

THE
INTERNATIONAL ENCYCLOPEDIA
OF
EDUCATION

Editors-in-Chief
TORSTEN HUSEN
T. NEVILLE POSTLETHWAITE

THE
INTERNATIONAL ENCYCLOPEDIA
OF
EDUCATION
Research and Studies

Volume 6
M-O

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PERGAMON PRESS

OXFORD · NEW YORK · TORONTO · SYDNEY · PARIS · FRANKFURT

U.K.	Pergamon Press Ltd., Headington Hill Hall, Oxford OX3 0BW, England
U.S.A.	Pergamon Press Inc., Maxwell House, Fairview Park, Elmsford, New York 10523, U.S.A.
CANADA	Pergamon Press Canada Ltd., Suite 104, 150 Consumers Rd., Willowdale, Ontario M2J 1P9, Canada
AUSTRALIA	Pergamon Press (Aust.) Pty. Ltd., P.O. Box 544, Potts Point, N.S.W. 2011, Australia
FRANCE	Pergamon Press SARL, 24 rue des Ecoles, 75240 Paris, Cedex 05, France
FEDERAL REPUBLIC OF GERMANY	Pergamon Press GmbH, Hammerweg 6, D-6242 Kronberg-Taunus, Federal Republic of Germany

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First edition 1985

Library of Congress Cataloging in Publication Data

Main entry under title:

The International encyclopedia of education

Includes bibliographies.

Index: v. 10.

1. Education—Dictionaries. 2. Education—Research—
Dictionaries. I. Husén, Torsten, 1916–
II. Postlethwaite, T. Neville.
LB15.I569 1985 370'.3'21 84-20750

British Library Cataloguing in Publication Data

The International encyclopedia of education

1. Education—Dictionaries

I. Husén, Torsten II. Postlethwaite, T. Neville
370'.3'21 LB15

ISBN 0-08-028119-2

*Computer data file designed and computer typeset by Page Bros
(Norwich) Ltd.*

Printed in Great Britain by A. Wheaton & Co. Ltd., Exeter

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Macao: System of Education

The Portuguese colony of Macao (Macau) is located on a small peninsula and two adjacent islands that jut into the Pearl River near where the Pearl flows from mainland China, past the city of Canton, and into the South China Sea. The territory covers 9 square kilometers (3.47 square miles) with a population in 1980 of 285,000, bringing the population density to nearly 32,000 per square kilometer.

Four centuries ago Macao became known as the Gateway to Asia, since it was the first permanent European settlement on the China coast and hence the port through which traders and missionaries from the West gained access to China. In past centuries, Macao was also known as the City of God and the City of Schools because of the extensive network of churches and schools established by Catholic orders and, to a lesser extent, by Protestant missions.

Although for more than four centuries the colony was infused with a strong Christian influence, by the 1970s only a small proportion of its citizens were Christians. The population in 1970 was 250,000, and only 9 percent were professed Catholics and only 1 percent Protestants. The majority (77 percent) were Buddhists, another 12 percent professed no religion, and 1 percent were Moslems or of other faiths. In terms of national origin, the population in 1970 was 3 percent Portuguese and 97 percent Chinese, suggesting that 9 percent of the Chinese residents had adopted Christianity (*Anuario Estadístico 1971 1972* pp. 21, 23).

By the 1980s the colony's chief sources of income were tourism, import-export trade, and the manufacture of fireworks, textiles, plastics, and electronics. The chief attractions for tourists were the gambling centers—four casinos, a dog-racing track, a jaialai court, and the annual Macau Grand Prix auto race.

1. Structure and Administration of the Educational System

Education in Macao is the official responsibility of a Directorate of Educational and Cultural Services, established in 1980 to assume the duties of the former Department of Educational Services and to supervise the National Library, the Historical Archives, and the colony's organized athletics that involve over 7,500 participants from 81 sports clubs.

While the directorate is nominally in charge of all educational services in the territory, in practice its activities are far more limited. Of the 39,490 students

attending schools in Macao in 1979, only 10 percent were in schools administered immediately under the directorate. The remaining 90 percent were enrolled in schools sponsored by Catholic missions, Protestants, or private Chinese societies which were essentially in charge of their own affairs.

From the viewpoint of the instructional language used and the pattern of courses taught, the schools can be divided into two major types: those under the directorate, which are conducted in Portuguese, and private schools, which are attended mainly by Chinese students, operated by missions or Chinese organizations, and conducted in either English or Chinese.

The Portuguese-language schools, designed chiefly for children of Portuguese families, are of several types and levels and follow the same curricula as those authorized by the Ministry of Education in Portugal. These institutions, enrolling 3,615 students in 1979, include a kindergarten (*escola infantil*), a four-year primary school, a two-year upper-elementary school (grades 5–6, called *escola preparatoria*), a classical secondary school (*liceu*), and one commercial and one industrial school subsidized by the government. The directorate also administers three primary schools for Chinese pupils, with instruction given in both Portuguese and Chinese so that pupils can master both languages (Claro 1980a pp. 1–2).

To encourage Chinese youths and adults to learn Portuguese, evening classes are offered by the government free of charge, with more than 1,000 participants enrolled in 1980.

The colony's 89 private schools enrolled 90 percent or 35,357 of the city's students in 1979, while an additional 518 were in semi-government-sponsored programs. Of the 89 institutions, 23 were conducted by Catholic orders under the Diocese of Macao with a total enrollment of around 20,000 students. A second group of schools were Chinese institutions, following a program of study patterned after that in the People's Republic of China, with an estimated enrollment of 13,500. The remainder of the private-school students attended non-Catholic Christian schools of a noncommunist orientation (Claro 1980a pp. 1–2).

