, attitudes, values and skills to their maximum potential. Education is a human right and an instrument for human advancement.

(ii) education equips human resources to participate in and contribute to socio-economic development, through the acquisition of literacy, numeracy, social skills and technical know-how, social attitudes, values and vocational competencies to meet national needs and to adjust to changing needs.

It is argued that education per se cannot promote individual or socio-economic development without the support of the political,social and economic environment. The Sri Lankan experience since the beginning of local policy formulation in the late 1930s, is reviewed in order to examine trends and issues that pertain to human resources development within this framework.

Education for All

In the years after the end of direct colonial rule and universal franchise in 1931, Sri Lanka policy makers, reacting to the inequalities created and maintained by colonial policies, saw equality of opportunity as the most pressing social need. The Kannangara Report (Sessional Paper XXIV, 1943) reflects their perceptions. Its two major premises were:

(a) "Every individual must have equal opportunity so that, provided he has the necessary innate ability he can lift himself from the humblest to the highest position in the social, economic and political life of the nation",

(b) "Education in a democratic society should be free at all levels".

Education was thus seen as a basic human right and as an agent of socio-economic mobility for the individual. In providing free primary, secondary and tertiary education, policy makers envisaged outcomes that went far beyond the limited horizons of the social

class differentiated basic needs approach of the 1970s and 1980s. Strategies were proposed to reduce inequalities created by language and religious policy in colonial education in order to enable the fulfilment of these objectives.

In the decades that followed, particularly till the mid 1960s, education participation rates increased and urban-rural and gender disparities declined to an extent that was unique in South Asia. The major policies that contributed to this situation were the allocation of educational expenditure amounting to over 4% of the GNP by the 1960s; provision of an island-wide network of schools, increasing in number from 4537 in 1945 to 9494 in 1971 and to 10,209 in 1988, of which around 95% were co-educational schools by 1971; establishment of Central Schools between 1940 and 1947 chiefly in rural locations to extend secondary education facilities to children from the lowest economic strata; provision of an island-wide scheme of scholarships for post-primary education; and the change in the medium of instruction to the mother language in the whole school system by 1959 and in some university courses in the 1960s.

Age specific participation rates in the 5-14 age group increased from 57.6% in 1946 to 71.7% in 1953, 74.9% in 1963 (76.7% for boys and 72.6% for girls), and 83.7% in 1981 (83.7% for boys and 83.6% for girls). Enrolment in secondary education increased sharply in the 1950s, fourfold in Grades 9-10 and sixfold in Grades 11-12, during these years, and more girls than boys were enrolled in these grades during the last two decades. Educational participation rates of the 15-19 age group increased from 11.1% in 1953 to 36.1% in 1963 and 41.9% in 1981 (Table 1). The university student population trebled from 4,039 in 1959 to 14,210 in 1965. University enrolment has remained low relative to the age group in the population, but the social composition of the student population changed radically from its middle class ethos in 1950 (Strauss, 1951), to a more egalitarian distribution from the mid-sixties (Uswatte-Aratchi, 1974; Jayaweera, 1984).

Table 1: Participation Rates - Urban, Rural 1981

(1981)

Age	Total			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
5 - 9	84.4	84.5	84.2	86.6	86.4	86.9	83.8	84.1	83.6
10 - 14	82.4	82.9	81.8	85.2	86.4	84.4	81.6	82.1	81.1
5 - 14	83.7	83.7	83.6	85.9	86.4	85.6	82.7	83.1	82.4
15 - 19	41.9	41.2	42.7	46.4	44.9	48.0	40.6	40.0	41.3
19 - 24	8.9	8.7	9.0	9.7	9.4	10.2	6.7	9.1	8.7
5 - 24	55.8	56.0	55.6	56.2	55.3	57.3	55.7	56.3	55.2

Source: Census of Ceylon 1981.

According to UNESCO projections in 1960, Sri Lanka was expected to achieve universal primary education by 1980. The pace of extending educational opportunity slowed down after the mid-sixties, and despite the Constitutional Directives to eradicate illiteracy and provide universal education (Constitution, 1978), these goals have not been realized even in 1990. Around 8%-10% of an age cohort never enter school, around 75% year one entrants reach year six, 55% reach grade 9 and 25% grade 12, and 2% enter higher education institutions. Hence education for all even at first level has yet to become a reality.

