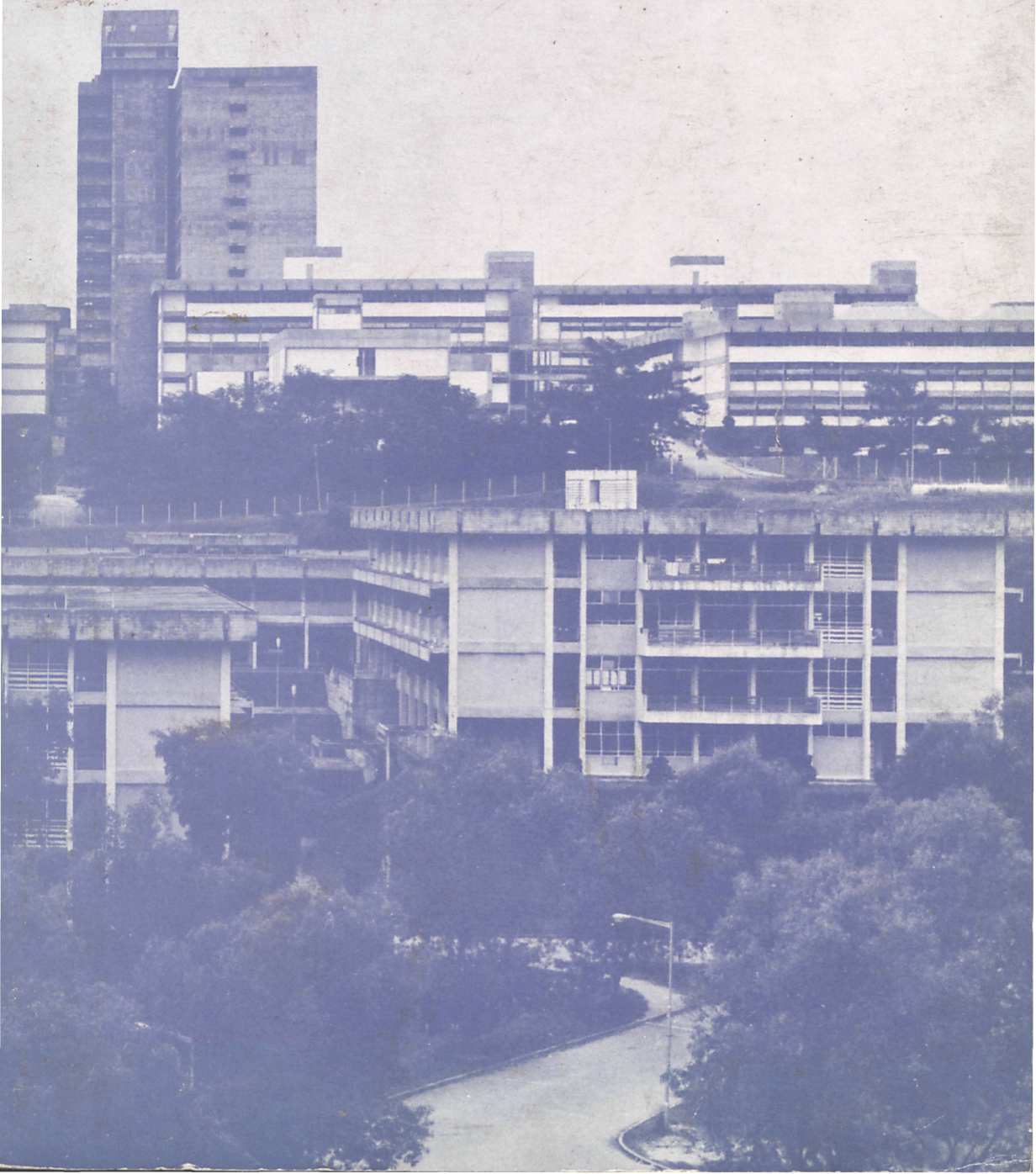


July 50

# DIRECTOR'S REVIEW

MARA INSTITUTE OF TECHNOLOGY

JULY 1973 TO JUNE 1974



**DIRECTOR'S REVIEW**  
**73/74**

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On 27 June 1973 the honorary degree of Doctor of Laws was conferred by Ohio University President Claude R. Sowle upon Datuk Arshad Ayub, Director of ITM, in recognition of his role as an administrator and innovator in Malaysian education.



## **DIRECTOR'S REMARKS**



During the academic year 1973/74 ITM provided education for more than 5,000 students in an array of 56 professional, technical, and scientific courses. The number of graduates for the year was 417, a figure that is low in relation to overall enrolment but that reflects the very high number of students in the first two or three years of their courses of study. These students are being prepared in professional and semi-professional courses which have been designed to integrate directly with the manpower requirements of Malaysia's massive economic development programmes. It is expected that by 1976 ITM will be producing graduates at the rate of more than 1,000 per year. In addition, a number of students leave the Institute each year for personal or academic reasons; these students nevertheless have partial qualifications which better equip them for future employment, even though they were unable to complete a full course.