In all government-administered schools, education for the first nine years is free of charge to the students' families. In addition, many pupils receive free meals provided by the Institute of Social Assistance. The cost of private schooling is borne chiefly by the sponsoring societies and fees paid by parents. In addition, the government provides subsidies to 60 of the 89 private institutions.

Until the 1980s there was no university education offered in Macao. The most able secondary-school graduates in the past years had been awarded scholarships to pursue higher education abroad, principally in Portugal or in the British colony of Hong Kong, located across the Pearl River from Macao. At the close of the 1970s, a coalition of business executives, primarily from Hong Kong, was granted a 25-acre site on Macao's Taipa Island to establish the private University of East Asia. The first buildings were erected in 1980–81 for the scheduled opening in the fall of 1981. According to the plan, the university is initially to comprise three colleges:

the University College, offering three-year degree courses; the Junior College, offering one year and two-year courses preparing candidates for admission into the University College and other tertiary institutions; and the College of Continuing Education, offering professional and other courses of varying durations. (*Universidade de Macau* 1980 p. 3)

The university's directors intend to enroll 500 students each year, beginning in 1981, until facilities for 2,000 students are completed in 1984. The university is to provide three streams, distinguished by language of instruction—Portuguese, Chinese, and English.

2. Curricula and Teaching Materials

Both curricula and teaching materials are imported from sources outside the colony. For the schools conducted in the Portuguese language and administered directly under the territorial government, both the pattern of subjects taught and the textbooks pupils study are imported from Portugal. For the noncommunist schools conducted in the Chinese or English languages for Chinese students, and administered either by Christian orders or by secular organizations, the curricula and textbooks are imported from Hong Kong. An estimated 90 percent of the textbooks in Macao are published in Hong Kong. The course of study and textbooks for communist schools come from the People's Republic of China.

Although each variety of private school is permitted to determine its own curriculum, free from government intervention, most schools include the subjects of Chinese language, English language, Chinese history, world history, mathematics, biology, chemistry, physics, social studies, geography, hygiene, handicrafts, art, and physical education. A move was initiated in the early 1980s to include moral instruction so as to counteract the increase in crime in the territory.

With regard to instructional methods, schools of the colony have depended chiefly on lecturing, discussions, and the assignment of reading in textbooks. Audiovisual aids have not been adopted extensively, nor has the colony utilized the educational television programs broadcast from nearby Hong Kong.

3. Supplying Educational Personnel

It has been unnecessary for the colony to maintain a system for training either administrative or teaching personnel, since most staff members have been educated abroad. The six or seven top administrators in the Directorate of Educational Services are Portuguese educationalists who hold advanced academic degrees. The same is true of the majority of the teachers in the Portuguese secondary school and primary schools. Members of Christian orders that maintain private schools in Macao have been educated in Europe or the United States or in other regions of the Far East.

Since there are no government regulations specifying the training and experience required of private teachers throughout the territory, each school is free to hire its own teachers on the basis of criteria set by schools' directors. Most classroom teachers come from Macao, Taiwan, Hong Kong, or mainland China. This laissez-faire teacher-supply system appears to suit the territory's needs, since there is no shortage of classroom instructors.

4. Conclusion

In summary, education in Macao is primarily conducted by private societies that are permitted a great measure of autonomy in determining their curricula, teaching materials, staffing, and methods of finance. The government directs its attention mainly at the support and supervision of the few Portuguese-language schools and at providing modest financial subsidies for the majority of the territory's private institutions.

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R. M. Thomas

Madagascar: System of Education

The Democratic Republic of Madagascar comprises a large island (area: 587,000 square kilometers or 226,640 square miles) and several small ones. It is

located in the Indian Ocean approximately 500 kilometers to the east of Mozambique. There are several distinct geographical regions within the country: the rice-growing high central plateau is the most developed area, and includes the capital city of Antananarivo as well as other important urban centers. To the east is a lush area lying between the plateau escarpments and the ocean. The arid southwestern region is the most isolated and the least developed. In contrast, the northern triangle is a rich agricultural area.

In addition to geographic variance, Madagascar is a nation of much ethnic variance. The total population of 8,742,000 includes more than half a dozen principal ethnic groups as well as a number of foreign residents (Europa 1982).

Language serves as an important unifying element amongst the population. Malagasy, a language of Malayo-Polynesian origin, is spoken throughout the nation in its various dialect forms. French is a second official language but is slightly less used in education and official affairs since the nation gained total independence on June 26, 1960.

The French rule of Madagascar lasted from the late nineteenth century until October 1958, when the nation entered a two-year period of autonomy within the French community. In 1960, the French granted independence to Madagascar and appointed a head of state to rule the country. During the French rule differences between the coastal people (*Côtiers*) and the highland *Merinas* were accentuated. These differences, in conjunction with economic problems, led to growing discontent. The country entered a period of political instability in 1972 which led to the establishment of the 1975 Constitution, the Socialist Revolutionary Charter.

Under the 1975 Constitution the National People's Assembly acts as the national legislative authority. Its members are elected by the people to serve a five-year term. A president is elected for a seven-year term, and becomes the chairman of the Supreme Revolutionary Council (SRC). The members of the council are chosen by the president, with the stipulation that one-third of the body be selected from a list provided by the National People's Assembly. The prime minister is appointed by the president, and the ministers are appointed by the prime minister.

