

Education, Development and Change in Malaysia*

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The creation of a modern, national, integrated institution of education in Malaysia was a post-colonial undertaking. The conception of education in British Malaya had been narrowly confining, both socially and scholastically. Indeed, through to the end of the colonial period, education was segregated into separate and disjointed linguistic-ethnic streams: English, Malay, Chinese and Tamil, with impoverishment of resources their common lot.¹⁾ Following the Second World War there had occurred a dramatic rise in enrolments, to be sure; however ongoing organizational discontinuities and constraints resulted in a downward trend in enrolment ratios during the last years of colonial rule.²⁾ The advent of representative government in 1955, and independence in 1957, marked a point of departure for the modernisation of educational institutions and policies. Over the period of independence, education has been systematically assimilated, by stages, with government's emerging goals of national development.

The study of the performance of education systems presents certain methodological difficulties. It is often convenient to portray educational trends by devising input-output tabulations for particular denominators, or variables, e.g. enrolments, expenditures, etc. However, a degree of caution must be exercised in their interpretation, lest logical fallacies intrude through the application of 'closed' systems analysis to essentially 'open' institutions like education. Education cannot be logically isolated from the context of society, from external normative and social influences.³⁾ The following discussion will, therefore, treat the development of the Malaysian education institution as a system, in relationship with the multiplicity of attitudinal, historical and cultural factors affecting the country's economic, political and social life.

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1) On colonial education policy and practice in British Malaya, see Charles Hirschman, 'Educational Patterns in Colonial Malaya', *Comparative Education Review* (1972); Philip Loh Fook Sen, *Seeds of Separatism: Educational Policy in Malaya 1874-1940* (Oxford, 1976); Rex Stevenson, *Cultivators and Administrators: British Educational Policy Towards the Malays, 1875-1906* (Oxford, 1976).

2) Malaya's overall enrolment rate was given as 63 per cent in 1951 (Member for Education, *Federation of Malaya Legislative Council Proceedings*, 19 Sept 1951), declining to about 58 per cent of the eligible age group by 1959: International Bank for Reconstruction and Development, *Economic Development of Malaya* (Singapore, 1954), pp. 142-77. See Part 3, below.

3) Viz. Gunnar Myrdall, *Asian Drama* (London, 1968), pp. 1533-6 and appendix 3, section 2.

I The Evolution of a National Education Institution

Among the priority issues tackled by the inter-communal Alliance Party government following its victory by an overwhelming majority in the country's first general election (1955), was the reform of education policy. Shortly after assuming office, the government appointed a special parliamentary committee under the then Minister of Education, Dato (later Tun) Abdul Razak, to consider the reconstitution of Malaya's fragmented colonial educational system along more integrated, national lines. The Razak Committee's charge aimed at:

“...establishing a national system of education acceptable to the people of the Federation as a whole which will satisfy their needs and promote their cultural, social, economic and political development as a nation, having regard to the intention of making Malay the national language of the country whilst preserving and sustaining the growth of the language and culture of other communities...”⁴⁾

The criterion of acceptability enabled the Razak Committee to combine diverse ethnic and modernising values into a formula for education institution-building. The ensuing legislation of 1957 set the process in motion. The new policy crystallised in an education institution linguistically plural in form, integrally national in content, Malay in its symbolism and developmental in its purpose. Given the enthusiasm of independence, it appeared as if the Alliance formula had indeed succeeded in sublimating the primordial racial controversies of the recent colonial past.⁵⁾

But not for long. The Alliance leadership presumed, with a simplistic utilitarian faith that was to become characteristic of their political style, that the benefits of dynamic growth would serve to overcome latent dissensions in society. Hence, the very rapid expansion of primary school enrolments seemed to demonstrate widespread acceptance of the linguistic and cultural elements of the 1957 reforms among the main ethnic blocs, Malay, Chinese and Indian (Tamil). However, the extent of the consensus achieved did not preclude further dispute over the attendant social, economic, and political functions of the new education policy, as it unfolded. During the 1960s, education was to become, in effect, a policy surrogate for issues of high strategy concerning the direction of national development. For Malaysia, the emergent education system acquired a special significance as an instrument for, and expression of, politically determined goals.

The initial thrust of the 1957 policy reforms focussed on the primary level of education, and particularly on the historically sensitive matters of language and curriculum. In reshaping the heterogeneity of the past, primary schooling was reconstituted into an educationally integrated whole having linguistically separate parts: so-called ‘Standard schools’ in which

4) *Report of the Education Committee* (Kuala Lumpur, 1956), p. 1.

5) On Malaysian education since independence, see, e.g. Francis Wong and Ee Yiang Hong, *Education in Malaysia* (Hong Kong, 1971); R. O. Tilman, ‘Education and Political Development in Malaysia’, *Yale University Southeast Asian Studies*, Reprint Series No. 27; and *Higher Education and Development in Southeast Asia* (I.A.U./U.N.E.S.C.O., Paris, 1969).

the main language of instruction was Malay, and 'Standard-type' schools in which it was English, Chinese (Kuo-Yü) or Tamil. All Standard-type schools provided compulsory instruction in Malay, the constitutionally-ordained National Language; similarly, English was a compulsory subject in all schools.⁶⁾ Thus the Razak policy distinguished between linguistic usage and language status, admitting pluralism in the media of primary instruction while conferring educational primacy onto English as the international language, and Malay as the National Language. Moreover, all Standard and Standard-type schools were to use a common curriculum and syllabus. Indeed, the notion of common educational content was the pivot around which the Razak policy turned. The uniformity of educational content comprised the institutional cement that bound linguistic pluralism to national norms of educational enculturation.

Standardisation of the primary school curriculum was significant not just for enculturation, but also with respect to patterns of socialisation in education. Historically, each of the language streams had its own instructional orientation and, through this, its particular social bias. The English medium followed the grammar school type; Chinese schooling was directed at recreating the literati of the classical tradition of China; Malay education was perceived early on in terms of a fossilised, agrarian, peasantry; while the Tamil school was geared to its constituency of an immigrant plantation and urban *lumpenproletariat*. Just as the English and Chinese schooling reflected their respective literary traditions in educational socialisation, the Malay and Tamil curricula connoted education for social stabilisation, at best, or economic impoverishment, at worst. Following the Second World War some initial but not very definite steps were taken to modernise the vernacular schools' curricula. This process was carried to fruition by the 1957 policy reform. In line with the new policy, the grammar school outlook of English-medium education was now extended to all Standard and Standard-type schools. Public education conceived as plural in form and national in content, became also literary-academic in orientation.

Secondary education received a somewhat more ambivalent treatment under the 1957 policy. The Razak Committee, for its part, had called for the institution of a new, assimilated 'National-type' secondary school network having English as its medium of instruction. The purpose was to bring about the desired linguistic-cultural synthesis at higher rungs of independent Malaya's education system. Serving all communities, this assimilated secondary level would blend Anglophone manner with communal accommodation, after the style of the contemporary Alliance ruling elite. In order to encourage existing Chinese and English secondary schools to conform to the new model, the government for the first time offered full financial support for National-type secondary education. At the same time, privately-

6) Furthermore, provision was made for the teaching of Chinese and/or Tamil (Malay already being compulsory) in English-medium Standard-type schools at the request of 15 or more pupils in any grade.

maintained schools were permitted to continue operating and even qualified for partial grants-in-aid. By pursuing a dual policy of supporting both continuity and change in secondary schooling, conflict was avoided or postponed, though at the price of failure to give momentum to the new directions in post-primary institution-building.

Paradoxically, the successful implementation of the Razak Committee recommendations at the primary school level shifted the focal point of public controversy onto the more ambiguous secondary education policy. As numbers of pupils passing through the Standard and Chinese and Tamil-medium Standard-type schools increased during the late 1950s, the English language basis of National-type secondary education posed an increasingly frustrating bar to their advancement.⁷⁾ Although the issue appeared still to be linguistic, language in fact represented an education policy mechanism regulating pupil progression and, ultimately, access to social status and roles. Bitterness over education language obstacles to social mobility was sharply manifest in the relative success of the more communal-oriented Malay and non-Malay opposition parties in the 1959 general elections. The returned, but shaken, Alliance government felt impelled to take stock of its education policies, for which a review committee was set up under the new Minister of Education, Abdul Rahman Talib.

Whereas the initial Razak Committee formulations comprised, in essence, a formula for inter-communal accommodation, the policy review undertook an exercise in social and cultural engineering. Responding to perceived challenges from their communal flanks, the Alliance leadership came to treat post-primary education instrumentally as an antidote to the incubation of counter-elites. The Rahman Talib Committee accordingly confirmed the post-1957 pattern of primary schooling, and set about harnessing secondary-level education to the imperative of elite formation in the Alliance image. However, since the Alliance had not yet formulated any coherent social doctrine of its own, the policy review fell back on ethno-linguistic differentiation, as between Malays and non-Malays, as the basis of post-primary educational reform.

The reversion to a dualistic approach to secondary education underscored the divergent enculturation and socialisation goals pertaining to Malays and non-Malays. Malays were to be satisfied of the status of the National Language in education, and assured of their vernacular avenue to upward mobility. Their post-primary education could continue in Malay. As regards non-Malays, it was deemed necessary to extend English-language National-type education as a means of inculcating Chinese and Indians with attitudes and values considered suitable. For, English education was regarded as making non-Malays acceptable for co-optation to the elite, in the oligarchic tradition of Anglo-Malay colonial condominium, perpetuated, in a cultural sense, in the Anglophone Chinese-Malay independence partnership. The separate acculturation and socialization patterns introduced into secondary education

7) With effect from 1958, special Malay language classes were attached to otherwise English-medium National-type secondaries, but this was clearly a limited venture.

bore the seeds of future conflict among the second-generation elites of the different communities. Later in the 1960s, government reacted by shifting back to a unitary post-primary model, though the future basis of institutional assimilation would be the National Language exclusively (albeit gradually).

In the meantime, the conclusions of the policy review were given formal legislative sanction in the 1961 Education Act. Henceforward, all publicly-financed secondary schooling had to be conducted in two official languages only, either Malay or English, though Chinese and/or Tamil could still be taught only as subjects. Malay secondary education was free, while government-aided English secondaries had to levy tuition fees. English and Malay also became the joint languages of public examination both for entry to, and graduation from, secondary education. To facilitate the linguistic transition on the part of pupils from Chinese and Tamil Standard-type primaries, a special one-year Remove Class was instituted prior to secondary level. Otherwise, those Chinese middle schools that had hitherto qualified for partial grants-in-aid were now obliged to transform themselves into English or Malay-medium National secondaries, or else remain unassisted, private enterprises. The reaction of Sino-phone Chinese to the 1961 enactment was predictably bitter, and many middle schools refused to comply until financial pressures compelled most to conform to the new policy standard. In doing so, all chose conversion to National-type, as a matter of course. While the Malay medium achieved formal parity for purposes of secondary education, it was not without irony that the new policy thus served the expansion of English-language secondary education, which even tended to attract pupils from the Malay stream.

At this stage there was no suggestion that the grammar school tradition of Malayan education be altered. As during colonial times, the quality of secondary schooling was still strongly identified with literary-style academic education. Popularisation and functional differentiation of a post-primary education were characteristically impugned and dismissed for allegedly devaluing scholastic standards. It was in this light that the policy review fixed an arbitrary ceiling on the pass rate from primary to secondary level at 30 per cent, based on past colonial practice. This then became the criterion for educational planning in the Second Five-Year Plan (1961–65).⁸⁾ For the overflow, quasi-vocational educational alternatives were set up, in distinct subordination to the grammar-style mainstream, and limited in scope and intent.⁹⁾ The prevailing obsession with grammar school education not only circumscribed the development of post-primary institutions, but, even more significantly, also restricted the capacity to cope with functional specialisation. Officialdom preferred to blame public prejudice for the unpopularity of technical and vocational schooling, though responsibility can be

8) *Second Five-Year Plan 1961–1965*, (Kuala Lumpur, 1961), para 157.

9) At the time there were only two technical secondary schools, and two junior trade schools in the entire Federation. Under the 1961 policy so-called 'secondary continuation' and 'rural trade' schools were established as dead-end quasi-vocational alternatives. They never gained popularity and were abolished only four years later when more substantial post-primary reforms were introduced.

traced directly to the grammar school cult fostered and supported by the education authorities themselves.