Regional disparities persist reflecting uneven distribution of resources (Table 2).

(i) In at least five districts, 40%-50% of schools belong to the category of 'small schools'. Overall only 4.8% of over 10,000 schools provide science education to GCE (Advanced Level) and half the districts have even a lower percentage of such schools (School Census, 1988).

(ii) School drop-outs are concentrated in low income urban neighbourhoods, remote rural districts and plantations. At the other end, less than 23% of those enrolled in GCE (AL) classes are in science classes in one-third of the districts (School Census, 1988).

(iii) District indices of performances at the GCE (OL) examination in 1987, indicates disparities between an index of 55-60 for Colombo district and 40-42 for Moneragala and Nuwara Eliya, in Mathematics, Science and English (Department of Examinations, 1987).

The non-schooled among the total population declined from 41.6%in 1953, but was still 12.1% in 1985/86. The percentage of the population with at least GCE (OL) qualifications increased from less than 2% to 14% over the same period (Census, 1953; Labour Force and Socio-economic Survey, 1985/86). Around 2% of the relevant age enter the university, but only 20% of GCE (AL) candidates who qualify for university admissions and 5% of all candidates find places in universities. The role of the proposed University Colleges in filling the lacuna has yet to be assessed. Upward socio-economic mobility has been denied to the majority of human resources contrary to the aspirations of the policy makers of the early 1940s.

It is necessary to examine the factors that affected the performance of education in promoting this facet of human resources development. The support or absence of support of a political will appears to have been an overarching factor. As reflected in the views embodied in the Kannangara Report, political will facilitated the implementation of the policy package of the 1940s. The impetus was the socio-cultural pressures from a majority who perceived themselves as a disadvantaged majority and who were able to operate through the political processes in 1956 and 1960. The internal dynamics of education created a social demand for education that outlasted the political will.

Table 2: Disparities in Science Education - 1989

Districts	No. of schools	No. of AL Sc. schools	%	No. of grad. trs.	No. of Sc. grad. trs.	%	Tot. enrol. Gr. 12-13	Tot. Sc.enrol. 12-13	%
Colombo	249	42	16.86	8329	431	5.17	16,107	7564	46.96
Homagama	204	10	4.90	4839	72	1.48	5,006	1149	22.95
Gampaha	341	24	7.0	7791	167	2.14	9,845	1149	22.95
Minuwangoda	245	16	6.5	43.26	92	2.12	4,385	1410	32.15
Kalutara	456	23	5.0	80.44	171	2.12	10,159	3406	33.52
Kandy	682	35	5.13	11,692	279	2.3	16,065	4683	29.19
Matale	310	10	3.22	3965	65	1.63	3,692	1031	27.92
Nuwara Eliya	454	10	2.2	3870	50	1.29	3,018	520	17.22
Galle	504	33	6.5	8085	196	2.42	12,189	4029	33.05
Matara	397	19	4.78	7642	138	1.8	8,817	3119	35.37
Tangalle	310	14	4.5	4614	122	2.64	5.23	2127	37.16
Jaffna	480	36	7.5	5738	350	6.09	9,862	3801	38.54
Kilinochi	75	3	4.0	680	15	2.2	647	105	16.22
Mannar	103	5	4.85	703	28	3.98	806	146	18.11
Mullaitivu	84	4	4.76	513	19	3.7	722	170	23.54
Vavuniya	125	3	2.4	640	26	4.06	530	118	22.26
Batticaloa	244	11	4.50	1889	75	3.97	2,374	795	33.48
Amparai	153	5	3.26	1787	20	1.11	1,744	274	15.71
Kalmunai	169	14	8.28	1916	60	3.13	3,587	1687	47.03
Trincomalee	204	10	4.9	1926	55	2.85	1,451	496	34.18
Kurunegala	389	18	4.62	6579	131	1.99	8,312	2806	33.75
Kuliyapitiya	283	12	4.24	3978	81	2.03	4,099	794	19.37
Nikaweratiya	275	5	1.81	3252	53	1.62	2,652	286	10.78
Puttalam	162	5	3.08	1560	22	1.41	803	165	20.54
Chilaw	168	10	5.95	2875	88	3.06	3,253	10.96	33.69
Anuradhapura	543	17	3.13	6115	76	1.24	4,631	1414	30.53
Polonnaruwa	195	6	3.07	2624	50	1.90	2,135	475	22.24
Bandarawela	543	22	4.05	7105	138	1.94	7,373	2211	29.98
Moneragala	203	5	2.46	2957	26	0.87	2,155	454	21.06
Ratnapura	586	24	4.09	7586	175	2.3	7,960	2375	29.83
Kagalle	605	20	3.30	7579	133	1.75	8,958	2435	27.18
Total	9741	471	4.83	141198	3404	2.4	169060	54500	32.23