In order to improve the economic situation, land was expropriated from French ownership during 1978-79 and converted to state farms and cooperatives. By placing priority on agricultural reform, the present government is attempting to achieve self-sufficiency in most basic food products. Furthermore, products such as coffee, cloves, vanilla, and meat make up a large percentage of export earnings.

The nonagricultural modern sector of the economy is also of a socialist nature. Since 1975, the government has owned the banks and insurance agencies, and the government has shares in many business

companies. There are plans to expand the industrial sector, which is currently limited. There is potential mineral wealth in the country; thus far tar sands have been explored for future production, and the refinery at Toamasina presently produces oil. However, the highest export earnings from minerals come from chrome (Hancock 1981 pp. 225-28).

In spite of vigorous programs and potential sources of wealth, Madagascar remains in need of aid. It will take some time for the effects of local programs to reach national significance. In the meantime, France remains the major supplier of aid.

1. Structure of the Educational System

There are three main goals to be pursued by the educational system: democratization, decentralization, and "Malagasization." Together, these three goals imply that education should be equally accessible to all, that the administration and the location of educational establishments should be scattered rather than centralized in one area, and that the system should serve the needs of the nation.

The basic structure of the educational system consists of a 6-year primary school, a 4-year junior-secondary school, a 3-year senior-secondary school, and a university. Young children may also enter nursery or kindergarten education after age 3.

Attendance in the six-year primary school, which children enter at age 6, is compulsory. By 1975, over 94 percent of primary-school-age children were enrolled (100 percent of males, 87 percent of females). In the same year, 54 percent of youths of secondary-school age were in school (58 percent of males, 50 percent of females). The highly selective university enrolled in 1976 only 1.7 percent of university-age youths (2.2 percent of males, 1.2 percent of females). By 1979, the percentage in higher education had grown to 3.1 (UNESCO 1981 pp. 3:17, 3:36).

Major reforms were made in the system in 1972-73. Research was conducted and suggestions were made by the Malagasy Interdepartmental Committee and various subcommittees. The results were given to the Ministry of National Education which initiated educational reforms accordingly. These reforms included the dismissal of the French director general of academic services and the establishment of a new administrative structure.

The Ministry of National Education is responsible for developing and coordinating the educational system with respect to the national goals of education. The directorate for the planning and orientation of education works with the primary, secondary, technical, and vocational operational teaching directorates to outline specific elements of the national education plan. They develop syllabi, and coordinate national and regional administrative bodies. The *Bureau d'Etudes des Programmes* (BEP) and the

Organe Technique d'Elaboration des Programmes (OTEP) are responsible for the adaptation of syllabi and methods in accordance with environmental conditions. They are also responsible for the coordination of research and instruction, the organization and production of curriculum materials, and the retraining of instructors. The Publication and Audio-Visual Service (SEPAV) takes care of the editing, publication, and distribution of curriculum materials (Razafindrakoto 1979).

Since 1973, all teaching and research establishments of higher education have been integrated into one autonomous university under the control of the Ministry of National Education. The head of the university is the rector who is advised by the university committee of administration. This committee includes ministry officials, administrative leaders, faculty, staff, and students. The finances of the university are the responsibility of the Ministry of Finance (UNESCO 1976).

Teacher training takes place at university level, in an institute of teacher training. A number of policies were initiated in 1973 in order to open additional schools for the sake of access to education in all areas and for the purpose of promoting the views of the nation. These policies included: the replacement of foreign instructors by Malagasy instructors; the placement of teacher-training students already holding the *baccalauréat* into teaching positions at the lower-secondary-school level; the placement of teachers holding bachelor's degrees in positions at the upper-secondary-school level; the request that persons holding the Lower Secondary Certificate teach rather than serve in the armed forces; the standardization of training programs; and the development of minicourses to refresh the knowledge of teachers (Razafindrakoto 1979).

Entrance into higher education programs requires six years of primary schooling, seven years of secondary schooling, and the successful completion of the secondary-school leaving certificate (*baccalauréat*) or an equivalent exam. The present policy strives to emphasize the use of common examinations rather than school type and location as the criteria for admission into higher education.

2. Concluding Remarks

It is difficult to assess the effects of the educational reforms over a short period of time. Some trends, however, are already evident: the emphasis on the development of primary schools has led to a marked increase in first-level school enrollment and a reduction of regional disparities.

In 1960–61, there were approximately 450,000 pupils in first-level schooling. This figure rose to more than 1,130,000 in 1975. Accordingly, the ratio of students attending school to the total school-age population of age 6 to 14 rose from 36.5 percent in

1962–63 to 47.1 percent in 1971–72 and then to 52.0 percent in 1975. Educational goals have not shown a similar effect on the higher levels of education. There are still a limited number of higher education establishments, and regional and social disparities have not yet been dealt with in an effective manner (Hugon 1980). According to the *Europa Yearbook* (Europa 1982) 85 percent of children between the ages of 6 and 11 attend school, but only 11 percent of children between the ages of 12 and 17 attend.

Thus, the effects of educational policies in Madagascar may be seen to some extent at the primary levels of education. More work remains to be done, especially in terms of secondary-education opportunities. As with the results of the agrarian reforms, it will no doubt be some time before the full effects of educational reform are evidenced at the national level.

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S. S. McIntyre

Malawi: System of Education

The Republic of Malawi, a landlocked country in East Africa, lies along the Great Rift Valley, with Lake Malawi along the eastern border, the Nyika Plateau in the northwest, and the Shire Highlands in the southeast. It covers an area of 117,050 square kilometres (45,193 square miles) and in 1974 had a population of 4,900,000.