ITM continued to grow dramatically during the past academic year. In 1973 there were 3,598 full-time students; in 1974 there were 4,684 full-time students and 488 part-time students enrolled in the extension education programme. In 1973 there were 231 full-time faculty; in 1974 there were 295 full-time faculty and more than 100 part-time staff retained for the teaching of highly specialized subjects. In 1973 ITM was still operating out of the temporary facilities on Jalan Othman and in Section 17 to complement the uncompleted campus in Shah Alam; by 1974 the Jalan Othman campus had been converted to use during the day as the School of Secretarial Science and during evenings as the extension education centre, the main campus at Shah Alam was virtually fully operational, and branch campuses were operating in Sabah, Sarawak, and Perlis. Also during the year, the computer centre and engineering workshop were installed in their respective schools, one additional hostel was completed, and the rest of the Schools were established in their new and permanent quarters — all of which facilitate the better delivery of academic and student services at the Institute.

One result of the development of facilities at the new campus has been to spur considerably the growth of Shah Alam as the new

state capital of Selangor. At the same time, the Institute has become a launching point for Malay involvement in industry and a forum for young Malays from throughout Malaysia. Because the majority of students are from rural areas, the Institute has served as a buffer between life in the *kampung* and life in the urban business environment. The responsibilities of the Institute are therefore far greater than simply educational; these also become social and psychological. One step taken in recognition of this multi-faceted role has been the development of such student personnel services as guidance and counselling to assist those students in need. I should add that in this field ITM has been a leader, being the first institution of higher learning in Malaysia to offer such services.

The general approach at ITM has been one of responsiveness: to grasp suitable opportunities when these arise and to act on them quickly, whereby the necessary physical or academic structure is created and then student and faculty development fill these out over time as programmes mature. We have chosen not to do the reverse, that is, not to have the students and faculty evolve before or concurrent with the structure. We have not had that luxury of time, largely because ITM's stated mission of bringing education to rural bumiputras has been of utmost urgency in realizing the objectives of the New Economic Policy. In this process we have attempted to offer courses of study that specifically relate to the potential of students and the requirements of industry. One result has been error, and we concede that we have made a substantial number. But another result has been success, and in importance and degree, this success much more than counterbalances any shortcomings. The accomplishments of ITM, given the obstacles it has had to overcome, have been considerable and can be measured in various terms: the increasing recognition by employing bodies of ITM graduates; the increasing regard for ITM of applying students (who increased in number from 7,000 in 1973 to almost 20,000 in 1974); and increasing earning power of graduating students, who because of their marginal entrance qualifications for university study would presumably have had to limit greatly their career goals if not for the education available to them at ITM.

## **BRANCH CAMPUSES**

With the successful first year of operation of the branch campuses in Kota Kinabalu and Kuching, the Governing Council has



accepted in principle the continuing expansion of the branch campus system. Thus, in July 1974 another branch campus was established in Perlis in conjunction with the state government. First year subjects offered to the initial intake of 254 students are for courses in the Schools of Accountancy, Administration & Law, Applied Sciences, Business & Management, and Secretarial Science. It is our intention, subject to the approval of the Governing Council and the relevant state authorities, to open one new campus each year: Trengganu in July 1975; Johore in 1976; Pahang in 1977; Perak in 1978; Malacca in 1979; and Kelantan in 1980. When these campuses have achieved a satisfactory level of development, they will be administered autonomously, except perhaps for such functions as staff recruitment and student admissions which can be better performed at the main campus, where facilities are more adequate.

The enrolment of each campus at maturity will be roughly 2,000 students, but some may grow larger if circumstances warrant. Initially these campuses will serve as feeder campuses for the main campus in Shah Alam, but it is intended that for some diplomas, all the course work will be done at the branch campus. For example, with the amount of land available to us in Sabah, I believe we will be able to offer the full course in Sabah for the Diploma in Forestry. It is probable, however, that students at advanced diploma level will continue to take their subjects at Shah Alam. We must bear in mind the resources available to ITM: we don't want to duplicate within the ITM system, just as we don't want to duplicate courses available outside the Institute. I nevertheless believe that many of the branches will eventually offer full courses in those areas that have traditionally formed the backbone of the curriculum: Business Studies, Accountancy, and Stenography.

As these branch campuses develop, there will be continuous evaluation of the manner in which they relate to the main campus and to the state in which they operate. In some instances, it will be desirable to up-grade the courses to full diploma level; but in others, we may elect to offer something less ambitious, for example, two-year certificate courses that might better meet a state's requirements for semi-professionals. We plan also to expand our extension education programme to these branches, at least in those subjects which are offered at the branch at any given time. Many working people find it difficult to pursue external courses with ITM faculty, they will have added guidance and incentive. We fully expect that the faculties, facilities, and services of these branches will make a contribution to each state far beyond that to students directly served.