The third stage of education institution-building evolved out of economic considerations, which induced a further reform of secondary-level education towards a greater consonance with development strategy and planning. The expansion and extension of the old grammarian format led, by the middle 1960s, to an education policy gap between large and growing numbers of primary school leavers, and emerging as semi-educated unemployed, concurrent with a shortage of middle and higher calibre professional, technical and vocational skills. Educational shortcomings had become a limiting factor in economic development. Concern over the country's lagging economic performance prompted the Alliance government, following the 1964 general election, to inject manpower planning considerations into the education policy component of the First Malaysia Plan, 1966–70. In the event, this manpower planning concept denoted the primacy of development goals even over entrenched educational values, and paved the way for far reaching changes in the internal organisation and orientation of secondary education.

The reforms introduced with effect from 1965 divided secondary schooling into two stages, separated by selection and differing in curriculum. At the lower secondary stage, admission was non-selective, open, and the three-year programme offered a so-called 'comprehensive' curriculum combining academic, technical and crafts subjects. Post-primary selection was thus deferred, and the dead-end 'secondary continuation' and 'rural trade' categories abolished. Upper secondary schooling still remained selective, but was now separated educationally and organisationally into parallel academic, technical, vocational and teacher training streams. Agricultural subjects were incorporated in the 'comprehensive' curriculum and, after 1969, agricultural science was offered as an Upper Secondary (both academic and vocational) alternative. A pre-university 'Sixth Form' was similarly divided into arts, science and technical streams. This institutional realignment of Malaysian education connoted a new policy conception in moving towards the rationalisation of levels and types of post-primary schooling in relation to the manpower requirements of the economy.

Although the immediate introduction of open-admission, comprehensive education resulted in an acknowledged fall in standards, especially in the academically-weaker Malay-medium stream, this was now accepted, in the manner of 'positive thinking', as the unavoidable short-run cost of social adaptation for eventual economic development.

The tertiary level of education was to experience at this stage a similar process of institutional reform and innovation. The country's first institution of higher learning, the University of Malaya (founded in Singapore, 1949, Kuala Lumpur Division, 1957; separation and autonomy, 1961), was conceived as an English academy for the scholastic elite, which defined its social composition and educational purpose. Pressures of events (the combination of language politics, educational reforms and social trends during the 1960s) brought about the

official adoption of English-Malay bilingualism at the University of Malaya by mid-decade, followed by the establishment of the Malay-language Universiti Kebangsaan Malaysia (National University of Malaysia) in 1970. Along with the termination of the English social and linguistic monopoly came a broadening of the scope and structure of higher education. Within the conventional universities of the English model, the sciences and technocratic professions were given increasing prominence, a trend reflected in the new foundation set up in Penang in 1969, subsequently renamed Universiti Sains Malaysia (Malaysian University of Science). Moreover, the early 1970s also witnessed the establishment of new types of functionally-specialised tertiary institutions geared to high-level manpower requirements of particular communities in their quest for economic development. These included the university-status Universiti Teknologi Malaysia (Malaysian Technological University) and Universiti Pertanian (University of Agriculture) operating in Malay; and the MARA Institute of Technology and Ungku Omar Polytechnic offering professional and sub-professional courses in technical and administrative subjects, in Malay and English, respectively. Additionally for non-Malays, English-medium pre-university and sub-professional studies were also available at the Tunku Abdul Rahman College. Malaysian education still retained a scholastic bias, to be sure, evidenced in the schools' preoccupation with preparing candidates for university, rather than intermediate employment opportunities. Yet, the emergence of an academically and functionally differentiated tertiary structure underlined the policy trend towards aligning education institution-building more closely with manpower planning for economic development.

The next stage of educational reform witnessed a revival of the language question, this time as part of the political search for symbols of national identity. As the constitutionally-prescribed ten-year term for reviewing its National Language provisions approached in 1967, the communal controversy over future language rights surfaced with renewed passion and extended, by implication, to education as well. Language politics revolved around the increasingly forceful efforts of the newly emergent, modern, Malay-educated elite, with certain factional backing from the United Malays National Organisation (UMNO), senior partner of the Alliance. Together, these ultra-nationalist components of Malay political life endeavored to consolidate the National Language status of Malay and therefore ensure its social rewards. An artful Alliance compromise had the National Language Act, 1967, proclaim Malay the "sole official language" whilst reserving the use of other language for education and certain other public purposes. The long-standing inter-communal *modus vivendi* was preserved more or less intact, but the ultra-nationalist core of Malay demands remained unsatisfied. Malay ultra-nationalism now turned against the rival and non-domiciled English-language education stream. Partly to mollify the fervor among Malays, and partly as a gesture towards the National Language objective of the Act, the Education Ministry decreed the juxtaposition of Malay language teaching upon four minor subjects in the first three grades of

English-medium primary schools, with effect from 1968. Whereas the Malayanisation of the English stream had originally been thought of as a quiet and gradual process, the pace of change was ultimately to be dictated by political events.

The challenge to Malay political primacy apparent in the 1969 general election results and culminating in racial violence,¹⁰⁾ propelled Malay nationalism towards a more strenuous reassertion of the Malay norms of statehood. As a result, the conversion of English schools to the Malay language was accelerated and progressed on the basis of a detailed timetable, subject by subject, year by year, scheduled for completion by 1983. Thereafter English would no longer have the status of a main stream language of public instruction. This would leave Malay as the only educational language ranging over the primary, secondary and tertiary levels. Standard-type schools in the Chinese or Tamil media were as yet unaffected by the conversion timetable. However, they would in any case be reduced to the status of peripheral, virtually terminal primary school languages when Malay became the exclusive medium of post-primary education.

That the target of linguistic Malayanisation was English-language schooling—rather than Chinese or Tamil—pointed to the current political anxieties of the UMNO leadership, the dominant element in Malaysia's ruling Alliance. Earlier Malay suspicions about non-Malay loyalty gradually abated, a tribute to the efficacy of the Razak education policy. They were replaced by a new sense of political rivalry over national status questions. The cataclysmic events of 1969 indicated to Malays that the newly emergent, nationally-educated, non-Malay elite had yet to be induced to accept the established political equation for allocating power. Thus, the conversion of the English stream was calculated to foster shared educational experiences in elite formation, while ensuring that this enculturation process was steeped in Malay linguistic and national symbols. The extension of Malay political norms through the education system to non-Malays conveyed a double sense of belonging: that non-Malays belong to Malaysia, while Malaysia belongs to the Malays.

It is noteworthy that these developments pertained mainly to the territories of peninsular Malaysia, the former Malaya, and only to a lesser degree to the Eastern Malaysian States of Sabah and Sarawak. By constitutional agreement the administration of education in Sabah and Sarawak has remained under State jurisdiction (though federally financed). Policies therefore have differed somewhat from those pursued by the Federal government in peninsular Malaysia. Lately, however, there has been a marked trend towards conformity with the national system.

The building of a national education system in Malaysia had to treat with the fundamental problems of language, culture, social change, economics, and politics, which confronted society. Yet, educational institution-building did not reflect haphazard or *ad hoc*

10) On the Revival of communalist antagonisms in the 1969 elections, see Martin Rudner, 'The Malaysian General Election of 1969: A Political Analysis', *Modern Asian Studies* (1970).

arrangements. At each stage it constituted the outcome of considered policy. These policy solutions were designed to cope with the complexity of social issues involving education, in accordance with the multiple goals of government. Outside the administration, an active public interest exercised its influence as both a stimulus and constraint on policy, and it is significant that the stages of education institution-building were broadly coterminous with general elections. Education policy evolved from an object to an integral subject, or instrument, of national policy-making, producing radical changes in educational organisation and orientations in the process.

II The 'Supply' of Education

Expenditures on education govern the quantum of educational resources placed at the disposal of society at any given time. Historically, education in British Malaya was subject to complex financial treatment, with private and state and central sources participating in its provision each according to its own lights. The shift from considerable private to predominantly public finance of education was matched by the increased predominance of the central authorities, even more than the constitution obligated. Adapting public finance to assume the cost of education institution-building involved the redefinition of certain conventional economic attitudes, budgetary principles, allocative priorities and administrative goals.

Changes in official attitudes and assumptions regarding the economic utility of education heralded the changes in actual policies concerning the public finance of education. In British Malaya education was commonly viewed as a positive thing, for its humanistic value as well as for its role in elite formation. Yet, this same attitude disclosed certain negative assumptions about the economics of education. Colonial officialdom tended to see education as a purely social service, something good and desirable but offering few direct economic returns.¹¹⁾ Education finance was therefore treated as a consumption item in public accounts, which implicitly depleted the financial resources available for investment in economic growth.

It was symptomatic of the character of colonial rule that those groups allowed to participate in colonial administration generally shared this attitude towards education, especially the influential British business interests who regularly insisted that "non-productive" social spending be "cut according to the cloth" of residual finance. They were allied to a traditional Malay elite on the defensive against rural social change. Even those who pressed for the expansion of educational finance, mainly professionals, trade unionists and rural Malay spokesmen, did so on the basis of social service and social welfare criteria rather than in broader development terms, by implication validating the conventional assumptions. One notable exception was the newly ascendant UMNO leadership of Tunku Abdul Rahman, who from

11) *Vide. The Colonial Empire, 1939-1947*, London: HMSO, 1947, Cmd. 7167, p. 107; see also Martin Rudner, 'The Draft Development Plan of the Federation of Malaya, 1950-1955', *Journal of Southeast Asian Studies* (1973), and Gayl D. Ness, *Bureaucracy and Rural Development in Malaysia* (Berkeley, 1967) esp. pp. 100-2.

the unofficial side of the colonial Legislative Council very early advocated mass education as a lever for Malay economic, social and political advancement.¹²⁾ Nevertheless, for the dominant colonial power elite there remained the dichotomy between education as a social service, however worthy its social or cultural objectives, and the hard economics of public finance.

The transition to elected government did not result in a frontal assault on inherited economic doctrine. Rather, the new Alliance government's inclination towards identifying education instrumentally with its emergent national goals served, in effect, to infiltrate an altered conception of education into public finance. With the introduction of the 1957 national school policy, public expenditure on education now came to be redefined as "investment" in the country's political "future".¹³⁾ Still, conventional economic philosophy had not yet conceived of education as being functionally related to economic, as distinct from social or political, development objectives. This was to come later, after it became increasingly apparent during the early 1960s that inadequate human resources constituted a limiting factor for economic planning. The Government's development imperative thereupon absorbed education policy and turned it towards economic ends:

"...the traditional system of education is (now) being reoriented to achieve not only the objectives of nation-building and universal literacy, but also the economic goals of the country."¹⁴⁾

This marked a revision of the policy conception of education, from a mere social (or political) service to a manpower approach centering on human capital formation for economic development.¹⁵⁾

The re-evaluation of educational finance, from budgetary liability to economic resource, signified a cognitive change in the precepts of public accounting, as well. Public financial perspectives shifted over from narrow revenue accounting to broader national and later social accounting.¹⁶⁾ While it may be tempting to explain this movement on the basis of improved government financial capabilities over time, actually the essence of the change was more in fiscal priorities. Thus, during the late colonial period restrictions were applied to expenditures on education at the same time as substantial reserve balances were being accumulated in London. By contrast, the development plans of the 1960s called for greatly expanded public expenditures on education, even at the expense of running down reserves, and borrowing. It has not been so much government's ability to afford education, as its willingness, prompted by decisions in the political sphere and articulated through changes in attitudes, that determined the provision of educational finance.

The First Five-Year Plan, introduced in 1956 by the newly-elected Alliance government,

12) *Legislative Council Proceedings*, 20 September, 1951.

13) Minister of Education, *Legislative Council Proceedings*, 11 December 1958.

14) *First Malaysia Plan, 1966-70* (Kuala Lumpur, 1966), para 491.

15) *Ibid.*, paras. 37, 42-3, 180.