Source: Based on Annual School Census, Ministry of Education 1988

After 1965, the spectre of unemployment and the influence of human capital theories dimmed official interest in extending educational opportunity. In the 1970s, presumably in the shadow of the ILO Mission's (1971) structures on the oversupply of the 'educated' and 'mismatch', other mechanisms were used to democratize education. A common nine year curriculum including mathematics, science and vocational subjects was introduced in all schools. District based quotas were used for university admissions to equalize opportunities in disadvantaged districts; a mechanism that denied opportunity of educational advancement to Tamil youth and embittered them, and drove Colombo based professionals overseas; and at the same time relegated to near oblivion the reduction of district wise disparities in educational provision.

In the 1980s, political will appeared to be reflected in the provision of free textbooks from Grades 1-10 and the Mahapola Scholarships, but educational opportunity was a non-issue at official level. Further, non-formal literacy classes for out-of-school children introduced in 1981, and plantation education received low priority, and the continuing unequal distribution of resources for education reinforced and even widened disparities.

Economic resource constraints to educational expenditure were exacerbated by the reduction of social sector expenditure in response to structural adjustment policies over the last decade. Allocation for education reached the lowest point of 2.3% of the GNP and 6%-8% of the budget in the 1980s. Poverty, aggravated by inflation and decline in real incomes, caused once again by structural adjustment policies, affected the utilization of educational services, particularly in pockets of educational and economic disadvantage.

It appears therefore that education was constrained by forces generated by its external environment in meeting needs and could not compensate for deficiencies in the socio-economic environment of individuals. If education is to assist all human 'resources' to achieve their potential, it will be necessary in the 1990s at least to introduce compulsory education in formal institutions or non-formal centres, promote complementary non-formal mechanisms to bring out-of-school children within the ambit of the educational structure, revamp and expand the concept of central schools of excellence in all districts and sub-districts, and restructure the tertiary education sector to provide viable alternative paths to progress.

Education and Integrated Personal Development

Educational opportunity does not ensure integrated personal development unless the content and methodology of education are directed to this end. Several factors have militated against such a development in Sri Lanka.

Since the nineteenth century, educational achievement has been linked with upward mobility, and achievement has been defined in terms of formal examination qualifications. The examination-oriented curriculum has never been successfully modi-

fied despite criticism, and the competitive ethos has intensified in a context in which higher educational opportunities are limited to a few universities and jobs are scarce. Rote learning for reproduction at examinations is therefore the major activity in schools and universities thus stultifying the educational process.

The massive exercises in curriculum development that took place in the late 1960s and in the 1970s were centralized to achieve uniformity of standards in schools in order to ensure equal opportunity. Access to knowledge increased and there was qualitative improvement in curriculum materials. But, the 'pre-packaged' courses that were introduced, particularly in secondary schools, provided little opportunity for individual initiative, divergent thinking, creativity, or innovation among teachers or students. Bloom's Taxonomy of Educational Objectives (1965) clarified 'lesson objectives' and structured the learning-teaching process, but over-emphasized cognitive abilities. The affective domain, aesthetic sensibilities, creative arts, sports and games, and most importantly value education (as distinct from textbook based religious education) have been virtually jettisoned resulting in one-sided personal development.

The social climate of the Sri Lanka classroom which has tended traditionally to be authoritarian has not been democratized and a participatory approach introduced as the one-way process of teaching 'pre-canned' courses exclusively has reinforced orthodoxy in teaching methodology. Instructions from curriculum development staff to adapt courses to the local situation have had little effect on teachers with targets to achieve, deadlines to meet and inadequate resources such as supplementary materials.