## **NEW COURSES AND PROGRAMMES**

During the year under review, three new courses were added to the ITM curriculum: the three-year diploma courses in Wood Technology and Fisheries Technology and the two-year certificate course in Photography. We expect during the current year to introduce a course in Textile Technology and by 1976 to offer highly specialized courses in Mining and Petroleum Engineering. These numbers are small in relation to the additions to the curriculum in earlier years, but this reflects the new emphasis on the consolidation and improvement of existing programmes.

One emerging trend is the development of Diploma courses to supersede the external courses which initially were relied upon to ensure recognition. These courses are being tailored more specifically to the Malaysian situation, but will not preclude a student's pursuing the external qualification either concurrently or subsequently. Another trend is the development of a two-tier system for the awarding of advanced diplomas, whereby students who perform exceptionally well can continue for one or two additional years in a more specialised programme that will give them better qualifications on leaving the Institute. This system is now being implemented in the Schools of Accountancy, Administration & Law, Business & Management, and Architecture, Planning & Surveying.

Also during the year, the twelve-week Programme for Executive Development was introduced. This intensive course is designed for people already in industry to improve their basic skills in accountancy, business principles, and marketing. With the cooperation of employers, participants in the programme are given study leave with pay, and they typically assume positions of greater responsibility on their return. The success of the first offering in February 1974 has been satisfying to the employers and to the Institute, and we now intend to offer this programme on an on-going basis each semester.

As a result of a joint study performed with the University of Kentucky, it has become apparent that the Institute has the potential to further assist the involvement of bumiputras in business. It is intended in January 1975 that we will establish, in conjunction with the University of Kentucky, the Malaysian Centre for Entrepreneurial Development. The Centre will offer a one-year diploma course to train consultants who will assist bumiputra entrepreneurs in the improved operation of their small businesses. Continuing research on small business in Malaysia will also be conducted, and it is expected in the future that the Centre will offer a Masters programme in Entrepreneurial Development of one-year's duration for students

holding the Bachelor of Business Administration degree and of two year's duration for those with Arts degrees.

## **COOPERATIVE RELATIONSHIPS WITH OTHER INSTITUTIONS**

Over the last ten years, ITM has cultivated relationships with a number of institutions of higher learning throughout the world, particularly in England, the United States, and Australia. The substance of these relationships has taken several forms: student exchanges, training of ITM faculty, visiting professorships, and consultancies on programme development. The effect has been to improve the international recognition of ITM curricula, to facilitate entry of students and faculty for further studies and to focus attention to the specific problems facing ITM. These informal affiliations will not only continue in the future, they will be expanded to make available as many resources as possible to the students, faculty, and administration of the Institute.

These relationships typically begin with the involvement of a foreign institution in the development of a particular school, course, or programme. The Ealing Technical College and London Polytechnic were instrumental in the development of the Diploma in Business Studies. The British Government, coupled with a number of British academic institutions, has been instrumental in helping us to establish our School of Engineering, just as the Australians have been involved in course development for the School of Architecture, Planning, and Surveying. The Department of Journalism of Ohio University has been instrumental in the establishment of the School of Mass Communications, first in developing the curriculum, then in supplying numerous advisers and faculty. We are currently negotiating with this same university's Department of Business Administration for a Bachelor's programme in Business Administration, whereby the degree will be jointly awarded. And we are in the process of exploring new relationships: with the Colorado School of Mines for new courses in Mining and Petroleum Engineering; with a professional body in the UK for the Diploma in Transport, enabling us to reduce our reliance on external examination by the Chartered Institute of Transport; with Denver University for the Diploma in Library Science; with Boston University and the University of Washington for the public relations component of the Diploma in Mass Communications; and with the University of Kentucky for the establishment of the Malaysian Centre for Entrepreneurial Develop-

ment. I feel that one factor in our flexibility and consequent success is the fact that we are willing and able to work with institutions from throughout the world to achieve our objectives more rapidly and efficiently.

Through the mutual development and upgrading of academic programmes, these institutions have become familiar with ITM, especially our faculty and students. This familiarity facilitates considerably the entrance of both faculty and students into these institutions for additional training. For example, our students in Business Studies are now accepted at Associate of Arts level into Bachelor's programmes at Ohio University, Augustana College, Wilmington College, Northern Illinois University, Indiana University, and many others. Once the BBA programme is underway, our students will be accepted directly into Master's Degree programmes. In addition, students from the School of Architecture, Planning, and Surveying are currently accepted into the fourth year of six-year programmes in their respective areas of study in Australia. These are only a few examples; the list goes on and on.

What we have done in working with these institutions is to make ITM an open book. Professionals from abroad come to ITM, study our programmes, and tell us where we are falling short. We welcome this criticism, but we insist at the same time that they provide us with a Malaysia-specific solution that is practical within the operating constraints of ITM. From my point of view, an institution must not only be open in its own country, it must also be open to observation by outsiders. In maintaining these relationships, we have been unafraid of criticism, willing to experiment, and confident in our acceptance of revised objectives and methods. This approach has been absolutely imperative to our total process of institutional development.