16) Cf. Gayl D. Ness, *Bureaucracy and Rural Development in Malaysia*.

provided for a considerable expansion of public spending on the capital projects of government departments and authorities over the quinquennium.¹⁷⁾ Highest plan priority was assigned to projects related to the export and nascent industrial sectors, while implementation of the new national school policy received second priority. Yet, Education Ministry proposals for some M\$128 m. capital investment were nevertheless pruned by the Treasury's Economic Secretariat, under the direction of expatriate colonial financial officials, to less than half that amount. But even that constituted a three-fold increase, in real terms, over public capital expenditure on education during the previous five-year period. Subsequent plans were to greatly increase the magnitude and scope of public investment, while successive changes in the priorities and machinery of planning influenced education's share.¹⁸⁾

The much enlarged sums involved in the Second Five-Year Plan, 1961–65, were similarly devoted mainly to the development of the state apparatus, especially those parts dealing with 'economic' or 'productive' undertakings. The education target was addressed to the objects of the then-current policy review. Educational objectives were expressed rather simplistically in terms of crude enrolment and demographic relationships. Overall planning perspectives remained fundamentally unaltered, although this Second Five-Year Plan hint at social accounting contained the germ of a new ingredient for education planning. The next plan, termed the First Malaysia Plan, 1966–70, emphasised the mobilisation of investable resources for accelerated economic growth, and in so doing treated education as a factor for human capital formation. Later, social and economic criteria for education planning were brought together and refined in the Second Malaysia Plan of 1971–75, with reference to its radical goal of "restructuring" society along more "balanced" lines of economic attainment between Malays and non-Malays. The Third Malaysia Plan 1976–80, aimed at a strategy of conquering poverty, on strata rather than purely racial lines.¹⁹⁾ Objectives of employment, social mobility and economic nationalism thus rendered education into an integral component of planning for development of the economy.

This evolving planning role for education had a zigzag effect on the ratio of educational investment under the plans. Capital appropriations for education increased absolutely over the successive quinquennia, to be sure. The relative proportion of total public investment devoted to education grew in the earlier departmentalised Five-Year Plans, from eight per cent of the First to 12 per cent of the Second. There followed a decline, paradoxically, under the macro-economic Malaysia Plans (Peninsular Malaysia figures in brackets) to 11.6 (10.3)

17) This Plan, so-called, was never actually published, but its particulars were made known in the *Report on Economic Planning in the Federation of Malaya in 1956*, Legislative Council Paper 14 of 1956. For a study of this plan and its place in Malaysian economic history, see Martin Rudner, *Nationalism, Planning and Economic Modernization in Malaysia*, (Beverly Hills, Calif., 1975).

18) For an historical survey of planning in Malaya, see David Lim, 'Malaysia', in Yip Yat Hoong, ed., *Development Planning in Southeast Asia: Role of the University* (Singapore, 1973), and Martin Rudner, *Nationalism, Planning and Economic Modernisation in Malaysia*.

19) *Third Malaysia Plan 1976–1980* (Kuala Lumpur, 1976), Prime Minister's Foreword, v–vii.

per cent in the First, and again to 7.4 (6.3) per cent in the Second, rising with the priority of social development to 9.4 per cent of the mid-term revision of the Second Malaysia Plan and stabilising at 9.1 (8.4) per cent of the Third.²⁰⁾ The closer integration of education into macro-economic planning was more than merely a gesture in the direction of popular social services. Indeed, the more integrated approach to educational planning led also to increased public investment 'downstream' from the education system, in employment-related industrial developments.

In the event, developmental priorities were allocated somewhat differently by actual patterns of public finance, compared to the original plans. Malaysian planning experience discloses regular and significant divergence in the sectoral distribution of public investment between original plans and their implementation. On the whole, economic and administration/security planning targets were achieved, and usually overfulfilled, while social sector objectives remained chronically underfulfilled.

Education shared the social sector shortfall, though the degree of plan underfulfillment depended on the place of education in the current development strategy as well as government motives and commitment. The First Five-Year Plan achieved only 62 per cent of its education expenditure target, slightly less than the social sector average, displaying the discontinuities between education planning and public finance. Subsequently, development strategy became more consistent in the Second Five-Year Plan, so that its education target was 91 per cent fulfilled, a level unprecedented for social development. Afterward, the shift in emphasis from fiscal outlays to structural reforms in the First Malaysia Plan saw the rate of plan fulfillment drop to 70 per cent, far inferior to the 77 per cent social sector average (all-Malaysia figures; rates for Peninsular Malaysia were 77.9 and 80.8 per cent, respectively). Education plan fulfillment rose again under the renewed urgency of the Second Malaysia Plan to 88 per cent of the revised mid-term target, compared to 94 per cent for the social services and 95 per cent for public investment overall.²¹⁾

The ratio of (public) investment in education to total public investment under the plans experienced a similarly chequered trend. Between the First and Second Five-Year Plans the ratio increased from six to nine per cent as the policy focus shifted from the primary to the secondary level, and commitments entered high gear over the Rahman Talib policy review. The ratio reduced to 7.7 (Peninsular Malaysia: 7.9) per cent of the First Malaysia Plan, but climbed again to 8.7 (9.5) per cent in response to the ethnic re-structuring goals of the revised Second Malaysia Plan.

Objective difficulties exacerbated the effects of policy and administrative ambivalence. Arguably, a good part of the persistent shortfall in public investment in education represented

20) If non-defence-related expenditure only be considered, the Peninsular share for education rose from 6.3 per cent of the First Five-Year Plan to 12.6 per cent of the Second, falling to 11.5 per cent of the First Malaysia Plan and further to 7.6 per cent of the Second, and rising to 10.3 per cent of the Third.

21) *Third Malaysia Plan* table 22-9.

Table 1 Malaysian Development Plan Targets 1956-75

(M\$ million)

	First FYP		Second FYP		First Malaysia Plan			Second Malaysia Plan				Third Malaysia Plan			
	Plan (1)	Actual (2)	Plan (3)	Actual (4)	Plan* (5)	Est. Actual* (6)	Plan (7)	Actual (8)	Plan* (9)	Actual* (10)	Plan (11)	Revised (12)	Est. Actual (13)	Penin- sular (14)	Malaysia (15)
Total public investment	1148.7	1007.0	2150.0	2651.7	3153.6	3610.2	4556.9	4242.9	5868.21	8075.8	7250.0	10255.4	9920	15445.7	18554.9
Economic Sector	780.4	760.2	1477.9	1763.7	2228.7	2210.8	2710.2	2685.4	3898.76	5771.9	4870.9	7349.7	7127	10475.5	12665.1
Social Sector	277.9	138.9	491.0	413.6	797.4	644.7	975.3	752.1	836.02	1132.6	1067.4	1431.0	1449	2511.3	3092.1
- of which Education	95.4	60.9	260.0	236.0	368.0	286.9	470.8	329.4	370.11	765.6	337	963.8	866.6	1296.9	1691.3
General Admin. and Security	90.4	108.0	181.1	474.4	687.5	754.7	865.4	804.9	1133.34	1171.3	1311.7	1474.7	1344	2458.8	2797.6

* Peninsular Malaysia-Malaya, only.

Source: *Report on Economic Planning in the Federation of Malaya in 1956; First Malaysia Plan; Second Malaysia Plan; Treasury Report, 1975-76; Third Malaysia Plan.*

scarcities of suitable resources, pedagogical and other, especially at the more specialised secondary and technical levels and in East Malaysia. The accelerated expansion of education in recent years telescoped the normal gestation period for resource creation, inevitably causing bottlenecks for further expansion and refinement.²²⁾ These scarcities retarded educational investment even when funds were available, though mis-allocations of actual investment (eg the lags in teacher training) compounded the inadequacy of the educational resources base over the long run.

The allocation of public investment within the education system, among the different levels and types of schooling, spelled out the goals and perspectives attached to government's 'supply' of education. A detailed breakdown of expenditures for the earlier period of planning is not available. However it may be inferred that the First Five-Year Plan invested comparatively heavily in the expansion of primary education in order to realize the policy objectives propounded by the Razak Committee. This was eased under the Second Five-Year Plan, by which time the policy review had re-directed the emphasis towards National-type secondary education. Subsequently, the integral manpower approach adopted in the First Malaysia Plan brought about a further re-allocation of internal investment priorities in education (Table 2). Post-primary education now absorbed over three-quarters of actual public investment in education over the 1966-70 quinquennium, with the bulk going to the secondary (51.9 per cent) and university (12.6 per cent) levels. Even so, the secondary school investment target remained underfulfilled almost by half, while for the much vaunted technical type (secondary) schools the investment short fall amounted to nearly 65 per cent. Teacher training suffered an even more severe investment lag, ironically in view of the pronounced shortage of qualified teaching staff for the schools. By comparison the universities did rela-

Table 2 Internal Distribution of Development Expenditure by Level of Education, Peninsular Malaysia, 1966-1975

(M\$ million)

	First Malaysia Plan			Second Malaysia Plan		
	Plan (1)	Est. Actual (2)	Per cent Fulfillment (3)	Revised Plan (4)	Est. Actual (5)	Per cent Fulfillment (6)
Primary school level	54.6	48.5	88.8	87.4	80.2	91.8
Secondary school level	188.7	100.7	53.4	133.2	138.0	103.6
Technical school level	30.8	10.8	35.1	34.0	25.7	75.6
University level	30.0	24.4	81.3	235.4	198.5	84.3
Teacher training	28.5	9.7	34.0	9.0	3.6	40.0
Higher Technical level	—	—	—	7.7	6.6	85.7

Notes: Figures do not total the aggregate given in Table 1, due to the omission of training and other programmes financed under the 'Education and Training' item in the plan.

Sources: *Second Malaysia Plan*; *Third Malaysia Plan*.

22) Cf. *Second Malaysia Plan*, p. 231.

tively well in Malaysia, as elsewhere, having attained over 80 per cent fulfillment by way of attracting a disproportionate—in terms of enrolments, at least—share of realised public investment. This distribution of education investment continued in the Second Malaysia Plan; despite the nominal overfulfillment of the secondary school target, its actual allocation of real investment resources, discounted for inflation, had scarcely been augmented over the quinquennium. The actual distribution of education investment superimposed, in effect, its own pattern of institution building onto the original policy scheme.

The ensuing balance of investment in education represented an effective demotion of the priority of secondary schooling, and teacher training most of all, in favour of enhanced tertiary level development. Although the disparity between plan and realisation for secondary schooling was corrected in the Second Malaysia Plan, the distributive balance remained much the same. Development emphasis on the elitist tertiary level discriminated against populist progression in secondary schooling, and (because of laggard investment in teacher training) tended to sacrifice the calibre of primary education. Yet, this operational re-definition of investment priorities seems to have occurred haphazardly, without regard for rationality in the development of educational resources. Such deviations from planned institutional priorities consequently lowered the efficiency of investment in educational development.

Internal rates of return attributable to the various levels and types of schooling provide a convenient indicator of the net marginal revenue product of education investment, together with attendant current outlays.²³⁾ In his pioneering study of the returns to Malaysian education, made half-way through the First Malaysia Plan period, O.E. Hoerr²⁴⁾ concluded that for Peninsular Malaysia (e.g. Malaya), at least, educational investment yields a comparatively high average revenue product, socially as well as privately (Table 3). Internal net social rates of return to all levels of education were judged favourably, compared to the officially-determined public opportunity cost of capital, set at 10 per cent.²⁵⁾ In particular, secondary-

23) The internal Rate of Return to education is that discount Rate that equates the discounted flow of education costs to the discounted flow of income benefits, and is the equivalent of the net marginal revenue product of education capital; *vide.* T. Schultz, 'Capital Formation by Education,' *Journal of Political Economy* (1960) and G. Becker, *Human Capital* (New York, 1960). On the limitations of education investment analysis, and Rate of Return models generally, see Stephen Merrett, 'The Rate of Return to Education: A Critique', *Oxford Economic Papers* (1966), pp. 289–303.

24) O. E. Hoerr, 'Education, Income and Equity in Malaysia,' Reprinted in *Readings on Malaysian Economic Development*, ed. David Lim (1975). This remains the only study of the returns to education capital in Malaysia, to date. The distinction between social and private rates of return reflect the usual differences in the education costs actually incurred by the state and private beneficiary, on the one hand, and discontinuities in the flow of benefits from education in 'insulated' labour markets like Malaysia, on the other. Ozay Mehmet, 'Manpower Planning and Labour Markets in Developing Countries: A Case Study of West Malaysia', *Journal of Development Studies* (1972), pp. 277–289.

25) This is the rate used by the Economic Planning Unit of Malaysia for weighing social preferences in public investment. Another rate for comparison would be the interest rate earned on overseas reserve balances accumulated owing to the long-standing Treasury 'Reserves Syndrome'. In 1969, yields on long-term US and UK government bonds, an indicator of the Returns to Malaysian Official Overseas Reserves, ranged from 7.48 to 8.82 per cent; Bank Negara Malaysia, *Annual Report and Statement of Accounts, 1970* (1971), pp. 7–8.