The 'system' and the constraints within which it operates have substituted for human development, academic development for those with high cognitive abilities, and mechanistic learning or non-learning for others, closing the doors on the pursuit of interests that enrich human experience. More decentralization, flexibility and local initiative in curriculum development and teaching, and equal status for co-curricular activities are required to achieve human development that cannot however be quantified by measurement techniques.

Education and the Social Dimensions of Human Resources Development

The social dimensions of development have been undervalued in the power centres of educational planning and research till the 1970s. In Sri Lanka, however, as discussed earlier, the social consequences of inequalities in education were the springboard for the educational reforms of the 1940s.

The benefits of these policies are reflected quantitatively in high rates of literacy relative to economic growth rates. Male and female literacy rates increased from 76.5% and 46.2% respectively at the 1946 Census to 90.5% and 82.8% respectively at the 1981 Census and was 88.6% and 80.0% respectively at the Labour Force and Socio-economic Survey in 1985/86 (Table 3). By 1963, gender disparities in the literacy rates of the school age population were minimal and had practically disappeared in age groups under 35

years by 1981. Literacy rates appear to have stagnated in the 1980s and to have even declined slightly, and Sri Lanka has retrogressed in literacy status in the Asian Region. Nevertheless, literacy rates are relatively high for a low income country, particularly in comparison with South Asian neighbours, and are partly responsible for Sri Lanka's high "scores" of over 80 in the Physical Quality of Life Index (PQLI) and the more recent, Human Development Index (HDI).

Literacy has had a positive impact on other social indicators. It has been claimed that the rising literacy and educational levels of women have contributed to the extensive utilization of health and family planning services and to declining fertility and maternal and infant mortality rates. The participation of women in senior secondary and higher education has led to rise in the average age of marriage to 25 years and to declining family size.

While the overall impact of education in widening the social base of human resources development is visible, it is also seen that education has not contributed adequately to orienting human resources to promoting national harmony and responsible citizenship. Although the Special Committee or Kannangara Committee (1943) identified the need to "weld the heterogenous elements of the population into a nation", and "to increase the common element and foster the idea of nationhood", the socio-cultural processes that influenced education policies, increased the divisive tendencies existing in earlier times. The overt expression of the socio-cultural nationalism of the Sinhala majority intensified the nationalism of the Tamil minority group, and the education system reinforced these trends and conflicts or ignored them. There was no conscious effort made through the education process to promote social integration and national harmony in a multi-ethnic society.

Likewise, the narrow examination-oriented curriculum did not promote values and attitudes that would ensure a vigorous, critical, responsible and co-operative citizenry. Inevitably, there has been an erosion of values, intolerance of differences, and lack of respect for human rights, and an increase in consumerism, commercialism, and external manifestations of 'success'.

Education in Sri Lanka provided a base of minimum competencies for social interaction and development, but failed to build the 'mental structures' that would ensure social stability and transformation. The education system has failed in this task because pressures from the external environment propelled it in other, and often, opposing directions. It is not too late in the context of the traumatic experiences to ethnic and social violence since 1983, to re-examine the curriculum with a view to incorporating content and activities to fill these lacunae.

Table 3: Literacy by Sector and Sex

	Census 1946	Census 1953	Census 1963	Census 1971	CF &[*1] SE Survey 1981/82	CF[*] SE Survey 1981/82	Census 1981	LF & SE Survey 1985/86
All Island								
Total	62.8	69.0	76.8	78.5	85.4	85.4	86.5	84.2
Male	76.5	80.7	85.6	85.6	89.9	89.9	90.5	88.6
Female	46.2	55.5	70.9	70.9	81.1	81.1	82.8	80.0
Urban[2]								
Total	76.2	82.6	87.7	86.2	90.7	89.7	93.3	89.1
Male	84.5	88.5	91.8	90.3	92.9	92.9	95.3	92.4
Female	65.7	74.1	82.7	81.5	88.7	89.8	91.0	86.1
Rural[2]								
Total	60.1	66.4	70.1	76.2	87.8	86.0	84.5	84.6
Male	74.7	79.0	83.9	84.1	91.6	90.1	89.0	88.5
Female	43.0	52.4	63.6	67.9	83.2	82.1	79.9	80.7
Estate								
Total					65.6	64.8		59.4
Male					79.3	78.0		74.5
Female					52.1	52.6		46.9

[*] 1 population 5 + years. 2. Estate sector included in rural in Census

CF & SE survey - Consumer Finances and Socio-economic survey
Central Bank of Ceylon

LF & SE survey - Labour Force and Socio-economic survey
Department of Census and Statistics

Source: Department of Census and Statistics, Central Bank of Ceylon.