## **DIVERSIFYING THE CURRICULUM**

One shortcoming of most courses offered by the Institute has been their almost complete emphasis on professional subjects. Notable exceptions have been the liberal studies component in the curricula of the School of Art and Design and the addition of the subject, Contemporary Issues in Malaysia, to the courses of study in the Schools of Mass Communications and Business & Management. This subject was introduced on a trial basis in 1972, and it is expected that the subject will be offered in an increasing number of schools. To improve further the balance of subjects taught at the



Institute, we are currently exploring two separate, but not exclusive, possibilities.

The first is the teaching of behavioural sciences. Until now, we have had to intensify the teaching of professional subjects to give students as solid a basis as possible in the three or four years they spend at the Institute. We felt for a long while that to devote too much time to non-professional subjects would dilute the courses of study and open them to the pitfalls and potential irrelevancies of liberal education in general. But it is now apparent that we do have a responsibility to train students in areas beyond those directly related to their ultimate careers. Our problem is this: How do we integrate such subjects as philosophy, sociology, and psychology into the curricula in a meaningful manner that avoids their distracting from the primary purpose of providing professional education? The solution is not simple, but we are nevertheless studying alternative proposals with the hope of offering a number of liberal subjects that will give a better balance to the overall curriculum.

The second possibility for expanding the curriculum is the introduction of religious and military studies. In this regard we are considering the larger issue of the future generation of bumiputras. If students are observed today, one witnesses their adoption of many new values, largely the sophisticated and essentially materialistic values of the West. Some of these new values have admitted application to Malaysian society as the emphasis shifts to increasing urbanization and industrialization. But others are in direct conflict with traditional values in our society. I feel that too many of the latter are being unwittingly adopted — too rapidly and with too little consideration of their implications. Because of the Institute's responsibility to its students, I feel we have a duty to balance such influences. One method of accomplishing this balance is through the introduction of programmes that will inculcate a sense of moral and physical discipline.

Rather than allowing students to divorce themselves from the spiritual discipline promoted in their homes and in schools, we propose to encourage this discipline by offering religious instruction as one component in every course of study. Students would attend weekly lectures, and the subject would be graded like any other that is required for graduation. By giving students a better understanding of the tenets of Islamic teaching, they can approach the dramatic changes that are taking place around them with a more stable value system.

And rather than allowing students to divorce themselves from the authority structures which guided their behaviour in the family and in school, we propose to make military training compulsory for all students one afternoon a week. This should not be misconstrued:

we are not transforming ITM into a military college. The primary intention is simply to maintain a sense of discipline in the context of conventional authority systems. Students will have the choice to join the Police, the Air Force, the Navy, and the already existing programme of the Territorial Army. If for some reason they are unable, they can join the boy scouts or girl guides. Once a week they would wear their uniforms, thereby helping to develop a sense of camaraderie and a sense of responsibility in their respective units. Considerable emphasis will be given to physical exercise. Only then can we presume to contribute to the development of whole individuals — intellectually, spiritually, physically.

## **THE TEMPORARY CLOSURE**

These remarks would be incomplete without mention of the unfortunate sequence of events that led to the closing of the Institute for six weeks in April and May after the demonstration on April 22, 1974. The main issue for students was achieving greater recognition for ITM diplomas and securing degree status for courses that have requirements and standards equivalent to degree courses in other institutions. To demonstrate their cause, a large number of students began a long march from the Shah Alam campus to Kuala Lumpur, where they intended to state their appeal. But because this march was unauthorized, the Federal Reserve Unit stopped them along the federal highway. After a brief encounter, the students returned to campus and occupied the administration block. The campus was sealed off for a day, and after authorities met to discuss the situation, it was decided that the Institute should be closed down for an indefinite period. Not until six weeks later were students called back for their examinations, first those taking external examinations, then the others.

This protest was, I feel, a manifestation of the students' search for their own identity and of their trying to put into practice the belief that if they are to be the future leaders of the country, they should in some way participate in the leadership of their own destiny. And being students, they are impatient: marching towards Kuala Lumpur was a vent for their frustrations. But this does not mean the method is to be condoned. There should not have been a demonstration in such form, and I do not think the students were at all aware of the implications of their actions. It is the consequences of these actions which they have had to accept.