Table 3 Internal Rates of Return to Education in Peninsular Malaysia, 1967-8

	Cumulative			Marginal			Cumulative Social Benefit/Cost Ratio at 10% Discount Rate (7)
	Net Social (1)	Gross Private (2)	Net Private (3)	Net Social (4)	Gross Private (5)	Net Private (6)	
Primary level	8.2	29.5	12.9	8.2	29.5	12.9	0.82
Lower Secondary	11.9	45.5	17.0	15.6	61.5	21.1	1.06
Upper Secondary	13.6	52.0	17.6	15.3	65.0	18.9	1.28
'Sixth Form'	13.2	52.8	17.1	12.8	55.3	15.6	1.31
University (domestic)	9.5	49.7	16.0	5.8	37.2	14.4	0.92

Source: Hoerr, *Education, Income and Equity in Malaysia*.

level schooling demonstrated higher social and private returns than the primary or even university levels, well above the opportunity cost of capital. This was so despite a relatively high unemployment rate among non-specialised, lower-secondary school leavers.²⁶⁾ In these circumstances, the high net returns to secondary education testified to the significant economic potential for suitably equipped middle-echelon manpower. Laggard investment in secondary education, and the application of strict selectivity rules above the comprehensive lower secondary level, would therefore seem to imply considerable opportunity costs in terms of incremental educational returns forgone.

Applying cumulative social benefit/cost ratios to the various levels of education, at a 10 per cent social time preference rate, it appears that public expenditure on post-primary education was generally profitable. Although primary schooling produced social returns slightly below the opportunity cost of capital, these costs have come to be regarded more as indivisible investment in the substructure of educational capital formation, particularly after the introduction of open-access, comprehensive lower-secondary education. While the university ratio was, on average, marginally inferior to that of the secondary level, this may understate the contribution of the very remunerative professional and technical faculties, as well as the research and consultancy functions of universities. On the whole, the comparatively advantageous social returns to education were exceeded by the respective private rates of return, which again proved especially favourable for secondary-level education. In his factoring of income flows, Hoerr has estimated that education may account for some 60 per cent of unadjusted money incomes in Peninsular Malaysia, though this reduces upon adjustment for unemployment and labour-force participation rates in inverse relationship with levels of educational attainment.²⁷⁾

Education institution-building was also marked by a greatly increased ratio of (public) education expenditures to national income. The portion of GNP devoted to public education,

26) *Ibid.*, p. 91; *Second Malaysia Plan*, pp. 99-100.

27) Hoerr, *loc. cit.*, pp. 295-6.

indicated by total public sector expenditure (development and current) on formal schooling at all levels, grew from less than two per cent at the end of the colonial period to over three per cent by the end of the First Five-Year Plan, to some 4-3/4 per cent at the end of the Second Five-Year Plan, even considering adjustments for the formation of Malaysia. After a slight decline under the First Malaysia Plan, the ratio reached well beyond five per cent of Malaysian GNP mid-way through the Second.²⁸⁾ Pupil numbers had grown by a factor of three, yet the level of public expenditure on education per pupil enrolled rose almost three-fold, in real terms, between 1955 and 1973 (Table 4).

Rates of expenditure reflected the intensity of government goal commitment for each stage of education institution-building or reform. For independent Malaya/Malaysia, the most rapid rate of increase of educational expenditures occurred during the First and Second Five Year Plan and Second Malaysia Plan periods. These plan quinquennia constituted particular stages of policy which emphasised the primacy of educational goals pertaining to the social and political systems. Developments in education were instrumentally related to certain compelling political objectives at each stage, which induced higher public financial priorities for the purpose. The rate of increase of public expenditure on education was lowest, in real terms less than the growth of enrolments, under the First Malaysia Plan. There is some irony in that that period coincided with the primacy of educational goals relating to economic objectives, but with little or no political urgency attached. Official attitudes and policy had integrated education into economic development strategy at the time, without, however, ensuring the warranted capital and current commitments. In Malaysian practice, the realisation of financial commitments derived more from political motivations than from

Table 4 Public Educational Capital Formation 1955-73

		(1) GNP at market prices (M\$ million)	(2) Total public expenditure on education (M\$ million)	(3) (2) as per cent of (1)	(4) (2) per pupil enrolled (1967 prices*)	(5) Average annual rate of growth of real (2)* (per cent)
Malaya	1955	4992	86	1.72	[111]	[20.4]
	1960	5626	179	3.18	149	15.7
	1963	6362	283	4.44	215	
Malaysia	1965	[8637]	411	4.75	260	3.9
	1970	11617	521	4.48	228	11.3
	1973	16634	947	5.69	310	

Note: *Retail price index (1967 : 190) pertains to peninsular Malaysia only, while aggregate expenditures apply to all Malaysia.

Source: *Economic Reports, 1973-74, 1974-75; First Malaysia Plan; Second Malaysia Plan, adapted.*

28) The so-called 'Karachi Plan' for education in Asia, to which Malaysia subscribed, envisaged the expenditure of four to five per cent of GNP on formal education only by 1980; UNESCO and ECAFE, *Final Report, Meeting of Ministers of Education of Asian Member States Participating in the Karachi Plan, Tokyo, 2-11 April, 1962*, (Bangkok, 1962). The 'Karachi Plan' was adopted in 1959.

economic purpose, *per se*. Economic ends may have provided a rationale for resource mobilisation on behalf of education, however actual commitments depended on the political imperatives that effectively governed educational 'supply' in relation to determined policy goals.

III The 'Demand' for Education

Enrolments reveal the effective social demand for education at each level for each type of schooling. School enrolments in Malaysia are voluntary i.e. not legally compulsory, and fee-paying at post-primary levels, for the non-Malay population. Historically, only Malays were accorded free education, extended in the 1960s through to the secondary and tertiary levels. Primary schooling for non-Malays was made free in 1962 in 'Standard-type' institutions, as a sweetener for the controversial secondary school reforms, though the colonial custom obliging government-aided secondaries to provide a margin of 10 per cent free places for the (non-Malay) poor has been retained. 'Free' education, in the Malaysian usage, has meant free tuition only; and while conceding that children of poor families (Malay as well as non-Malay) have had difficulty meeting the attendant costs of schooling, government has pleaded financial stringencies for not making 'free' education wholly free. Neither has government seen fit to make primary education compulsory. Instead, its policy has been to 'assure' school place for all qualified children up to (from the 1970s) age 15. This facile substitution of assurances for compulsory attendance relieved government of the burden of providing for genuinely universal primary education, while shifting the onus of enrolment over onto society-at-large. Nevertheless, the provision of places and extension of free and aided schooling produced a notable institutional change as the once strong private school sector declined to relative unimportance while incremental enrolment concentrated in public education.²⁹⁾

The total school population of British Malaya prior to the Second World War was to the order of 263,000 enrolled.³⁰⁾ Enrolments subsequently increased sharply in post-war years, reaching over three-quarters of a million in Malaya alone by the middle 1950s (plus an additional 158,000 in Singapore). This accelerated growth of enrolments denoted a far-reaching change in public attitudes towards education.³¹⁾ To be sure, the surge in enrolments resulted in part from pent-up demand from the war years and difficult aftermath. Of greater long-run significance, however, was the wider recognition accorded the value of education, which, coupl-

29) At the primary level in 1974, private schools, mainly Chinese, comprised one per cent of all schools and enrolled a half per cent of all pupils. At the secondary level private schools, mainly English, comprised 18 per cent of all schools (excluding, however, technical and vocational schools) and enrolled just over seven per cent of all pupils: *Education in Malaysia, 1974*, annex 2. Note that figures supplied for Malaysian education refer to enrolments, rather than attendance. Since there is usually a gap between enrolment and actual attendance, especially in poor and rural areas, this reduces the usefulness of official statistics for measuring real educational attainments. However, the enrolment figures do provide, at least, an indicator of trends in social participation in education.

30) Figures in this paragraph are from the IBRD, *The Economic Developments of Malaya*.

31) Lim Chong Yah, *The Economic Development of Modern Malaya* (Kuala Lumpur, 1967), p. 305.

ed with rising incomes, translated into an increasing public appetite for formal, secular schooling. Expanded private demand for education was reinforced by its growing social utility, in as much as the post-war expansion of government service and economic developments generally produced broader employment opportunities for educated manpower. Unfortunately, the inadequate provision for education in colonial public finance restricted the capacity of existing educational facilities to cope with both the demand backlog as well as current demand from the rapidly increasing school-age population. Consequently, the ratio of primary-level enrolments out of the eligible age group actually declined during the first half of the 1950s, to approximately 58 per cent in 1954,³²⁾ notwithstanding the expansion of numbers.

Self-government led to institutional reforms and policy goals that gave rise to a dramatic upsurge in primary school intake. In order to maximize the effects of the Razak Committee prescriptions, the Alliance government declared its intention to accommodate all children of age 7+ who so desire in Standard or Standard-type primary schools by 1960. This output target explicitly acknowledged a likely fall in scholastic quality ("it is better to offer a slightly lower standard of education temporarily than no education at all").³³⁾ Government even accepted the possibility of deficit financing in order to bring this about, a radical departure from the fiscal norms of the past.

Responding to government's commitment, Malayan primary school enrolments reached the one-million mark already in 1958, two years ahead of target. A good part of this sudden increase in fact consisted of over-age pupils whose schooling had been forcibly deferred. And yet there was no slack in enrolments as this backlog was made up. Demand for primary education now shifted in favour of more widespread and longer schooling on the part of the appropriate age groups. This was no doubt inspired by the favourable private rates of return current for primary and post-primary education, stimulated still further by policy innovations including the introduction of free primary schooling (for non-Malays) in 1962. Primary enrolments continued their rise, though the average annual rate of increase slowed down from 7.5 per cent during the 1955-60 era to around 3 per cent, equivalent to the rate of population growth, thereafter. The effect of this was to very nearly double the total primary school population of peninsular Malaysia between 1955 and 1973, to over 1-1/2 million enrolled.

Primary enrolments in the East Malaysian States of Sabah and Sarawak, where education was administratively separate from the Federal centre, displayed an even more rapid growth rate arising out of their comparatively lower starting point. Nevertheless, apart from a rapid short-term increase immediately following the formation of Malaysia, the longer run growth trend of primary enrolment in Sabah and Sarawak for the decade 1964-74 scarcely bettered that for the earlier period of British rule, 1955-64 (Table 5).

32) IBRD, *The Economic Development of Malaya*, pp. 142 ff.

33) Minister of Education, *Federation of Malaya Legislative Council Proceedings* 15, Nov. 1956.

Table 5 Primary-Level Enrolments, 1955-1973

	Peninsular Malaysia			Sabah and Sarawak	
	Enrolment (‘000)	Index (1955=100)	Enrolment Ratio ¹ (per cent)	Enrolment (‘000)	Index (1955=100)
1955	776	100	58	92	100
1958	1,007	129	na	120	130
1960	1,125	145	86	142	154
1964	1,197	154	90	161	175
1968	1,371	177	91	250	272
1973	1,531	197	91	252 ²	317

¹ Enrolment Ratio: enrolment as proportion of eligible age group for primary-level education.

² 1974

na: not available

Sources: *Educational Statistics of Malaysia 1937 to 1967*; *Educational Statistics of Malaysia 1969*; *Education in Malaysia 1974*; *Progress of Education in the Asian Region*; a *Statistical Review*.

More significant than mere numerical growth has been the real and very substantial improvement in the ratio of primary school enrolments to their eligible age groups in Peninsular Malaysia (no data is available on enrolment ratios for the East Malaysian States). This ratio stood at about 58 per cent in 1955, at the end of the colonial era in Malayan education. Increased enrolments accompanying the first stage of policy reform elevated this ratio to 86 per cent five years later. Since a large but uncertain portion of the primary school population then consisted of over-age backlog, the effective ratio for the properly eligible age group was somewhat less than this aggregate figure appears to indicate. Once this backlog was overcome, around the middle 1960s, the distortion disappeared. Growing demand for primary education among the currently eligible age group brought the effective ratio to 90 per cent in 1964, stabilising at just over 91 per cent by the late 1960s, early 1970s. Primary education had become mass public education, though still not quite *universal* education.

Stabilization of the enrolment ratio at 90-91 per cent implied, conversely, that about 9 per cent of the eligible age group remained consistently outside the scope of formal primary education. These presumably comprised the socially remote and economically most disadvantaged segments of the population. Foredoomed by their lack of even elementary schooling, at a time of rising educational levels in the community generally, this hard core of educational impoverishment represented the long-run social cost of the failure to utilize compulsory means of attaining universal primary education.