Education and the Economic Dimensions of Human Resource Development

Policy and research studies have tended to focus largely on this aspect of human resources development. It is regrettable too that while the social dimensions of education policies were endogenously conceptualized, plans for education and skill development for the labour market have been apt to be determined or influenced by exogenous models and theories. Such initiatives were also associated with selection for secondary or senior secondary education and have therefore been rejected by a population committed to open access to education over several decades. Hence proposals to gear the secondary education system to the needs of the labour market, such as the tripartite system of secondary education and the bifurcation of senior secondary education (Sessional Paper XXIV of 1943; Education Amendment Act 1951), and differentiation into four unequal and chiefly vocational types of schools at the end of junior secondary education (White Paper 1966) were nebulous and social class biassed in conception, and were aborted without implementation.

With rising unemployment rates, human capital theories appeared to policy makers and administrators to be a panacea for educational ills. The identification of a "structural mismatch" between education and employment opportunities, relatively high vocational aspirations of secondary school leavers and an irrelevant content of education as the causes of unemployment or 'educated unemployment' by the ILO Mission (1971), accelerated a policy orientation that was focused largely on the general education system and took very little account of the economic and social realities in the context in which these policies had to operate.

The Five Year Plan of the government elected in 1970 and confronted with a youth insurgency in 1971, placed the blame for unemployment and social unrest on education."The failure, if not the inability of the academic system to provide a meaningful and a productive role for the output of the education system has resulted in fear, frustration and despair, rather than a net increase in social satisfaction. Thus it became evident that an educated population becomes a national asset only to the extent that it is able to fit into the productive occupations that the economy is capable of producing" (Five Year Plan, 1972-76).

Education was clearly expected to equip human resources to meet manpower requirements. It was equally clear, though not officially recognized, that the 'failure' of education to perform this function was due to structural factors in the economy, over which education has no control.

In an economy that differed little from the colonial economy, the decline of prices of export commodities from the late 1950s resulted in the deterioration of terms of trade by 4% in the 1960s, 6.5% from 1969 to 1972 and 15% from 1972-75, and in slow economic growth with growth rates declining from over 4% in the 1960s to 2.9% between 1969 and 1975 (Alailima, 1984). The population 'explosion' following the decline in mortality rates after the anti-malaria campaign in 1945-46, resulted in population growth rates of 2.8%

from 1946-53, 2.7% from 1953-63, and 2.2% from 1963-71, declining to less than 2% from the 1970s. The labour force grew at the rate of 2.7% to 3% from the 1960s to the mid 1970s but employment grew only at 1.5% between 1959 and 1968 and 2.3% between 1969 and 1975. The expanding education system contained the increasing labour force till the mix sixties when it entered the labour market seeking employment opportunities that were rapidly diminishing.

The inability of the economy to absorb the labour force led to increasing unemployment - 7.6% in 1963 (Census, 1963), 15.6% in 1971 (Census 1971) and 19.9% in 1975 (Land and Labour Utilization Survey, 1975). The most vulnerable groups were the youth in the 15-24 age group entering the labour market, and women whose unemployment rates have been consistently double that of men at every national survey since 1969. As the educational levels of the labour force rose with expansion in enrolments, the educational levels of the unemployed also rose (Table 4), and secondary school dropouts and secondary school leavers with GCE (Ordinary and Advanced Level qualifications, and in the 1970s, university graduates have had the highest unemployment rates. There was a dual relationship between the education of human resources and employment. Education was necessary for high level and remunerative employment as the median incomes for different occupational levels indicated. But education did not necessarily ensure access to employment. Education was not unequivocally an economic investment for individuals or the country.