Whereas other local institutions have also had their

demonstrations, ITM is the first institution of higher learning in Malaysia to be closed down. Such ignominy we can do without. The image of the Institute has of course suffered; the academic programmes suffered even more, because the closure was highly disruptive of educational process at the Institute. Many more students would have graduated in June had none of this occurred. But the episode has been a lesson — for the individual student, for ITM, and for the country. The students have become aware of the consequences of their actions; they now know that if they stage another such demonstration, the Institute is likely to be closed again and they might well suffer more than they could hope to gain. The Institute has had to take stock of its shortcomings and is emerging the better for it. And in Malaysia, we are coming to realize that student demonstrations are the product of a search for identity, of impatience, and of the realization that, as a group, students do have strength and solidarity which can be quickly mobilized. The question, however, is whether a show of this strength is good or bad, whether it is used or abused. Demonstrations can be valid, in proper form and concerning appropriate issues, but demonstrations can also be feebly invalid, when inappropriate methods or issues are taken up in their cause. The latter too frequently predominates, subverting the validity of the former and rather alienating than influencing the audience towards whom the appeals are directed.

About all these recent demonstrations, I think we should be concerned, but not unduly worried. These will continue to occur as long as there are issues. I would hope that students will limit themselves to appropriate and important issues and, in their pursuit of these issues, to the use of suitable methods. Students must not draw too much inspiration from other countries which have different environments, different forms of government, and different problems. In addition, they must realize that for every issue there are many points of view and that the key to achieving their goals is the acceptance of compromise.

## **RELATING ITM TO GOVERNMENT OBJECTIVES**

The rapid development of ITM over the last few years has been possible because of the efforts and encouragement of many individuals. A few of these stand out, however, and deserve special mention. Foremost, of course, is Y.A.B. Tun Abdul Razak, who as Deputy Prime Minister and Minister for Rural Development directed in 1965 that ITM should receive the financial support necessary to

develop additional areas of course work and to deliver these courses to an increasing number of young bumiputras. One major goal of the Institute became the redressing of the imbalance of Malay involvement in commerce and industry; this was to be accomplished despite any obstacles. Tun Razak's assurance set the tone for the ambitious programmes of the Institute, and he selected two men to oversee the implementation of these directives: Datuk Mansor Othman and Encik Ghafar Baba.

Datuk Mansor was instrumental in formulating the academic programmes of the Institute within the context of current and future requirements. In 1966, he recommended a plan that featured the offering of 42 different professional and semi-professional courses, the great majority of which were unavailable in other Malaysian institutions of higher learning. Encik Ghafar, as Chairman of MARA, gave special priority to the requirements of ITM, ensuring that the support necessary for its development programmes would be provided. To do this, he had to convince the Cabinet and the Treasury that such allocations were desirable and justified, especially in the face of competing programmes which might have yielded more immediate returns. For both men, ITM was to become an instrument for the advancement of rural bumiputra youths and the platform for launching trained bumiputras into commerce and industry. In their pursuit of these objectives, they became the architects of the overall planning that would eventually realize the general institutional concept put forth by Tun Razak.

Then, in 1970, Tan Sri Ghazali Shafie was appointed Chairman of the newly-formed Governing Council. Since this appointment, one of his primary objectives has been to ensure that the academic programmes offered by the Institute continue to be relevant to the manpower requirements of the country and that all courses be consistently improved in quality. Through careful and systematic planning, he has insisted on completeness of approach and has rejected mediocrity. The consolidation and upgrading of academic programmes over the past four years are in large part the result of his persistent efforts. Under his guidance, 16 new courses of study have been added to the curriculum, the establishment of branch campuses has been set in motion, the extension of part-time education to people already employed has been initiated, and a series of new programmes to make ITM more capable and relevant have been introduced.

Without the support and dedication of these leaders, ITM would not have become an educational institution of such direct importance to the achievement of government objectives for economic development. Without their efforts, ITM would be much, much less.



# **ACADEMIC PROGRAMMES**



## **GOALS OF ITM**

The primary goal of ITM is to develop and operate a series of educational programmes that is directly geared to the manpower requirements of the country, particularly in technology, business management and administration. These programmes and opportunities are to be made available to the maximum number of bumiputra youths, especially those from rural areas, so that they are better equipped to participate in the commercial and industrial sectors of the economy. To maintain the challenge and relevancy of instructional methods and curricula, the educational programmes are continually reviewed and assessed. The Institute also seeks to bring about a basic attitudinal change so that graduates are better prepared motivationally and technically for competitive and effective participation in their occupations. ITM is responsible for ensuring that its graduates obtain positions, recognition and remuneration commensurate with their skills. Finally, it is the purpose of ITM to make its human and material resources available to the public and private sectors and to the general community.

## **SYSTEM OF EDUCATION**

The primary function of the Institute is to provide effective teaching that will enhance student learning. Tutorials complement lectures and give the opportunity for more personal treatment. Assessment is continuous and keeps lecturers apprised of student progress and students more constantly on the alert. Coursework is an important determinant of the final grade. Case studies and projects are based on local problems and situations and relate instruction to more relevant course content. Practical training is essential to the various curricula and supplements the professional and semi-professional training which students receive in the classroom.