Malawi was formerly the British protectorate of Nyasaland from 1891 to 1953, when it became part of the Federation of Rhodesia and Nyasaland. The federation dissolved in 1963 and the following year Malawi gained independence under its present name.

In 1966 it became a republic within the Commonwealth.

1. Aims of Education

The main aim of education in Malawi is to produce educated people whose theoretical knowledge and practical skills are well-balanced. The educational system is seen as both working within and developing the country's cultural norms and social values, which include discipline, good character, and propriety in manner and dress.

The extension of accessibility to education, particularly primary education, has long been a goal in Malawi. Universal primary education has not yet been achieved but remains the ultimate aim.

The basic objectives of education are rooted in those of national development and are as follows:

- (a) to base educational development, particularly beyond the primary level, on the personnel requirements of social and economic development;
- (b) to make the system more relevant to socio-economic needs;
- (c) to ensure the maximum and efficient utilization of existing facilities and resource inputs;
- (d) to secure a more equitable distribution of educational facilities and resources in order to realize the greatest possible cost effectiveness in the education sector.

The goals of primary education are:

- (a) to enable pupils to lead a productive and fulfilled life after completing primary education by: (i) mastering reading, writing, and arithmetic; (ii) character formation, including spiritual and cultural values and responsible citizenship; (iii) acquiring knowledge of people and the world, particularly an understanding of the local environment and ways of improving the quality of life in it; and (iv) acquiring knowledge and skills in agriculture and other practical areas in which pupils will have to earn a living;
- (b) to equip pupils with sufficient knowledge and skills to continue learning after they leave school; and
- (c) to prepare pupils for the next level of education.

Education policy, therefore, emphasizes education at all levels for agricultural and rural development, and the curriculum has been restructured accordingly. The school leaver can therefore return to the land reasonably well-equipped to deal with and understand rural problems and participate effectively in national development.

2. Administration

The Ministry of Education and Culture is headed by a politically appointed minister who also sits in the cabinet. Under the minister is a principal secretary who directs day-to-day activities. The principal secretary is assisted by the deputy secretary. Under the deputy secretary are four heads of the main branches. The chief education officer heads the Educational Administration Branch; the chief inspector of schools heads the Inspectorate and Examination Branch; the assistant chief education officer (planning) heads the Educational Planning Branch; and the under-secretary heads the General Administration Branch.

The Educational Administration Branch ensures the efficient running of schools and colleges by the provision of teaching staff, support staff, equipment and books, selection of pupils, and the maintenance of discipline. The Inspectorate and Examination Branch is responsible for the supervision of schools and colleges, the development of curricula, and the Malawi public examinations. The Educational Planning Branch is responsible for planning education development programmes and expansion of educational facilities. The General Administration Branch is responsible for general administrative and accounting functions including personnel, the audit, and stores management. To assist headquarters in its supervisory role, regional and district offices have been set up in each region and district respectively. A regional education officer supervises the district education officers in a region while the district education officers supervise headteachers within the district.

The Education Act of 1962 prescribes the roles of local and central government in education. Generally, the Act provides for the decentralization of certain aspects of primary education to each local education authority (LEA) while at the same time strengthening public control over education to facilitate the planning of education at the national level so that the needs of the whole people are taken into account. Consequently, the minister responsible for education is given complete authority over the sector and is directly represented by his nominees on education committees at the local education authority level.

Each district council or town or city council has been declared a local education authority. In discharging this role, it forms an education committee whose executive officer is the district education officer (DEO).

The Education Act empowers the central government to exercise overall powers in order to coordinate and plan education at the national level. The mechanisms for doing this are first the centralization and registration of teachers and second the regulation of syllabi and school fees.

Because missionaries were the pioneers in the pro-

vision of education in Malawi, they still have proprietorship over many schools. As voluntary agencies they contribute to education by the construction of schools and by equipping and furnishing them.

Local communities contribute to education largely through constructing the majority of primary schools through self-help projects.

In conclusion, the responsibility for primary education in Malawi is shared between the central government, local government, voluntary (mission) agencies, and the local communities in which the schools are situated. While variations occur between different local education authorities, the fact that the central government oversees the whole education system ensures coordination, equity, and fairness in the distribution of education goods and services.

3. General Structure of the Educational System

Education in Malawi is not compulsory at any level. The formal educational system comprises five sections: primary education, secondary education, teacher education, technical and vocational training, and higher education.

The primary-school course serves two functions: to provide a good background for those pupils who pass on to the next level of education and to prepare the majority of the pupils for life in the rural areas where they will have to earn their living. Emphasis is put on learning the basic skills of numeracy and literacy in order to ensure permanent literacy for all pupils completing the course.

The school year runs from October to August and is divided into three terms.

The primary course is eight years long and is divided into two sections, junior primary (standards 1–5) and senior primary (standards 6–8). The official entry age is 6. Instruction in standards 1–4 is conducted in Chichewa, the national language. Standard 5 is a transitional year in which instruction is both in Chichewa and English. After standard 5, instruction is in English.

There are two main types of primary school—assisted schools and unassisted schools. Assisted primary schools receive financial assistance from the central government. Of the assisted schools, some are owned by voluntary (mission) agencies while others are owned by local education authorities. Unassisted schools do not receive any financial assistance from the central government. These unassisted schools can apply for assistance when they meet requirements set down by the Ministry of Education.

Since only about 15 percent of primary-school leavers have the opportunity to go on to secondary school, the primary-school curriculum has been adapted to make it relevant to the needs of the majority who do not proceed further. Agriculture, home economics, and craft technology are introduced in the upper classes. The syllabi in science and

arithmetic put emphasis on preparing the pupil both for further education and life in rural society.