The overall imbalance between the labour force and employment was accompanied by structural unemployment where differential wages and the incentive structure attracted job applicants to areas of employment in the services sector, which in their perceptions, offered potential for stability, income and prestige despite their current saturation. The simplistic analysis of the ILO Mission and local planners that unrealistic aspirations for white collar jobs fostered by the content of education created unemployment ignored the fact that aspirations are created not by the curriculum, but by the reward and incentive structure. Recent analysis of micro data (Gunatillake, 1988) indicated that the aspirations of secondary school leavers for white collar jobs were not congruent with their subsequent behaviour in accepting any employment. Analysis of labour force data in the 1970s and 1980s by Alailima (1991) also pointed to an overall imbalance between the labour force and employment opportunities as the cause of unemployment.

The relationship between human resources development and employment has been found to be tenuous. But policy makers and administrators were influenced by the 'mismatch' theory to attempt to restructure the content of education to meet 'manpower projections'. In their preoccupation with this theory they overlooked the futile experiences since the 1930s in vocationalizing secondary education to produce specific skills for the labour market. The Handessa scheme in the 1930s, the transformation of Central Schools from institutions designed in the 1940s to meet local employment needs, into agents of socio-economic mobility modelled on urban secondary schools, the unsuccess-

ful efforts to introduce compulsory crafts in secondary schools in the 1950s and compulsory agriculture in the 1960s were all indicative of the fact that education by and large, can meet only existing employment needs.

Education Level	1971				1981				1985/86			
	Employed		Unemployed		Employed		Unemployed		Employed		Unemployed	
	M	F	M	F	M	F	M	F	M	F	M	F
No schooling	16.9	44.5	13.0	12.3	8.5	23.7	5.4	3.8	7.1	20.6	4.9	4.0
Primary Education	41.8	30.1	16.1	10.3	24.6	22.6	9.4	4.9	28.9	27.2	17.9	10.8
Primary Education (Incomplete)	34.3	16.3	60.4	57.4	55.5	34.1	72.7	67.6	45.8	31.2	52.3	40.9
GCE (OL)	4.8	4.7	9.5	18.1	7.8	10.8	9.8	19.5	14.1	14.5	19.6	30.6
GCE (AL)	1.4	3.4	0.6	1.0	1.5	4.1	1.8	3.3	2.6	4.1	4.9	12.8
Degree and above	0.9	0.9	0.4	0.7	1.3	2.4	0.4	0.6	1.5	2.3	0.5	0.8
Unspecified	-	-	-	-	0.7	2.3	0.5	0.4	-	-	-	-
Total	100	100	100	100	100	100	100	100	100	100	100	100

Source: Census Reports 1971; 1981; Labour Force and Socio-economic Survey 1985/86

In the 1970s, the largest exercise in using the secondary school curriculum to prepare human resources for employment, preferably in small scale enterprises in the locality, was undertaken with the introduction in 1972 of two pre-vocational subjects. The reform failed because the economy could not absorb the output of these courses in viable activities,while on the other hand, inequalities in the provision of facilities for pre-vocational education threatened to widen disparities in educational opportunity. The experience of Sri Lanka was not unique as Foster's documentation of the experiences of Ghana (1965), and Psacharopoulos, of Columbia and Tanzania (1988) underscored the 'vocational fallacy in education' or the futility of using extensive and unwieldy systems of general education to meet specific employment needs.

In the 1970s too, the official rejection of arts graduates as economically unviable human resources led to the introduction of a scheme of job-oriented courses for university arts graduates to make them employable and 'productive'. In 1971, 51% of arts students were enrolled in courses, such as Development Studies and Public Finance and Taxation, designed by planners. Eventually these graduates could not be absorbed into employment as the jobs for which they were trained were not created, and they were equipped with too narrow a range of content to adjust easily to other employment. A study of women arts graduates of 1972-77 found that 50% of those who had a general arts degree and only 25% of those with the job-oriented Development Studies had jobs (SLFUW, 1980). The Development Studies graduates were employed as teachers and clerks. Another study of unemployed graduates of 1974-77 found that the highest number of special degree graduates unemployed were those who had followed job oriented courses (Marga, 1983).