ITM operates on a semester basis: the first semester runs from July to early December the second, from January to May. Practical training and holidays are arranged during interims. Two types of courses are offered: external courses at professional or degree level; internal courses at professional or semi-professional level. As the Institute receives increased recognition for internal courses, the dependence on external courses will be reduced.

The basic entry qualification is the Malaysian Certificate of Education or the Cambridge Overseas School Certificate with credits in five subjects including English Language and mathematics. But for some specialised courses, entry qualifications differ: for example, Higher School Certificate is required for Engineering and Mass Communication; college degree is required for the post-graduate Diploma in Library Science; Lower Certificate of Education is required for the Certificate in Hotel and Restaurant Services.

During the period under review, the Institute began moving towards a two-tier system, where the first tier would consist of a broad-based three-year diploma programme. In the second tier, the better students would be selected to undergo training for a further year or two, after which they would be awarded advanced diplomas. The two-tier system has already been introduced in Engineering and Architecture, Planning and Survey. When the joint-degree B.B.A. programme is implemented, it will constitute the second tier for the feeder courses. Ultimately, it is hoped to introduce the two-tier system for all courses of study.

## **ORGANISATION**

The academic programmes of the Institute are organised into 13 schools, each of which is responsible to the Director through the Dean of Academic Affairs. In addition, there is a Language Centre serving all schools.

### **School of Accountancy**

Diploma in Accountancy

Institute of Cost and Management Accountants (U.K.)

Association of Certified Accountants (U.K.)

### **School of Administration & Law**

Diploma in Administration

Institute of Chartered Secretaries & Administrators (U.K.)



**Bachelor of Law (U.K.)**

**Barrister at Law (U.K.)**

**School of Applied Sciences**

**Diploma in Animal Health & Production**

**Diploma in Food Technology**

**Diploma in Forestry**

**Diploma in Industrial Chemistry**

**Diploma in Microbiology**

**Diploma in Planting Industry Management**

**Diploma in Rubber and Plastics Technology**

**Diploma in Wood Technology**

**Diploma in Science**

**School of Architecture, Planning and Surveying**

**Pre-Diploma Course**

**Diploma in Architecture**

**Diploma in Town & Regional Planning**

**Diploma in Building**

**Diploma in Estate Management**

**Diploma in Quantity Surveying**

**Advanced Diploma in Town & Regional Planning**

**Certificate in Town & Regional Planning**

**Diploma in Interior Design**

**School of Art & Design**

**Pre-Diploma in Art & Design**

**Diploma in Art & Design (Fine Art)**

**Diploma in Art & Design (Graphics)**

**Diploma in Art & Design (Textiles)**

**Diploma in Art & Design (Fashion)**

**Diploma in Art & Design (Industrial Design)**

**Diploma in Art & Design (Silversmithing & Jewellery)**

**Art Teachers' Diploma**

**School of Business & Management**

**Advanced Diploma in Business Administration**

**Chartered Insurance Institute (U.K.)**

**Diploma in Banking Studies**

**Diploma in Business Studies**

**Diploma in Credit Management**

**Institute of Marketing (U.K.)**

**Institute of Transport (U.K.)**

**School of Computer Science and Mathematics**

Diploma in Computer Science  
Institute of Actuaries (U.K.)  
Institute of Statisticians (U.K.)

**School of Engineering**

Civil Engineering  
Electrical Power Engineering  
Electronic Engineering  
Mechanical Engineering

**School of Hotel and Catering Management**

Diploma in Hotel and Catering Management  
Certificate of Hotel and Restaurant Services

**School of Mass Communication**

Diploma in Mass Communication (Journalism)  
Diploma in Mass Communication (Advertising)  
Diploma in Mass Communication (Public Relations)

**School of Library Science**

Diploma in Library Science  
Post-Graduate Diploma in Library Science

**School of Preparatory Studies**

Intensive English Language Course for Malay-medium students  
Higher School Certificate (Science)

**School of Secretarial Science**

English Stenography Course  
Malay Stenography Course

**Language Centre**

Proficiency Courses in Languages

**RECENT DEVELOPMENTS**

To maintain a high degree of responsiveness to the needs of the economy, courses and curricula are frequently reviewed and revised to update their relevancy. In this year's review we concentrate on

courses revised or introduced during the year under review or proposed for the coming year. We also give currency to any special developments or problems. One recurring problem is that of attracting and maintaining qualified staff. It devolves on allocation: if ITM had unlimited resources, it could retain the best faculty in the world and in suitable student-teacher ratios. ITM does not, however, have unlimited resources. This has constrained the activities of all the schools, to greater or lesser degree. Where greater, the situation of a particular school is elaborated.

## **Accountancy**

The enrolment in the School of Accountancy during the year under review increased to 792 from 536 in the previous year, making it the second largest school in the Institute. Because of the difficulties of attracting qualified accountants with field experience, the School's primary problem has been staff shortages. With only 22 faculty members, the staff-student ratio is 1 : 36. This is clearly unsatisfactory and has necessitated the temporary shelving of the faculty development programme.