Secondary education is considered the cornerstone of economic development as it is the prerequisite for entry into the modern economic sector. It is also required by students going on to the postsecondary or tertiary levels of education and training. In view of this, the ministry has emphasized expansion and diversification. The government has completed the first phase of expansion by constructing at least one secondary school in each district. More are being built with the aim of doubling enrolment in secondary schools by 1990. The policy on curricular diversification is to make secondary education more responsive and relevant to local needs. Apart from the introduction of agriculture, nearly half of the schools offer practical subjects like woodwork, metalwork, technical drawing, and home economics.

Secondary education lasts four years in most schools. After two years the students sit the Junior Certificate Examination (JCE). After obtaining the Junior Certificate (JC), students study for another two years before sitting for the Malawi Certificate of Education (MCE) which is the minimum entry qualification for the University of Malawi. A few students may continue secondary education by taking two more years at a "sixth-form" school which prepares students for the Higher School Certificate (HSC) examination.

There are five types of secondary school in Malawi. The division is made according to whether boarding facilities are available and whether the schools are government, assisted (mission), or private. There are aided boarding-secondary schools, aided day-secondary schools, government boarding-secondary schools, government day-secondary schools, and private secondary schools. The teaching stock is composed of qualified teachers holding degrees or diplomas. The very few underqualified teachers (T2 and T3 teachers) are restricted to teaching civics, physical education, or Chichewa. There are shortages of teachers, particularly in English, mathematics, and science. There are no unqualified teachers in secondary schools.

Technical education starts in primary schools and spans the whole of secondary and tertiary education. In primary schools, pupils are exposed to elementary aspects of crafts and technology. At the secondary level, technical subjects are offered in almost half the secondary schools. The most important technical training takes place as a form of vocational training in technical schools and the polytechnic.

The largest number of craft courses are carried out in government technical schools. The training is of an apprenticeship type and is administered jointly by the Ministry of Education and Culture and the Ministry of Labour with the cooperation of industry. Courses provided in government technical schools include brickwork, carpentry and joinery, plumbing,

motor mechanics, general fitting, diesel fitting, sheet-metal work, and electrical work. The minimum entry qualification for these courses is the Junior Certificate.

The trainee spends one year in a government technical school on a residential course as a pre-apprentice. At the end of the year, the trainee sits an examination. A successful result in the examination leads to the award of the Grade 3 National Trade Certificate. The trainee is then indentured to an employer for the next three years. During these three years, nine months of each year are spent in industry and three months at the technical school. According to the ability of the trainee, the Grade 2 Test and later the Grade 1 Trade Test can be taken within the indenture period. Throughout the apprenticeship period, the trainee is paid wages by his employer at rates fixed by the government. The employer is refunded in full from the Industrial Training Fund.

Assisted technical schools are owned by mission agencies and managed by boards of governors who receive annual government grants for the schools. Although selection, staffing, and courses are similar to those in government technical schools, their programmes are outside the apprenticeship scheme. Assisted technical schools offer two-year residential courses up to the Grade 2 level. Training is available in brickwork, carpentry and joinery, and motor mechanics.

Craft training, formerly carried out at the polytechnic, has been transferred to the government technical schools. The exceptions are training in printing and telecommunication crafts. The main role of the polytechnic in technical training is in the training of technicians, diploma engineers, and graduate engineers.

Entry to the technicians' course requires a good Malawi Certificate of Education. It follows the usual apprenticeship scheme with one year full-time at the polytechnic followed by three years of industrial attachment. In each of the three years, the trainee spends six months in industry and six months at the polytechnic where the trainee can take the City and Guilds Examination (set in London). Arrangements are under way for the formation of a local examining board, initially working in conjunction with the City and Guilds.

The engineering diploma course is a three-year university course followed at the polytechnic. It offers more academic subjects than the technicians' course. The engineering degree course was started in 1977. It is a six-year programme aimed at producing high-level professional engineers. The first graduates were produced in October 1983.

Youth training centres are under the control of the Malawi Young Pioneers Movement which is the youth-training organization of the Malawi Congress Party. The centres provide training in the building and metalwork trades. Upon completion of training,

youths are supposed to become self-employed in rural areas. The centres teach skills which will enable the trainee to build a complete house and manufacture all the wooden furniture, doors, windows, cupboards, etc., for it. The course in metalwork develops skills for maintenance and repair of hand tools, farm implements, bicycles, oxcarts, and other items found in the rural environment.

Training at youth centres is for one or two years. Although courses at the centres are not within the apprenticeship programme, one centre does carry out preapprenticeship training in general fitting, motor-vehicle mechanics, and autoelectrics. Such preapprentices are then transferred to government technical schools to join the apprenticeship scheme.

All forms of higher education in Malawi are the responsibility of the University of Malawi (founded in 1964) whose central administration is located in Zomba, the former capital of Malawi which has now become a university town. The central administration is under the direction of the vice-chancellor and the university registrar. Each of the four constituent colleges is headed by a principal who is assisted by the college registrar.

The first degree students were admitted in September 1965 and graduated four years later, in 1969. In December 1974, the University of Malawi Provisional Council Act, by which the university was established, was repealed and replaced by a full University of Malawi Act.

Students enter the university after obtaining the Malawi Certificate of Education (MCE). Admission depends on a very competitive national selection based on MCE grades. Once students have been selected, they automatically receive government scholarships.

In 1979, an additional college, for nursing education, was added to the existing three colleges: Bunda College of Agriculture in Lilongwe, Chancellor College in Zomba, Kamuzu College of Nursing in Lilongwe, and the polytechnic in Blantyre.