Along with higher enrolment ratios, a marked improvement has been recorded in the education of females, particularly in Peninsular Malaysia. Female enrolments persistently lagged during the colonial period, despite the efforts of educators. Only 44 per cent of Malaya's eligible female age group was enrolled in primary school, in 1953, compared to over 78 per cent of the male group, with females constituting only 37 per cent of total primary-level

enrolments as late as 1955.³⁴⁾ Under-enrolment of females gave way before the expansion of popular demand for education accompanying the policy changes after independence. The ratio of female enrolment grew to 89 per cent of the eligible female age group by the late 1960s, so that slightly less than 49 per cent of total primary-level enrolments consisted of girls.³⁵⁾ That proportion remained virtually constant into the 1970s, for Peninsular Malaysia. Elsewhere there was a greater imbalance in East Malaysia, though there the female proportion had grown from 40 per cent in 1963 to 45 per cent of primary enrolment a decade later.³⁶⁾

Higher female enrolment rates contributed, paradoxically, to the lowering of private and social returns to education especially at the primary level, where females were concentrated. This was because the female population, constituting now about half of primary enrolments, generally experienced lower rates of absorption into the labour force. And, among those absorbed, females, whatever their educational attainments, invariably suffered wage or salary discrimination. Nonetheless, the spread of education among the female population suggests the likelihood of increasing female participation and at higher-levels in the labour force in future. Moreover, the recent expansion of female enrolments contains the prospect of inter-generation transmission of the values being inculcated, with long-run effects on cultural attitudes and social behaviour.

The demand for education also revealed itself in vastly improved retention ratios for successive cohorts of primary schoolers. Prolongation of primary education signified a real gain in sustained, effective enrolment. Previously, not only were the aggregate enrolment rates low, but pupil 'wastage' was also inordinately heavy. Retention ratios for colonial Malayan primary schools as late as the 1950-55 period averaged a mere 32 per cent.³⁷⁾ Between 1957 and 1962, the accelerated demand for primary education also took the form of greater continuity of schooling, boosting the retention ratio to over 80 per cent. Then, with the introduction of free non-Malay primary schooling, the 1962 cohort experienced the retention of some 84 per cent of its initial enrolment. (It is noteworthy that retention ratios for females were still lower than for males, 78 as compared to 88 per cent). The improvement, though impressive, was still incomplete, so that it served ironically to accentuate the relative deprivation of the disadvantaged. Educational 'wastage' on the current scale has tended to exacerbate the already existent social gap in the universality of primary education, particularly since the enrolments of those retained in the school system has become all the more 'effective' educationally.³⁸⁾

34) *Federation of Malaya Annual Report, 1953*, p. 173; *Progress of Education in the Asian Region*, pp. 90-91, Table A8.

35) *Educational Statistics of Malaysia 1938 to 1967* (Kuala Lumpur, 1968), Tables 4-11.

36) *Education in Malaysia, 1974*, annexes 1, 3, 9.

37) Figures in this paragraph are from UNESCO, Regional Office for Education in Asia, *Long Term Projections for Education in Malaysia* (Bangkok, 1962), p. 13; and *Progress in Education in the Asian Region*, p. 111, table A15. These retention ratios apply to peninsular Malaysia only.

38) On Retention Ratios and the effectiveness of primary enrolment, see 'The Problem of Educational Wastage' in *Bulletin of the UNESCO Regional Office for Education in Asia*, Vol. 1 (1967).

The growth of primary-level enrolments disclosed variations in the demand for education in and among the four linguistic streams over the successive policy stages. Such variations denoted changes in 'taste', or social preferences, for educational languages, tempered by the accent of government policy. The demand for English language education grew most rapidly during the last decade of colonial rule, though relatively high rates of growth of enrolment also occurred in the Malay and, to a lesser extent, Chinese streams (Table 6), despite adverse circumstances. The education language reform of 1957 inspired increased rates of enrolment for the Chinese, Tamil and, to a lesser degree, Malay streams, even if incremental demand still favoured English by a wide margin. However, Chinese medium primary schooling subsequently declined, absolutely as well as relatively, following the adoption of the national (Rahman Talib) secondary education policy. Most of the shift in enrolments went to the English stream. This preference for English education was ultimately reversed by the decision to gradually convert the English stream to the National Language.³⁹⁾ From the late 1960s English enrolments therefore fell off suddenly and drastically. A small part of the demand shift reverted to the Chinese stream, which now terminated at the primary level. However, the main gains in enrolment were recorded by the Malay stream, which exclusively offered assured post-primary continuity of language. Malay stream enrolments thus accelerated during the second half of the 1960s and first half of the 1970s at nearly three times the rate for primary education as a whole.

Differential growth rates for the various streams, as policies unfolded, yielded a changing linguistic balance at the primary education level. After the first decade of reform, the linguistic balance showed a significant movement away from Chinese and towards English language education. Compared to 1956 (figures in brackets), by 1966 the Malay and Tamil medium schools continued to attract a virtually constant 45 and 6 per cent, respectively, of total primary enrolments, whereas the English rose to 21.5 per cent (15.6 per cent) at the expense of a Chinese decline to 27.5 per cent (33.6 per cent). Eight years later, the evolution of educational language policy had engineered a dramatically altered linguistic distribution of

Table 6 Primary Enrolment Trends by Language Stream, Peninsular Malaysia

Year	Malay Stream		English Stream		Chinese Stream		Tamil Stream		All Streams	
	No.	Index	No.	Index	No.	Index	No.	Index	No.	Index
1947	170,693	100	57,013	100	190,349	100	35,386	100	453,441	100
1956	392,012	229	135,875	238	291,224	153	48,212	136	867,323	191
1961	503,041	295	218,100	382	378,031	198	64,355	182	1,163,527	256
1966	575,991	337	275,848	484	352,517	185	76,691	217	1,281,047	282
1974	942,479	552	61,846	108	470,472	247	79,814	225	1,554,611	343

Source: *Educational Statistics of Malaysia 1938-1967*; *Education in Malaysia, 1974*

39) The conversion of English primaries to the Malay medium, began in earnest in 1969 and was to be completed by 1975; the secondary level by 1980; sixth form by 1982.

enrolment. Over 60 per cent of the primary population were now enrolled in Malay medium schools, 30 per cent in Chinese schools, 5 per cent in Tamil schools, leaving a residual 4 per cent in English schools pending completion of their conversion to National Language Standard. The displacement of English schooling by policy means led to a slight revival of Chinese-medium education, but more importantly to the emergence of Malay for the first time as the language of instruction for the majority of enrolments and on an increasingly multi-racial basis. This trend towards the decommunalisation of Malay-medium education, as its share of primary level enrolment began to exceed the Malay proportion of the school population (Table 7), implied new meaning for the term, 'National Language.'

Expanded primary enrolments, coupled to generally rising educational aspirations, exerted increasing demand pressure on access to post-primary levels of education. Transition ratios, indicating the actual proportions continuing through to higher levels of schooling, have remained relatively inflexible, however. Institutional and policy-inspired rigidities, largely eliminated at the primary level, remained to restrict the demand-responsiveness of post-primary education. These rigidities were not happenstance, but can be traced to the attitudinal legacy of colonial post-primary education policy. British Malayan secondary education had been modelled on the archetype English grammar school, and was intended as preparation for higher administrative and professional roles. Strict selectivity was applied, and operated according to officially prescribed optimal (actually, maximal) transition ratios, in pursuit of elitist standards.⁴⁰ As a result, secondary-level enrolment ratios were kept comparatively low, at about 11 per cent of the eligible age group at the end of the colonial period. Restricted orientation plus selectivity combined to ensure a strong upper class bias in these transition and post-primary enrolment ratios.

Table 7 Peninsular Malaysia: Enrolments by Race and Level of Education, 1970-75

	1970					1975				
	Malay	Chinese	Indian	Others	Total	Malay	Chinese	Indian	Others	Total
Primary	759,064	511,729	142,147	8,529	1,421,469	875,975	550,064	151,744	9,126	1,586,909
%	53.4	36.0	10.0	0.6	100.0	55.2	34.7	9.6	0.5	100.0
Lower secondary	193,054	146,872	36,339	2,270	378,535	305,700	198,493	54,290	2,988	561,471
%	51.0	38.8	9.6	0.6	100.0	54.4	35.4	9.7	0.5	100.0
Upper secondary	43,627	38,800	6,258	715	89,400	101,486	54,095	10,420	1,108	167,109
%	48.8	43.4	7.0	0.8	100.0	60.7	32.4	6.2	0.7	100.0
Post secondary	4,609	5,267	637	106	10,619	8,817	6,617	804	97	16,335
%	43.4	49.6	6.0	1.0	100.0	54.0	40.5	4.9	0.6	100.0

Source: *Third Malaysia Plan*.

40) The IBRD Report, *Economic Development of Malaya*, p. 465, cites colonial Education Ministry sources for setting the education constituency for grammar-type secondary education at a maximum of 20 per cent of the eligible age group. The optimal transition ratio was accordingly fixed at 30 per cent.

The narrow conception of post-primary educational purpose and constituency persisted also after self-government. Restriction was now justified by academic heritage. Obsessions with grammar-type schooling conditioned official attitudes towards post-primary continuation even at a time of reform in other areas. Hence, the old colonial ceiling on the ratio of entry into secondary-level education, at 30 per cent, was reiterated by the Rahman Talib review committee and afterwards incorporated in the Second Five-Year Plan as its norm for post-primary educational planning. Overflow demand was to be separated out and diverted to quasi-vocational, terminal subsidiaries. Distinctly inferior both status-wise and educationally, these pseudo-differentiated alternatives failed to attract substantial enrolments. Aggregate secondary-level enrolment increased more than five-fold during the decade since 1955, though relatively low transition ratios testified to the existence of considerable unsatisfied demand.

The secondary school reforms of 1965 aimed at reconciling traditional educational perspectives with the mounting pressures of demand. By the mid-1960s Peninsular Malaysia's aggregate secondary-level enrolment ratio stood at 25 per cent. With the introduction that year of open-access 'comprehensive' lower-secondary schooling, enrolments at this level grew to encompass 60 per cent of the eligible age group by 1974 (Table 8). Access to upper-secondary education, which now included parallel academic (arts and science), technical and vocational streams, remained selective still. Consequently, whereas enrolments in upper-secondaries increased steadily, the enrolment ratio for 1974 was still below 25 per cent. Further selectivity applied at the 'Sixth Form' and college levels, such that their combined enrolment ratio reduced to 6.6 per cent, and again at the university level, where the ratio stood at just over one per cent, notwithstanding the great expansion of student numbers over the late 1960s, early 1970s. Selectivity, in the recent Malaysian experience, amounted to more than just a test of educational achievement, in as much as the public examination mechanism was commonly wielded as an instrument for juxtaposing other policy objectives onto the education system.

Institutional and policy constrictions not only depressed levels of enrolment, but furthermore tended to distort the structure of demand for post-primary education. The National Language requirements built into the examination mechanism, for one thing, has tended to be particularly interdictive to those in the English or Chinese or Tamil streams with a propensity for scientific or technological studies.⁴¹⁾ Conversely, the utilization of fee discrimination, by which post-primary education was free for Malays and not for non-Malays, in effect tended to accentuate demand for the Malay-preferred humanistic subjects. Such measures worked to shift the composition of the (upper) secondary school enrolment proportionally away from technical, scientific, and vocational education, contrary to the intentions of the 1965 reform.

41) *Third Malaysia Plan*, Table 22-8. Some 2/3 of Chinese degree students were enrolled in science and applied science disciplines in 1975, compared to 27% of Malays.

Table 8 Peninsular Malaysian Post-Primary Enrolment Trends and Ratios

	1955		1960		1965		1973	
	No.	Ratio %	No.	Ratio %	No.	Ratio %	No.	Ratio %
Secondary Level								
Total Secondary	30,700	7	169,200	15	358,244	25	593,111	na
-Lower Secondary	—		—		354,482		469,176	80
-Upper Secondary	—		—			115,289		25
-Technical Institutes	100 (est)		500		855	2,225		
-Vocational Schools	5,000 (est)		7,900		8,400	6,448		
-Sixth Form	—		1,900		3,507	13,872		
Tertiary Level								
Teacher Training	1,000 (est)		6,870		9,114	4,600	6.3	
College and Institutes	200 (est)		500 (est)		1,000 (est)	10,480		
Universities	—		654		2,835	12,921	1.1	

na: not available

Sources: *Progress of Education in the Asia Region*; *Educational Statistics of Malaysia 1938-1968*; *Education in Malaysia 1974*.