The three-year Diploma in Accountancy, an internal programme, has been revised to adjust to current developments in the accountancy profession in Malaysia and to serve as pre-requisite for entrance into the proposed Bachelor of Business Administration degree programme that will be offered jointly by Ohio University and the Institute.

The U.K.-based examining bodies that administer external courses have upgraded their entrance requirements from five O-level passes to two A-level and three O-level passes, of which English Language and Mathematics are compulsory. These changes were implemented in January 1973 by the Institute of Cost and Management Accountancy and in September 1973 for the Association of Certified Accountants. Despite these higher entrance requirements, the School continues to have a strong response from students wishing to obtain these qualifications.

Graduates have had no difficulty in finding jobs, whether in government, semi-government, or private sectors. Through intermittent and casual contacts with graduates, it has been learned that all are employed or pursuing further studies. In September 1973, 23 Diploma in Accountancy graduates were interviewed for PSD scholarships; 19 received scholarship offers, and 11 accepted. Of

these, 10 are taking advanced A.C.A. courses in the U.K. and one is enrolled in a Masters in Accounting programme in the U.S.

### **Administration and Law**

Stenography courses were separated from the School and entrusted to the new School of Secretarial Science in early 1974.

During the year, there was an enrolment of 59 students in the C.I.S.A. course. In the same year, two students graduated from this course. Students with at least a Principal level in the Higher School Certificate were taken in for the first time. The higher entry qualification is demanded by the revised regulations of the C.I.S.A. During the year, the PSD has also accorded recognition to an Associateship of the C.I.S.A. as being equivalent to that of an Honours degree.

The enrolment in the LL.B programme totaled 114. Four students graduated in the year, of which three were awarded Third Class Honours and one a General Degree. The course continues to be popular among H.S.C. students and a fairly large number of applications were received though some were rejected for failing to meet the entrance requirements of London University.

The enrolment for the D.P.A. programme reached 210. This course continues to have the largest number of students in the School. Thirty two students graduated and 17 of these have been awarded scholarships for further their studies overseas. The rest are gainfully employed in the public and private sectors. The School also started a Malay Medium class for the first time and 30 students were enrolled. Some of them had H.S.C. or partial Certificates. The class as a whole performed exceptionally well in the first semester examination and five were placed on the Dean's List.

There is full employment for D.P.A. graduates and the School intends to take in 200 students in July 1975, 90 in the three branch campuses and 110 in the Shah Alam campus.

### **Applied Sciences**

The School has experienced a tremendous increase in student enrolment during the period under review, from 345 in 1972/73 to

632 in 1973/74. In the coming year, an intake of 900 students is anticipated.

To accommodate this growth, the number of academic staff has been increased from 37 to 54. The School has been fortunate in being able to recruit suitably trained academic staff, as well as ancillary staff such as technicians and laboratory assistants. These have been adequately supplemented by qualified and experienced part-time academic staff.

Two new courses were introduced: a four-year Diploma in Wood Technology course and a two and a half-year Diploma in Science. Students in the Wood Technology course are being trained as technologists in the paper, pulp and wood processing industries. The purpose of the Diploma in Science is to prepare students for direct admission into the second year of the faculties of Medicine, Science and Agriculture of Malaysian universities.

With the opening of branch campus courses in Sabah and Sarawak, it is planned that students at these branch campuses would study the basic sciences, and then go on to the main campus for second-year studies. It is hoped to extend this program to the branch campus in Perlis.

The School moved to its permanent quarters at Shah Alam campus in May 1974. The six-storey complex has 30 laboratories, two workshops, 15 lecture rooms and two lecture theatres capable of accommodating 1100 students and costing \$1.9 million. Initially, there were problems regarding equipment — arrival and installation took some time. In addition, new lab assistants had to be recruited and trained at short notice.

Graduates from the School have continued to be in great demand by both public and private sectors. To date, there have been 232 graduates, with 95 from the Diploma in Planting Industry Management, which continues to be a popular course. All graduates are currently employed or are pursuing further studies at universities abroad.

## **Architecture, Planning and Surveying**

The School moved to the Shah Alam Campus in October 1973 after renovations were completed to establish an Architectural Science Laboratory, a large general office, attached rooms for course tutors, and a conference cum-staff room. The workshops have been designed, and enquiries for the ordering of machinery are

in progress. Preparations to set up a computing laboratory have also been finalised.

I.T.M. diploma holders continue to enjoy course exemptions from institutions of higher learning abroad. In architecture, they have gained entry into the fourth year of six-year courses in the United Kingdom and Australia. In building economics, they have gained entry into the second year of three-year full-professional degree courses in the United Kingdom and into the fourth year of five-year part-time professional courses in Australia. In town planning, they have gained entry into the third year of four-year full-professional courses in the United Kingdom.