Bunda College of Agriculture offers a three-year training in agriculture at degree and diploma levels. A selected group of diplomates are admitted to the final two years after which they are awarded a degree in agriculture.

Chancellor College is the main campus of the university. It offers courses leading to degrees in arts, science, social science, education, public administration, and law; and to diplomas in education and public administration.

The polytechnic offers diploma and degree courses in business studies, accountancy, and engineering and a diploma in technical teaching. It is also responsible for a variety of certificate courses. The courses at the polytechnic have a direct vocational content and practical bias.

The Kamuzu College of Nursing is the newest of

the four constituent colleges of the university. It trains students in nursing and midwifery.

Correspondence education is provided mainly by the Malawi Correspondence College and Broadcasting Unit. However, other correspondence colleges, including ones abroad, also provide courses by correspondence.

The Malawi Correspondence College merged with the Schools Broadcasting Unit in 1973 after coexisting with it for six years. Enrolment totals about 3,500 students per year. Its objectives are:

- (a) to provide opportunities for secondary-school education to the thousands of primary-school leavers who are unable to attend secondary schools;
- (b) to enable adults who did not complete their education to have formal education at primary or secondary level;
- (c) to enable primary-school teachers to upgrade themselves either from T4 level to T3 or from T3 level to T2; and
- (d) to ensure that adequate alternative educational opportunities are available and to prevent a drain of funds to foreign correspondence colleges.

The Broadcasting Unit supplements the functions of the Correspondence College by providing radio programmes. In addition, the unit provides a tape service whereby schools send blank tapes to the unit on which it records specially requested material.

The Malawi Correspondence College and Broadcasting Unit offers the following courses: (a) a primary-school leaving certificate course; (b) nine Junior Certificate courses; (c) seven Malawi Certificate of Education courses; and (d) a teacher-upgrading course (T4 to T3 and T3 to T2).

A most important development in correspondence education is the setting up of Malawi Correspondence College centres and night schools. These started as study groups which met under the guidance of teachers. They have developed into schools with their own or shared facilities and a permanent staff of 1 teacher per 40 pupils. The local community usually provides the classrooms, hostels, and teachers' accommodation on a self-help basis while the college provides teachers and teaching/learning materials, including a radio.

Special education in Malawi is seen as a first stage in preparing the handicapped to lead an independent and satisfactory life in the community. The other stages are vocational training, settlement, and after-care. These three later stages are the concern of many government departments, statutory organizations, and private organizations, both within and outside the country.

There are well-developed programmes for the

blind and the deaf. There are no special programmes for retarded children. In order to encourage parents to send their handicapped children to school, no fees are payable for such children and their transport costs to school are covered by the government.

It is not possible to use the resource type of education for the deaf because the deaf require sophisticated and expensive equipment which cannot be provided all over the country. Therefore, education for the deaf is provided at an integrated centre which consists of a preschool, a primary school for deaf children, a training school for teachers of the deaf, and an audiology testing centre.

Teacher training for the deaf and the blind is carried out in Malawi at Montfort College and is open to other African countries. Recruitment is from among already serving primary-school teachers. Training is given by means of a supplementary two-year course which includes block periods of teaching practice at the nearby special schools.

4. Teacher Education

The Ministry of Education and Culture prescribes the syllabus and guidelines on period allocation for teachers' courses. The courses consist of both academic and pedagogical subjects. Classroom subjects are complemented by teaching practice. At different times during the course, students participate in peer teaching and microteaching. The student first teaches primary-school children at the adjacent demonstration primary school under the supervision of an experienced teacher. Later, the trainee teaches for a stretch of six weeks at a primary school in a scheme called block teaching.

The lecturers in the teachers' colleges are of three types: graduate teacher educators, who head most of the departments, and diplomate and nondiplomate tutors.

Primary-school teachers are mainly of two grades, T2 and T3. T2 teachers hold a Malawi Certificate of Education (four years of secondary education) plus a two-year Teachers' Certificate, while T3 teachers hold the Junior Certificate (two years of secondary education) plus a two-year Teachers' Certificate. There are a few T4 teachers (primary education plus Teachers' Certificate), but these are being phased out by normal attrition and by upgrading to T3 level through inservice training. A T1 grade exists but this is a promotional grade reserved for headmasters and headmistresses. Since there is a shortage of qualified teachers, recourse has been made to unqualified teachers. Most of the unqualified teachers have attempted the Junior Certificate Examination and are given short concentrated courses in teaching methodology.

Secondary-school teachers are trained at the School of Education. The school awards three types of professional qualifications: Diploma in Education,

Bachelor of Education, and the University Certificate in Education. Students enter as degree or diploma students and follow the course for a general degree in education. Students following the diploma course continue for a third year, taking courses in education and subject methodology, with a period of teaching practice in schools. Students selected for the Bachelor of Education course continue with third- and fourth-year general-degree courses in their teaching subjects and in education. During the fifth year they take subject methodology and education and have a period of teaching practice.

The University Certificate in Education course is intended for graduates without a teaching qualification who wish to become teachers. The graduates do an introductory three-week course before teaching in a secondary school for one year. Then, they spend a year of full-time study at the School of Education in subject methodology and education and also have a period of teaching practice.

Teachers of technical subjects are trained either locally or at overseas polytechnics. Primary-school technical teachers and secondary-school technical teachers are trained locally while teachers for technical schools are trained mostly in the United Kingdom.