The experience of the 1970s in restructuring the curriculum to meet specific manpower needs substantiates the argument that, contrary to assumptions, unemployment is caused by the overall inability of the economy to absorb the output of the education system rather than by the inadequacies of the educational curricula. It illustrates further the limits imposed on the economic dimensions of human resources by local and external structural constraints.

Graduate unemployment was contained in the 1980s by the operation of a national scale placement programme under the Ministry of Youth Affairs and Employment that facilitated the absorption of arts graduates into the teaching profession, and into management after training. The experience of this placement programme indicates that short term training after graduation can equip university graduates to fill any niche in employment. In the 1980s also, the University Grants Commission prepared Corporate Plans which attempted to limit admission to specific courses on the basis of manpower estimates. The increase in university admissions in response to current pressures illustrates the vulnerability of employment-oriented human resource development planning to social forces.

Social unrest has revived pressures to vocationalize secondary education. Employment and unemployment trends in the 1980s have favoured flexible short-term training programmes rather than the long term vocationalization of human resources development through the education system. Unemployment rates declined to 15.8% in 1980/81, 14.1% in 1985/86 and 14.4 in 1990 (Labour Force Surveys) in response to the demand from labour intensive lead development programmes such as the Accelerated Mahaweli Development Programme, the Export Processing Zones, and the National Housing Programme. It is significant, however, that much of this employment, particularly in the case of women, has been in casual work and unpaid family work (Rodrigo, 1990) as the demand has been for low cost female labour in factory industry and in subcontracting industries in the informal sector of the economy.

The Sri Lankan experience has disproved the claim that human resources development through education is necessarily an economic investment. The supply of labour by the education system has been under-utilized where no demand exists. Hence the role of education has to be supported by demand factors that facilitate labour absorption.

While education cannot create employment, it can accelerate or impede meeting the demands of the economy. A general education that includes technical skills in major areas of economic development and encourages flexibility and ability to adapt to changing needs for skill development, initiative, co-operation and other positive personality traits is more likely to meet the broad human resource needs of the labour market than the vocationalization of secondary education. The Life Skills Programme in years 6 and 7 with its common content and spectrum of activities needs to be built upon and expanded so that the products of this core programme can cope with all facets of life including employment.

There is however a sector of the education system that is an intermediate agency between education and employment-related human resources development but has been vulnerable to ad hoc interventions that reduce its efficiency. This vocational and technical education sector at secondary and tertiary level has received low priority over decades. It is the least developed sector with the widest gender gap in enrolment patterns.

It is estimated that 125,000 students 'drop out' before Grade 10, 80,000 after the GCE (OL) and another 80,000 after the GCE (AL). Vocational training opportunities at tertiary level are minimal and tend to be confined to Law, Accountancy and Computer Science, the socially acceptable alternatives to university education. It is not clear at present whether the proposed Affiliated University Colleges will offer a viable alternative to AL aspirants.

At senior secondary level, agricultural education opportunities are minimal and the 27 Technical Colleges have had little contact with employers at information or placement level. Non-formal vocational training programmes have proliferated in recent years, organized chiefly by the National Apprenticeship and Training Authority (NATA), the Departments of Labour and Rural Industries, the Non-formal Division of the Ministry of Education, the National Youth Services Council (NYSC) and the Institute of Construction and Training and Development (ICTAD) and a few other 'line' Ministries. They offer together under 100,000 places, a wide spectrum of skills for men, and courses determined by gender role stereotypes for women (Jayaweera, 1990).

However, they lack co-ordination, quality control of programmes, and except in the case of NATA, linkages with employers. Their employment potential has been limited, but it is apparent that under the guidance of the new Tertiary and Vocational Education Commission, this sector can provide short term, flexible training and retrain-

ing programmes, offering an alternative to human resource development strategies that distort the purposes of general education.

Conclusion

In any society, education has been the area in which other social science contributions have converged, interacted or clashed. Education itself needs to be seen from a holistic perspective of integrated human development that subsumes human resources development, irrespective of theories that explain fragmented issues.

Education has been blamed for unemployment, youth unrest, social instability and conflict, but it was seen also that education does not function in a vacuum. Structural factors within and outside the country were observed to limit or support its 'behaviour'. It can be concluded that education can be 'planned' to provide for the optimal development of human potential and for socio-economic development, but the interface between education and its external environment will determine the outcomes of such human resources development.

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