Moreover, sub-professional tertiary training was given a strongly Malay bias in enrolment capabilities, limiting non-Malay access to, and therefore the manpower reservoir of, certain skilled occupations.

This effect was also felt at the tertiary level, in the general universities. There, the proportion of student population in the liberal arts actually increased during the decade since 1965, and the proportion of graduates even more so, to more than half⁴²⁾ (Table 9). It is noteworthy that the balance would have been skewed in the other direction except for the concentration of Universiti Kebangsaan's mainly Malay enrolment in the humanities and, to a lesser extent, economics faculties. Indeed, it was symptomatic of ethnic educational propensities that Malays also predominated in the arts enrolment of the University of Malaya, while the composition of the scientific and technological faculties was overwhelmingly non-Malay, especially Chinese. If the newer technological universities and institutes are taken into account, the enrolment distribution emerged less emphatically liberal arts, though it was precisely these institutions that suffered from laggard science enrolments at the upper-secondary level. Policy and institutional constraints begot a situation of qualified but unsatisfied excess demand for higher levels of education, only part of which found expression in the outflow of students to universities abroad, amounting to more than double the domestic university population.⁴³⁾

The availability of educational facilities remains imbalanced between urban and rural areas, notwithstanding the great strides taken since independence. Primary education has been made widely available in the *kampongs* (villages), to be sure, though there exists some

Table 9 Proportions of Tertiary Level Enrolments and Graduates in Liberal Arts (%)

	1965		1975	
	Enrolments	Graduates*	Enrolments	Graduates*
General Universities University of Malaya ⁽¹⁾	52.8	48.6	49.8	46.3
Universiti Ketangsaan Malaysia ⁽²⁾	81.5	84.7
Universiti Sains Malaysia ⁽³⁾	42.8	63.2
Subtota	52.8	48.6	53.8	54.4
All University Level Institutions	41.5	38.1	36.5	48.5

(1) Faculties of Arts, and Economics and Administration.

(2) Faculties of Arts, Islamic Studies, Malay Literature and Culture, and Economics and Management.

(3) School of Humanities, Comparative Social Sciences, Humanities with Education.

* First degree level

Source: *RIHED NEWS*, November 1974

42) Note that the Karachi Plan had called for a 45 : 55 balance between arts and other subjects, and the science and technologies, by 1975.

43) While the Second Malaysia Plan forecast an enrolment of 12,800 in the technical and vocational streams by 1975, actual enrolments lagged a third behind this target.

Table 10 Urban-Rural Distribution of Educational Facilities, 1975

	Urban	Rural
Number of schools		
primary	770	3553
lower-secondary	68	169
combined lower-upper secondary	317	256
Number of classrooms		
primary	9707	22170
secondary	7236	5931
Number of laboratories (secondary level)	1316	865

Source: *Bulletin of the UNESCO Regional Office for Education in Asia*, June 1976.

discrepancy between more-developed and less-developed regions. However, the distribution of secondary-level facilities has been rather less favourable (Table 10). By the mid-1970s rural areas had five times the number of primary schools, and more than twice the classrooms, taking into account lower population concentration, but far fewer secondary schools, and classrooms, than the urban areas. In the crucial areas of science education, rural secondary schools have disproportionately fewer laboratory facilities than their urban counterparts. Although residential secondaries and Special Science secondaries were established in each State in Peninsular Malaysia, except Perak and Malacca, in order to improve the availability of science and technical schooling for rural Malays, the prevailing imbalances militated against any substantial rise in transition and science-technical ratios. Educational patterns are still effectively differentiated as between urban and rural schooling, with the latter suffering sharper cut-offs between the primary and secondary levels, and having a more pronounced bias away from science training. Because of the linguistic-ethnic interweaving particular to Malaysia, these imbalances especially affected the Malay-medium stream. Consequently, Malay enrolments have been heavily concentrated in the non-science/non-technical courses, in effect continuing at the post-primary level the old educational-occupational separation by language and race.

The shape of Malaysia's 'education pyramid' depicts the narrowing effect of confined transition and enrolment ratios at higher rungs of education system (Table 11). Broadly based at the primary level, the 'pyramid' tapered sharply at the secondary level and beyond, coming to a very narrow tertiary-level peak. To be sure, the introduction of open-admission 'comprehensive' schooling in 1965 tended to broaden the lower-secondary range somewhat, but a tight bottleneck occurred nevertheless at the upper levels. The skew of the 'pyramid' indicated a small proportion of Malaysian enrolments at the tertiary level, relative to the country's socio-economic development, or compared to others in the Asian region or Latin America. With the distribution of educational opportunity so confined, the selector mechanisms invariably involved a large element of pre-selection along class and racial lines, in

Table 11 Percentage Distribution of Enrolments at All Levels, Malaysia and Selected Other Countries

	Year	All Levels	1st Level	2nd Level Lower Upper	3rd Level
Malaysia	1965	100	78.1	21.2	0.7
Malaysia	1975	100	68	(23.3+6.5)	1.0
Asian Region	1965	100	75	22	3
Philippines	1964	100	79.4	14.8	5.8
Republic of Korea	1965	100	78.6	19.1	2.3
Singapore	1965	100	74.0	23.6	2.4
Taiwan	1965	100	75.1	22.1	2.8
Latin America	1965	100	82	16	2
Europe	1965	100	64	32	4
North America	1965	100	64	26	10

Sources: For Malaysia: *Educational Statistics of Malaysia 1938 to 1969*; Education in Malaysia 1974; or *Progress of Education in the Asian Region*; *Third Malaysia Plan*.

curious combinations. Differential policy treatment of Malays and non-Malays made for a reportedly significant degree of upward mobility of Malays from lower class backgrounds to higher levels of the education system; while, conversely, for non-Malays this distributive mechanism for educational advancement tended to reflect and reinforce existing patterns of social stratification.⁴⁴⁾

This distribution of enrolment among the various levels of schooling implied an allocation of education capital formation as between 'broader' and 'deeper' education/manpower relationships. Increased enrolments over time raised the quantum of schooling per Malaysian worker from an average of less than four years in 1950, to over five by 1965.⁴⁵⁾ Education capital formation had broadened, as the growing labour force was schooled to the primary level, and after 1965 increasingly to the 'comprehensive' lower-secondary level. Yet, the sharply skewed 'education pyramid', with its stunted progressivity at its post-primary (after 1965, post-lower secondary) levels, militated against any parallel deepening of the educational attainments of

Table 12 Average Labour Force Educational Attainments for Selected Countries
(years of schooling per worker)

Malaysia (1965): 5.10	Indonesia (1965): 3.28	Japan (1960): 10.3
	Philippines (1965): 7.37	U.K. (1960): 10.2
	Singapore (1965): 6.12	U.S.A. (1960): 11.8
	Taiwan (1965): 5.71	

Source: Sundrum, *Manpower and Educational Development in Eastern and Southern Asia*.

44) Yoshimitsu Takei, John C. Bock, Bruce Saunders, *Educational Sponsorship by Ethnicity: A Preliminary Analysis of the West Malaysian Experience* (Athens, Ohio, 1973).

45) R. M. Sundrum, 'Manpower and Educational Development in Eastern and Southern Asia; *Malayan Economic Review* (1971).

the labour force at large. Ordinary selectivity was furthermore confining as a result of implicit and explicit linguistic and racial barriers to educational advancement. The average educational attainment of the Malaysian labour force may have compared favourably to that of less-developed neighbours, but still ranked well beneath the needs of economic development (Table 12).⁴⁶⁾

IV Education and National Development: Some Topics for Consideration

Education systems function to define, transmit, and thereby allocate values in society. This ultimately allocative role serves to make certain scarce valued resources available to some, while denying them to others. Thus, institutional limits on the scope of participation in education, and the selection mechanisms for advancement through the system, operate to regulate access to social status and roles. Again, the prescribed content of education designates what attitudes, beliefs, expectations, information and skills are imparted through the agency of formal schooling. In Malaysia, the once oversized private and parochial school sector has since been supplanted by a national education institution, in which the allocative choices are matters of public policy. Thus, education policy has become more all-embracing and uniform throughout, but also more singularly authoritative. Some of the consequences for Malaysian economic, social, and political development are considered below.

a. Education and the Labour Market: Employment

The Malaysian labour market has long been characterized by the paradox of relatively high levels of 'hard core' unemployment coincidental with shortages of manpower, at differing levels of skills and educational attainment. A 1962 survey of the labour force disclosed unemployment rates of 5.2 per cent among males, and 7.9 per cent among females.⁴⁷⁾ For both males and females, the highest rates of unemployment were incurred by those with incomplete secondary level education of the undifferentiated, grammar school type, followed by those with just a primary education (Table 13). By contrast, graduates of technical, vocational or professional streams suffered little or no unemployment, with many vacancies actually being left unfilled.

This relationship between education—or the lack of it—and unemployment has persisted following the 1965 reform introducing open-access 'comprehensive' lower secondary schooling. Between 1970 and 1975 the rate of unemployment oscillated between seven and eight per cent of the labour force. As in the past, the highest incidence of unemployment affected youth with low and non-differentiated educational attainments. Some 69 per cent of registered unemployed (those for whom data is available) in 1975 were aged between 15–24 years, and about 83 per cent had lower-secondary education or less.⁴⁸⁾ Unemployment of those having reached the upper-secondary level continued to be most pronounced among the arts stream.

46) *Third Malaysia Plan*, Chap. 8.

47) *Reports on Employment, Unemployment and Under-employment, 1962*, Department of Labour and Industrial Relations and Department of Statistics, Kuala Lumpur, 1962.

48) The Treasury, Malaysia. *Economic Report 1975–76* (Kuala Lumpur, 1976), p. 90, *Third Malaysia Plan*, Chap. 8.

Table 13 Specific Unemployment Rates by Level of Education, 1962

	Percentage unemployed	
	Males	Females
No education	3.1	4.3
Primary level	5.3	12.8
Secondary level, forms I and II	9.4	31.7
form III	10.9	29.3
form IV	12.1	22.8
form V	6.7	10.2
form VI	9.5	21.9
Trade schools or technical institute	0.2	0.3
Teacher training college	0.0	0.0
Technical college or polytechnic	0.01	—
University	0.04	0.07
all	5.2	7.9

Note: Specific unemployment rate = $\frac{U_i U_i}{U_i + E_i}$ where U_i is the number unemployed and E_i the number gainfully employed at each educational level.

Source: 'Report on Employment, Unemployment and Under-employment, 1962', Department of Labour and Industrial Relations and Department of Statistics, Kuala Lumpur, reproduced in *Report of the Higher Education Planning Committee, 1967*.

At the same time, education policy, with its selectivity and sharp cut-off at higher and more specialized levels, has not met the growing demand for executive, professional and technical manpower. In order to overcome constraints on development due to the lack of qualified manpower, Malaysia has continued to rely on the employment of expatriate personnel. Data for the mid-1960s indicate that expatriates filled a fifth of all high-echelon professional and technical positions, and were particularly strongly represented in the private sector. Meanwhile, a large proportion of professional and sub-professional posts, especially in the public sectors, remained vacant (Table 14).⁴⁹⁾ This pattern of employment persisted into the 1970s.⁵⁰⁾ Dependence on expatriate personnel for managerial and technical manpower tended to favour private enterprise and weaken public service recruitment, especially since the end of colonial service. Moreover, the extent of the expatriate stake in top-ranking occupations carried certain negative implications for the management of the Malaysian economy, more about which below.

Shortages of qualified manpower affected not only the professional and sub-professional ranks, but also the skilled and semi-skilled occupations requiring some level of post-primary

49) See also Sundrum, *Educational Planning*, pp. 41-3.

50) The results of the 1973 Manpower Survey reproduced in the *Third Malaysia Plan*, table 8: 11. Then, vacancies were reported for some 10.4% of Professional and technical posts, 8.6% of administrative and managerial posts, 7.1% of clerical, 6.3% of service, 1.7% of sales, 4.4% of production, 3.1% of agricultural posts.