In Malawi, inservice teacher education is organized and carried out by a number of agencies which include the Malawi Institute of Education, the University of Malawi, the Malawi Correspondence College and Broadcasting Unit, and the ministry headquarters with its regional and district officers. The most important centre for inservice education is the Malawi Institute of Education whose facilities are specially built for this function.

The first type of inservice course is for unqualified primary-school teachers. This course aims to give them basic professional training in teaching skills and to upgrade their background knowledge in specific subject areas of the primary-school curriculum. The course comprises a correspondence element provided by the Malawi Correspondence College and Broadcasting Unit and a residential five-week course at the Malawi Institute of Education, followed by a follow-up workshop at district level after six months of teaching in primary schools. The unqualified teachers complete their training at regular teachers' colleges where they undergo two years of residential training before obtaining registration.

The second type of inservice course is for primary-school teachers who wish to be upgraded either from T4 to T3 or T3 to T2. The training aims to improve the quality of the teaching force in primary schools. The first phase of the course is by correspondence supplemented by radio programmes. The second phase is a five-week residential course at the Malawi Institute of Education during the long school holidays. The residential phase includes education courses but emphasis is laid on critical assessment of

the primary-subject syllabi. The last phase consists of teaching in schools, where newly acquired skills are put into practice. The district inspector of schools makes the final assessment leading to the upgrading of the teacher, which is confirmed by the issuing by the Registrar of Teachers of a new Authority-to-Teach Certificate.

Upgrading courses for secondary-school teachers are undertaken at the University of Malawi where teachers spend a year or two of residential study. In all cases, the courses consist of subject methodology, education, and teaching practice. Unqualified graduate teachers obtain a University Certificate of Education (UCE); diploma teachers can become graduate teachers by working for the two-year Bachelor of Education degree.

The last type of inservice course is a short course organized by the ministry headquarters or regional or district offices. These courses emphasize the development of skills and an understanding of how the school system works.

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Malaysia: System of Education

Malaysia occupies two distinct geographical areas: Peninsular Malaysia, comprising the Malay Peninsula to the south of the Isthmus of Kra, and East Malaysia (the states of Sabah and Sarawak), consisting of the north and western regions of the island of Borneo. Both parts are separated by about 644 kilometers (400 miles) of the South China Sea. The total land area of Malaysia is about 336,700 square kilometers (130,000 square miles), of which Peninsular Malaysia occupies 134,680 square kilometers (52,000 square miles) and East Malaysia 202,020 square kilometers (78,000 square miles).

Western influence came with the capture of Malacca by the Portuguese in 1511 and later by the Dutch in 1642. Britain's connection with Peninsular Malaysia began with the establishment of trading settlements in Penang in 1786, Singapore in 1819,

Table 1
Population by age group 1970–80^a

Age group	1970		1975		1980	
	thousands	%	thousands	%	thousands	%
0–14	4,792.4	44.5	5,230.0	42.0	5,632.2	39.5
15–64	5,631.4	52.2	6,776.0	54.4	8,103.9	56.8
65+	353.1	3.3	443.9	3.6	525.1	3.7
Total	10,776.9	100.0	12,449.9	100.0	14,261.2	100.0

a Source: adapted from Malaysia, Government of 1981 p. 80

and Malacca in 1824. British influence and authority over North Borneo (Sabah and Sarawak) were established almost concurrently with British expansion in the Malay Peninsula.

In 1955, Malaya achieved self-government, gaining independence in 1957 and adopting a system of constitutional monarchy with a popularly elected government. The Federation of Malaysia, with Sabah and Sarawak, was formed in 1963. The expansion of the tin industry brought in a large number of Chinese, and the growth of the rubber industry resulted in an influx of Indian immigrants. These events gave rise to the existing plural society comprising the three major ethnic groups—Malays, Chinese, and Indians.

The population of Malaysia in 1980 was estimated at 14.3 million with a yearly increase of 2.8 percent. The population by age group over the period 1970–80 is shown in Table 1.

Agriculture remains a major occupation and accounts for the highest percentage of the labor force. The utilization of human resources is shown in Table 2.

Malaysia is now an elective constitutional monarchy. The federal government has authority over external affairs, defense, internal security, justice (except Islamic and native law), federal citizenship, finance, commerce, industry, communications, education, and other related matters.

Table 2
Occupational distribution of personnel 1980^a

	Thousands	%
Professional and technical	278.3	5.5
Administration and managerial	62.2	1.2
Clerical	277.7	5.4
Wholesale and retail	481.9	9.5
Services	447.6	8.8
Agriculture	1,979.0	38.8
Manufacturing	1,566.8	30.8
Total	5,093.5	100.0

a Source: adapted from Malaysia, Government of 1981 p. 98

Education in the prewar and pre-independence period developed along racial and ethnic lines. There were four kinds of school, using English, Malay, Chinese, and Tamil as the media of instruction. The years following the Second World War were periods of reconstruction toward the development of a unified system of education. In the present system of education, the stated objective is to bring together children of all races within a national educational system in which the national language (Bahasa Malaysia) is the main medium of instruction.

1. General Structure and Size of the Education Effort

Formal education in Malaysia begins at age 6 in the primary schools and has a 6 + 3 + 2 + 2 system of primary, secondary (lower and upper), and post-secondary education (Fig. 1).

At the primary level, there are three media of instruction: Bahasa Malaysia, Chinese, and Tamil. In all schools, and at all levels, English is taught as a compulsory second language. Promotion at the primary and lower-secondary levels is automatic. In 1980, 2,006,748 children attended primary schools, more than 93 percent of the population cohort between the ages of 6 and 11 (Fig. 2). It is expected that about 90 percent of the cohort will progress from standard 6 of primary to form 1 of lower-secondary education.