Table 14 Vacant and Expatriate-filled Positions, 1965

(Percentages of total posts)

	Government Sectors		Education System		Private Sector		Total	
	V (1)	E-F (2)	V (3)	E-F (4)	V (5)	E-F (6)	V (7)	E-F (8)
All occupations	6.4	0.2	7.7	2.8#	0.4	0.6	2.5	1.3
Professional ¹								
Managers	17.1	3.0	27.1	3.3	0.9	28.8	6.1	20.1
Technologists	20.7	8.0	—	—	4.2	43.6	12.9	21.3
Teachers	—	—	24.3	17.0	—	—	24.3	17.0
Others	16.0	4.6	33.3	22.2	4.4	24.4	12.0	10.3
Sub-professional ²								
Junior managers/accounts	11.7	0.1	9.0	1.7	1.3	15.3	5.8	5.8
Teachers	—	—	13.4*	7.6	—	—	13.4	7.6
Technologists and others	18.3	—	12.3	0.4	3.2	12.1	15.2	2.1
Skilled labour ³								
Teachers	—	—	2.2*	—	—	—	2.2	—
Bluecollar	6.2	—	15.2	—	0.8	—	2.3	—
Whitecollar	6.7	—	14.7	—	0.5	—	3.4	—
Semi skilled/unskilled								
Bluecollar	2.8	—	13.7	—	0.3	—	0.9	—
Whitecollar	7.0	—	18.2	—	0.27	—	4.4	—

* Arbitrary division.

Including posts filled by local but unqualified personnel (allocative only).

¹ University or equivalent experience for managers.² Training of one or two years beyond School Certificate.³ Education beyond Lower Certificate of Education Level, but less than subprofessional.

V: Vacant; E-F: Expatriate-filled.

training (e.g. beyond the Lower Certificate of Education). Access to their occupations was restricted by the racial and linguistic selectivity of post-secondary institutions. Insufficient supplies of appropriately educated and trained labour became a significant limiting factor in Malaysian economic activity. Successive development plans have blamed inadequacies of human capital, more than of capital funding for persistent shortfalls in plan implementation.⁵¹⁾

Responsibility for the apparent discontinuity between schooling and employment opportunities may be traced in to the survival of the 'grammar' cult in the new context of racial restructuring. The strong hand of the past in matters of educational content and selectivity rendered the institution of education rather less responsive to changing circumstances than warranted by the evolution of government policy towards education. Explicit and implicit racial and linguistic tests further confirmed the social scope of educational continuation. Thus, Malaysia's sharply cut-off 'educational pyramid' produced too many school leavers with inappropriate training, and too few with sufficient education relative to social and market

51) *Third Malaysia Plan*, Chap. 8-vii.

demands.

b. Education and the Labour Market: Insularity

Ethnic insularity in the labour market, characteristic of plural societies and tradition-bound economic expectations, has been a major impediment to manpower mobility and the reduction of inequalities in (Peninsular) Malaysia. Historically, colonial education policy contributed to and reinforced ethnic-linguistic occupational separation. Malay-language education had a “strong rural bias...adapted to the needs of the home(i.e. *Kampong* village)environment.”⁵²⁾ Tamil schools on rural estates were similarly confining, and Chinese education—the only vernaculars to extend beyond the primary level—preserved an essentially parochial purpose.

From 1957, the adoption of the national education policy, built around a common curriculum, overrode schooled insularity in favour of modernizing expectations. A last attempt by the independent Malayan government to uphold the traditional occupational orientation of at least a segment of the Malay stream, through the establishment of ‘rural trade’ schools geared to the *Kampong* economy, failed to gain popularity and was finally abandoned in 1964. Since then, Malaysian education has evinced a generalist and modernist occupational outlook for all language streams.

The metamorphose was most pronounced in Malay-language education. In the past, only English schooling provided generalized access to higher echelon occupations, leading many avenue for Malay upward mobility was for ‘Intelligent’ pupils to transfer out of the Malay stream to the English. During the first decade of independence, English education still provided the widest latitude for occupational mobility, even though the policy reforms had rectified somewhat the educational insularity of the hitherto confining vernacular streams. In particular, the extension of Malay-language schooling through the post-primary levels, coupled to policies of ethnic sponsorship for Malays, brought about a radical transformation of Malay educational ambitions and social aims.

Upward mobility through the education system, and thereafter into occupational roles, by the late 1960s was more conspicuous for Malays than for non-Malays.⁵³⁾ By the middle 1970s Malays comprised more than half of post-primary enrolment, and had already increased their share to over 45 per cent of professional, technical, managerial and administrative employment.⁵⁴⁾ While this process was doubtlessly abetted by discriminatory preferences, policy expressions of Malay ‘special rights’, the operational key was to be found in the transformation of Malay-medium education. At the post-primary levels, this Malay educational transformation produced a new technocratic class, of mainly peasant background, schooled in

52) *IBRD Report*, p. 449.

53) Takei and Bock, *Ethnic Sponsorship in Education*, pp. 8, 11, 12. This study, conducted in 1968–69, reports that almost 60 per cent of Malays in secondary schools are of lower/lower-medium socio-economic origins, and enjoy greater upward mobility through the school system than do non-Malays. At the university level they found that 40 per cent of Malay students come from lower economic strata, compared to a negligible number of non-Malays (p. 11). See also the *Third Malaysia Plan* Statistics on Racial Enrolment at the Tertiary Level, Table 22–6.

54) *Third Malaysia Plan*, Table 4-15, and para 433.

modern skills and values, and constituting a 'second generation' nationalist elite. Even at the mass primary level, the modernization of Malay education doubtlessly contributed to the improved employment rates for Malays, in the face of deteriorating unemployment generally.⁵⁵⁾

The gradual conversion of English schools will eventually eliminate all institutional competition to the post-primary mobility and occupational utility of Malay-language education. On the other hand, the Chinese and especially the Tamil streams, being terminal at the primary level, offer rather less scope for upward or occupational mobility.

Ethnic occupational insularity, together with attendant inequalities of income distribution, have remained features of the Malaysian labour market. Of course schools were hardly to blame for these differentials, which had their origins in history and were perpetuated through class and communal relationships. However, education has served to transmit existing occupational bias, or else not correct it. Within the Malay stream, their generally inadequate facilities for science and technical instruction has resulted in a *de facto* concentration on grammar-style, literary education. Malay occupational predilections have accordingly been towards administration and pedagogy, leaving the scientific and technological professions very much to English-educated non-Malays, particularly Chinese.⁵⁶⁾ This racial channelling declined somewhat during the 1970s, but is still pronounced. Although deliberate discrimination among schools is no longer practiced, the inevitable leads and lags in policy innovation has meant that certain segments of the school system benefited sooner, or more, from development than others. Overall improvements notwithstanding, rural schools are generally inferior to urban, Tamil-language schooling has remained problematic, certain neighbourhood schools have been better equipped than others, while reputedly 'elite' institutions continue to exercise undue claims on public educational resources.

Modernity and uniformity in education have not wrought full equality of opportunity among the different communities. In Malaysia like in India and elsewhere in Southern Asia, linguistic constraints on occupational mobility, arising out of particular educational styles or differences in the economic utility of languages, accentuate anew the insularity of gains wrought by discontinuous educational development.⁵⁷⁾

c. Education and Management of the Economy

The social composition of control over national economic affairs depends largely upon the manpower output of education systems. During the colonial period, top echelon administra-

55) *The Labour Force Sample Survey, 1972*, indicated that Malay unemployment had tended to improve (1971 figures in brackets) to six per cent (7.8 per cent) while the Chinese remained steady at seven per cent (7.1 per cent) and the Indian worsened to 12.2 per cent (11.1 per cent). This confirmed trends reported in the *Socio-Economic Survey of Households, 1967-68*, showing that between 1962 and 1968 Malay unemployment fell from 6.1 per cent to 5.8 per cent, whereas for Chinese and Indians it rose from six per cent to 6.9 per cent and 10.3 per cent, respectively.

56) IAU/UNESCO, *Higher Education and Development in Southeast Asia*, Vol. II, (Paris, 1969), pp. 366-7.

57) G. Myrdal, *Asian Drama*, Vol. III, pp. 1741-3.

tive, managerial, professional and technical posts were mostly filled by expatriate British personnel. At the outset of independence, only about a quarter of Division 1 positions in the Federal public service was filled by Malaysians (1955).⁵⁸⁾ Measures aimed at rectifying this situation and bringing the understaffed government bureaucracy up to full establishment strength hinged upon the supply of qualified, highlevel manpower. Whereas 'Malayanization' had been scheduled to proceed at a gradual pace after independence, in the event the public service endured rapid expatriate retirements, spurred by the terms of compensation, far in excess of the capacity of the education system to produce local replacements.⁵⁹⁾ The resulting strain of understaffing hit government bureaucracy at precisely the time when political developments were generating increasingly urgent economic and social demands on public administration.

Remedy was sought in the expansion of civil service recruitment through the growth of education. Following independence Malay-educated personnel were accepted for senior posts, hitherto exclusively English, and came to occupy an increasingly dominant position in government bureaucracy. This not only altered the language of administration but, even more significantly, its social composition and political-cultural outlook.

Despite the pressures of development, public service recruitment has remained ethnically and educationally restrictive. Senior administrative positions have not been open to non-Malays except on the basis of a 1 : 4 (non-Malay: Malay) quota, originating from the early 1950s, although the technical and professional branches are necessarily more open.⁶⁰⁾ The effect of restrictive recruitment has been to limit the expansion of the government service to the output of higher educated Malays. Consequently, understaffing at the senior administrative and professional and technical ranks incurred opportunity costs in terms of potential development forgone.

Economic developments during the 1960s and early 1970s led to a dramatic expansion of both the private corporate sector and state commercial enterprise.⁶¹⁾ The accompanying growth in demand for business administration and technical-professional personnel could not be met by the Malaysian education system, with its literary bias and sharp cut-off points. Most locally-recruited corporate personnel tended to be non-Malay, particularly Chinese, since Malays generally preferred and were given preference in government administrative service. The remaining shortages were made up by the large-scale employment of expatriates in top-echelon managerial and professional-technical posts (Table 13).

One adverse consequence of this has been the formation within the economic administration (private as well as public) of separate occupational communities of expatriates, non-Malays, and Malays, set apart by educational experience, social attachments, value orien-

58) High Commissioner, *L.C. Proc.* 30 November 1955. A further 13 per cent of Division 1 posts were unfilled.

59) Cf. *Report of a Committee on the Malayanization of the Public Service* (Kuala Lumpur, 1956); R. O. Tilman, *Bureaucratic Transition in Malaya* (Durham, NC, 1961).

60) The Colonial Territories 1953-54 (HMSO, London, 1954), Cmd. 9169, para 111.

61) *Third Malaysia Plan*, para 424.

tations and organizational commitments. Differences among occupational communities at economic decision-making levels have occasionally given rise to goal conflicts which interfered with the effective administration of development policy.⁶²⁾ The dilution of national political control over economic management tended to inhibit policy initiative and innovation, especially where established procedures, norms or interests were at stake. Indeed, this tendency for breakdown and discontinuity in development administration was tacitly abetted by the political leaderships customary aversion to organizational discord. Structural deficiencies tended to be tolerated and often perpetuated, therefore aggravating their negative influence on administrative efficiency.⁶³⁾

Tensions in economic administration touched on the raw communal nerves of the Malaysian body politic. Growing impatience with laggard developmental performance engendered a more radical nationalism especially among the emergent, Malay-educated, second-generation elite, reacting against the composition and frustrations of economic management. Yet, the tenor of Malay ultra-nationalist argumentation revealed a barely-disguised racialism and xenophobia injected into political debate under radical guise.⁶⁴⁾ Advocacy of a racial redistribution of income and wealth obtained official respectability through the adoption of a 'racial economic balance' as the ultimate target of public policy as from the Second Malaysia Plan.⁶⁵⁾ However, the pursuit of Malay economic power, by way of 'restructuring society and its economic balance', placed in jeopardy the delicately contrived balance of inter-communal support for the Alliance political formula, without really treating the root issue, i.e. the apparent failure of education policy to generate sufficient high-level human capital to extend the scope of Malayization towards greater charge of, and a larger share in, the expanding corporate economy.

d. Education and Acculturalisation, Socialisation and Social Brokerage

As the most salient public institution touching all communities, English-language education, historically served as an agency for the creation of social brokers to mediate inter-communal relations in Malaya's plural society. While the vernacular streams appealed to their respective communities only, English education was uniquely multi-racial in its enrolment, and remained singularly well positioned by its post-primary structure for colonial elite formation. English language grammar-type education became the accepted preparation for social recruitment to leadership roles in public administration and corporate enterprise during the colonial period,

62) On this point, and for examples, see Gayl D. Ness, 'The Malayan Bureaucracy and its Occupational Communities', *Comparative Studies in Society and History* (April, 1970), esp. p. 183; and Martin Rudner, *Nationalism, Planning and Economic Modernization in Malaysia, The Politics of Beginning Development*.

63) cf. Milton J. Esman, *Development and Administration in Malaysia*, (Cornell, 1972).

64) Probably the most well-known published work in this line is Mahathir bin Mohammed, *The Malay Dilemma* (Singapore, 1970). The book has been banned in Malaysia notwithstanding Dr. Mahathir's recent (1976) appointment as Minister of Education and Deputy Prime Minister.

65) *Second Malaysia Plan*, para 20.

and for some time afterwards.⁶⁶⁾ What emerged was a bi-cultural elite, composed of person-ages representing the various communities but socialised according to the shared values of English grammar schooling. The education process was emphatically elitist in the double sense that leadership recruitment through English acculturation and socialisation patterns was very largely confined to communal elites, and made for the management of underlying social tensions through elite-level social brokerage.

The first generation Alliance party leadership exemplified this consociational type of inter-communal elite, highly stratified by communal social background and related by the common cultural denominator of English grammar education. Under their influence social brokerage crystallized into a distinctive Alliance style of political compromise. The efficacy of this form of political entrepreneurship required ongoing cohesiveness and exclusivity for the common mode of socialisation and acculturation. Otherwise, non-shared avenues of elite formation might emerge to challenge or else shatter the bonds among brokers and between elite patrons and communal clients.

The education policy reforms of 1957 and 1961, widely regarded as a tribute to the Alliance manner of social brokerage, ironically carried the seeds of its eventual challenge. The provision of a national standard of primary schooling in the Malay, Chinese and Tamil languages, and the extension of Malay-medium education through the secondary level, and later to the tertiary as well, effectively pluralized the former English-stream monopoly over educational acculturation and socialisation for economic and political leadership roles. The shared English educational experience diminished relative to the considerable expansion of enrolments in separate National and National-type schools during the 1960s. Except for the provision of a common curriculum, this trend towards the vernacular decreased the commonality of education and generated competing communal ('ultra') elites. Moreover, there emerged a deepening dichotomy between the ethnic mass, educated increasingly in their respective vernacular primary streams, and the established English-educated consociational elites still dominating the component parties of the ruling Alliance. An invigorated ethnicity, now inspired by vernacular educated, modernised communal counter-elites, appeared less amenable to accommodation by traditional patrimonial style of social brokerage.

Dissension within the Alliance coalition weakened its political capabilities at a time of growing stress and strain on political integration. Its two main constituent party organizations, the United Malays National Organization (UMNO) and Malayan Chinese Association (MCA) came under increasing assault from their respective communal counter-elites during the 1960s. Alliance appeal constricted accordingly, costing the coalition a margin of support in the 1969 general elections. The voting result projected a rise of ethnic parochialism, which challenged the terms of inter-communal accommodation fostered by the Al-

66) On the social and educational backgrounds of the early Alliance nationalistic leadership, see R. O. Tilman, 'Policy Formulation, Policy Execution, and the Political Elite Structure of Contemporary Malaya', in Wang Gungwu, ed., *Malaysia* (New York, 1965).

liance leadership consensus. A sudden breakdown in the Alliance leadership competence contributed to the aftermath of racial violence.

The political reconstruction that followed the 1969 crisis and emergency aimed at restoring the modicum of inter-communal co-operation and accommodation necessary for the functioning of a more-or-less 'open', plural society. The policies effected emphasised a double blend of norms and patterns of social brokerage. On the normative level, Malays were assured of their national title and non-Malays of their legitimate interests, an authoritative allocation of national rights to Malays and civil rights to non-Malays that became legally sacrosanct. The long-run task of creating a new set of social brokers to reconcile ethnic interests in terms of these norms fell to Malay-language education. To be sure, education policy continued to tolerate Chinese and Tamil language National-type primary schools, to avoid antagonising these communities. However the English stream is to be eliminated grade by grade up to 1983, leaving a Malay language monopoly over post-primary education. With Malay to become the exclusive mediator of shared acculturation and recruitment to leadership roles, it was calculated that this would engender a multi-racial, Malay-educated elite better disposed to social brokerage among their respective ethnic interests, while rendering the terms of racial consociation more emphatically Malay.

Existing education policies and practice have not been wholly consistent with these new directions in elite formation and political entrepreneurship. Ongoing restrictions on entry to the upper secondary levels amount a deliberate constriction of the scope of shared educational enculturation. Malaysia's sharply skewed 'education pyramid', in which only the post-primary levels were racially and educationally integrated, offers only a narrow platform for the intended creation of social brokers. The restricted effective level of national educational socialisation is narrowed still further by the degree of cultural alienation between prospective social brokers and their communal reference groups, where primary school enrolment is largely—about a third—in educationally-segregated Chinese and Tamil streams. Even within the Malay-language stream now being transformed along racially integrated lines, the persistence of differential continuation patterns for Malays and non-Malays might tend to prejudice the emergence of a new consociational elite. Discordant lines of acculturation and socialisation accompanying education policy may bring about a situation where the passing of traditional patrimonial social brokerage entails in its wake ethnocentered class confrontation.

e. The Search for National Symbols of Political Community

The political development of Malaysia points to the distinction between state-building and nation-building. Modern state institutions have been established and extended to cope with the demands of development. On the other hand, integrative, normative symbols

of nationhood have remained relatively underdeveloped and weak.⁶⁷⁾ Building a modern state apparatus where any prior sense of nation-being was absent required the formulation, virtually *de novo*, of a cultural matrix for binding a plural society into a political community and legitimizing its authority structure.

Formal enculturation in British Malaya had been left largely to educational institutions, with their diverse orientations. While independent Malaysia retained and even accentuated the acculturating role of education, stricter political direction was applied to the determination and transmission of social values through the school system. In taking on this political imperative, policies towards educational acculturation had to contend with the competing and oftentimes contradictory requirements of authority, as distinct from social acceptability; normative orthodoxy or tolerance; consistency or flexibility in application.

For much of Malaysia's modern history the dilemma was tacitly resolved by avoiding any positive definition of authoritative national values, and substituting instead the manipulation of surrogate symbols or, more emphatically, negative anti-symbols. Colonial education policy during the early 1950s promulgated the fostering of a 'United Malayan Nation' as its political cultural goal, though without specifying the meaning of 'Malayan', or 'nation', or, indeed, the notion of 'unity'.⁶⁸⁾ The vagueness of the concept relegated it to the sphere of platitudes, while in practice the colonial administration treated educational acculturation primarily as a problem of Chinese orientations. As in other times and places, whenever political forces arose that could not be contained by established institutions, or controlled by settled customs, authority variously ascribed them to the intrigues of hostile strangers.

Recurrent efforts on the part of the colonial Education Department to convert Chinese education to the English medium ('National' schools of 1952; 'Standard-type' schools of 1954) elevated the educational language question to a test of loyalty. English language education became a symbol of orthodoxy, whereas linguistic pluralism, especially Chinese, was tainted with the anti-symbol of Communist sedition. Official sponsorship of English instruction and curriculum substituted for any formulation of genuine national focal points of Malayan allegiance. Instead, the emphasis on English educational symbols produced hostile reactions among Malay nationalists as well as Chinese, and plunged political culture into the maelstrom of language politics.

Malaya's newly-elected Alliance government assumed power in 1955 confident in its

67) The political cultural dimensions of political systems, and their development, has not been fully examined in the political science literature. Yet it is clear that there exists a critical symbiotic relationship between the authoritative network of norms and the performance of state institutions in the political system; cf. G. Almond and S. Verba, *The Civic Culture* (Princeton, 1963); L. W. Pye and S. Verba, eds., *Political Culture and Political Development* (Princeton, 1965), David Easton, *A Systems Analysis of Political Life* (New York, 1965); Carl J. Friedrich, *Man and His Government* (New York, 1965).

68) *Report of the Education Policy Committee*, Legislative Council Paper 70 of 1952, para 7. The term originated in the Report of the Barnes Committee on Malay education, and was subsequently adopted without further elucidation in the 1952 Education Ordinance.

political authority, having derived its legitimacy from a popular mandate coupled with British-style constitutional association with traditional Malay monarchical forms. Yet the Alliance political formula preferred to avoid potentially divisive normative issues, relying instead on a pragmatic style of social brokerage to advance the cause of an emergent consociational democracy. That marked the treatment of education policy adopted by the Razak Committee. Its resolution of the contentious language issue balanced educational acculturation on the twin principles of national identity and inter-communal acceptability. These points of reference for policy indicated little about the actual normative content of educational acculturation. Rather, the acceptance of compromise was itself conceived as producing, over time, definite commitments to political community. Form served as a substitute for substance in the Alliance approach to national-building.

Meanwhile, in view of their own caution and ambiguity over the determination of positive national norms, the Alliance leadership continued to manipulate the double anti-symbols of communism and racialism so as to demarcate boundaries of legitimacy.

An educational curriculum oriented towards Malaya, and not towards other countries, may well have been a *sine qua non* of national education enculturation, but itself hardly sufficed to foster national identity. As a matter of fact, the continued predominance of essentially ethnic values in society was accentuated, rather than being sublimated, by the modern form of mass public education and the creation of new parochial elites.⁶⁹⁾ The Alliance formula came under mounting attack from Malay "ultra" insistence on fundamentally Malay national norms on the one hand, and non-Malay "chauvinist" demands for recognition of normative pluralism on the other.⁷⁰⁾ Reacting to the situation, government's education policy review, expressed in the Rahman Talib Committee Report, resurrected the national language symbol in educational acculturation. Thereafter for much of the 1960s, language politics dominated the issue of political culture.⁷¹⁾ Carried forward by its own momentum, the controversy over the language status of Malaysian political community flowed over into a dispute about political legitimacy. When the explosion occurred during the unsettled aftermath of the 1969 general elections, the original Alliance consensus on political community and political legitimacy ranked among the first casualties.

The political reconstruction that followed laid down the norms for a reconstituted political culture, and codified these in the *Rukunegara*, Malaysia's so-called "National Ideology".⁷²⁾ In reply to the challenge, official ideology projected distinctively Malay values onto the main symbols of Malaysian politics: the Monarchy (Malay Rulers), the Established Religion

69) cf. Walker Conner, National-building or Nation-destroying? *World Politics* (April, 1972), pp. 319–55.

70) cf. Wang Gungwu, 'Malayan Nationalism', *Journal of the Royal Central Asian Society* (July–Oct. 1962), p. 321 and 'Chinese Politics in Malaya', *The China Quarterly* (1970), pp. 1–30, and R. O. Tilman, 'The Socialization of the Chinese into Malaysian Politics'; Some Preliminary Observations', *Studies on Asia* (1966).

71) Margaret Roff, 'The Politics of Language in Malaya', *Asian Survey* (May, 1967).

72) See R. S. Milne, 'National Ideology and Nation-building in Malaysia', *Asian Survey* (July, 1970).

(Islam), the National Language (Malay) and communal status (Malay 'special rights'). While the 'legitimate rights' of non-Malays were assured as hitherto, the more positivist definition of Malaysian political culture affirmed Malay custody over the norms of political community *and* political legitimacy. This invoked a subtle but nevertheless meaningful change in the terms of intercommunal partnership, in so far as non-Malays were now expected to subscribe to strictly Malay symbols of national identity. The inculcation of Malay national norms postulated a stronger emphasis on political acculturation by means of education policy. Conversion of post-primary schooling to the Malay language, exclusively, implies a greater degree of cultural integration eventually. However, language is now just one, albeit salient, symbol of the Malay nationalist resurgence. Political means of acculturation will have to cope with the dilemma involved in forging particularistic norms into the nationalism of an otherwise plural society. In the meantime, UMNO has proceeded to extend its bloc of political consensus beyond the original Alliance to a broader National Front coalition, designed to make impregnable the Malay dominion over the Malaysian political process.

Any evaluation of the wider consequences of education policies must necessarily remain tentative, to be sure, owing to our inadequate time perspective. It is still too soon to discern the full influence of changes in Malaysian education since independence: the first cohort to embark on post-1957 national schooling finished its primary education in 1963, completed the secondary level not before 1970, and graduated university (bachelor's degree) only in 1973. This lengthy time sequence, the gestation period of education, suggests that the outcome of the education institution-building process of the 1950s and 60s has yet to be wholly revealed.