All primary schools, irrespective of the medium of instruction, use a common syllabus to ensure that all pupils follow a course whose content reflects a Malaysian outlook. Each school conducts its own evaluation of pupils. Tests are administered regularly, whether weekly, monthly, or at term end. In addition, centralized assessments are conducted yearly for all pupils in standard 5. This national assessment is used to determine the level of pupil achievement and the remedial activities required before the pupils enter secondary schools.

At the lower-secondary level (forms 1–3), pupils undergo automatic promotion through the three levels. Thus, a child has a minimum schooling of nine

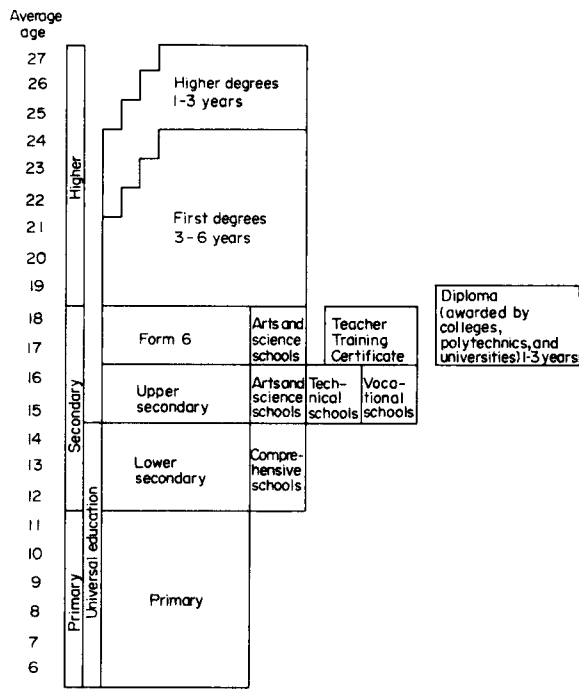


Figure 1
Structure of formal education^a

^a Source: Malaysia, Government of 1980 p. 19

years. Pupils in standard 6 in the Chinese- or Tamil-medium schools have an additional year in the "remove class" before proceeding to form 1 of lower-secondary school. In the remove class, pupils are expected to acquire proficiency in Bahasa Malaysia. In 1980, a total of 809,663 children ranging from age 12 to age 14 followed lower-secondary education.

The lower-secondary level offers a comprehensive type of education. In addition to academic subjects, studies of a prevocational nature such as industrial arts, home science, agricultural science, and commercial studies are included. All pupils are required to take at least one of the prevocational subjects, the main aim being to expose them to some practical studies. At the end of form 3, pupils sit for the Lower Certificate of Education examination. On the basis of results in this examination, pupils are selected to proceed to the upper-secondary level and are channeled into various streams, such as science, arts, technical, and vocational.

At the upper-secondary level (forms 4-5), education consists of academic (arts or science), technical, and vocational streams. In 1980, the total number of pupils in the upper-secondary level was 248,804. At the end of the second year, pupils in the academic and technical streams sit for the Malaysian

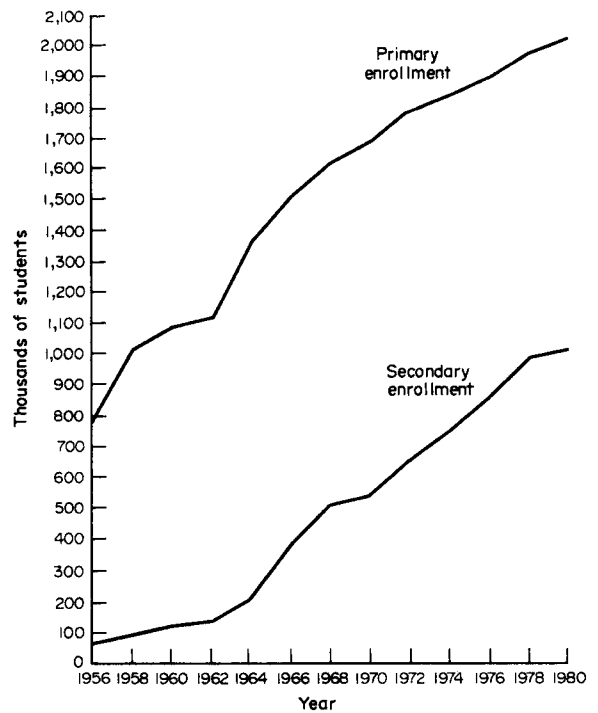


Figure 2
Enrollment of students in primary and secondary schools 1956-80^a

^a Source: Malaysia, Government of 1980 p. 20

Certificate of Education or *Sijil Pelajaran Malaysia* examination (in English and Bahasa Malaysia respectively), and pupils in the vocational stream sit for the Malaysian Vocational Certificate of Education. These examinations provide entry qualifications for posts in the public and private sectors. The tests are also utilized as a basis for selection into the postsecondary level (form 6) or for entry to the various courses at the tertiary level.

At the preuniversity level (form 6—lower and upper), education is streamed into science and arts. Pupils are selected on the basis of their performance in the Malaysian Certificate of Education or *Sijil Pelajaran Malaysia* examinations. In 1980, the enrollment was 27,062. At the end of the second year, the students sit for the Higher School Certificate or *Sijil Tinggi Persekolahan* in English or Bahasa Malaysia respectively. The results in this examination determine student entrance into local as well as accredited foreign universities and colleges. It is also a qualification for appointment to certain jobs in the government and the private sector.

All out-of-school training programs are run independently of the formal school system. However,