Several assessors and professors visited the School during the year. Mr. E. McCarty, Senior Lecturer from the University of Melbourne's Faculty of Architecture and Building, looked into the general improvement of courses and the streamlining of office administration; Professor B. Lewis, the retired Dean of their Faculty of Architecture and Building, and Professor L. Simon, Head of their Department of Building, came to advise on syllabus preparation for the Advanced Diplomas in Architecture and in Building.

Staff recruitment has continued: one architect, three valuers, three quantity surveyors, one mathematician, and one lecturer in English joined the School during the year. One staff member left for the United Kingdom to read for the degree, Master of Building Management. An accelerated staff recruitment and training programme has been set out in anticipation of the projected higher enrolment and the course progression to Advanced Diploma status.

Besides their teaching and supervision duties, staff members have been actively engaged in assisting I.T.M. in the site selection and planning for branch campuses and in the future physical development of the main campus at Shah Alam.

## **Art and Design**

In December 1973, the School moved from its temporary premises at Section 17, Petaling Jaya, to a new three-floor building in Shah Alam that has 50,000 sq. ft. of floor area and houses 30 studios, five-workshops, and staff offices. Nevertheless, it was quickly discovered that even the new building was inadequate for the needs of the School's 12 departments each of which requires an average of 12,000 sq. ft. As temporary measure, space is being utilized in other School buildings. For example, the Art Teacher's

Diploma is housed in the School of Mass Communication. Also, existing store rooms are utilised as staff rooms, but this leaves no provision for storage. The School has therefore proposed the establishment of a much larger building to cater for existing and future needs. This proposal is now being considered.

Since its creation, the School has suffered from a shortage of trained staff, primarily because the Ministry of Education has not sent any teachers for overseas training in art since 1966. This was one of the reasons for the introduction of the post-graduate Art Teacher's Diploma, which has been recognised by the P.S.D. as being equivalent to an honours degree.

Because of the constraints imposed by the shortages of physical facilities and trained staff, student intake has not increased significantly. The School's enrolment rose from 252 in 1972/73 to only 269 in 73/74. The number of graduates remained the same (46), with the largest number from the graphics department.

It is planned to move the first-year students to the proposed branch campus in Trengganu in July 1975. Initial intake is estimated at 120.

No new courses are planned for the coming year, but it is proposed to introduce drama, music, and interior design by 1976.

## **Business and Management**

A post-graduate Programme for Executive Development was introduced in March 1974 with an intake of 47 graduates. The PED is a highly-intensive 12-week introductory course in business designed to expose participants to the wide areas of commercial and industrial operations and to the tools for decision-making. The first PED participants were men and women who had just completed their final examinations for their degrees and whose coursework in university did not include any business, economics, or management subjects. The objectives of the programme were to expose participants to the business environment and to prepare them for entry into the private sector where they would assume meaningful and responsible positions.

Participants were exposed to the total spectrum of business subjects, not only in lectures and seminars, but also through factory visits, talks and intensive "can sessions". Lecturers and speakers were drawn from the school and the private sector to enable the experience to be both academic and realistic. Feedback from the

first PED has indicated the need for such a programme. It has also shown that participants can adjust with greater ease to job environments. 80% of the participants found employment with the private sector. It is envisaged that the second PED will cater for working professionals to sharpen both their academic and theoretical foundations. Thus the programme is directed both at new graduates and working professionals.

Perhaps the most interesting aspect of the Programme has been the sponsorship of the participants by the private sector.

During the year 1974, negotiations and other details were completed for the Bachelor of Business Administration degree programme with the Ohio University. This joint ITM/Ohio degree programme will have its first intake of about 80 undergraduates in June 1975. Entry into this undergraduate programme is open to all holders of ITM diplomas in Business Studies, Banking, Hotel & Catering Management, and Public Administration & Local Government.

In June 1973, 248 new students enrolled in the various courses and in January 1974, 193 students enrolled in the commerce courses. By July 1974 the total enrolment in the school was 1,200 students. The number of graduates for the year under review was 78.

### **Computer Science, Actuaries and Statistics**

The past year has revealed greater student interest in the computer science course and entrance into this course has become increasingly competitive. It is planned to accept two batches of students per year to meet this increased demand. Computer science courses may also become more popular because of the introduction of the BBA degree. The School is also planning to introduce computer science courses in the Extension Education programme. Currently, the Diploma in Statistics is available in the Extension Education programme. The School is planning to phase out the Institute of Statisticians Course and to replace it with the Advanced Diploma in Statistics.

The formation of the Statistics Centre in October 1973 is serving not only to substantiate the teaching and practice within the school, but also to provide a data collection and storage centre and to enable the offering of consultancy services for the Institute and the business public. During the first year of its operation, this centre has undertaken an opinion survey, a student survey, an extension programme



survey and a student census — all for the Institute — and a tourist expenditure survey for the Tourist Development Corporation in mid-1974. It is anticipated that the Statistics Centre will undertake an increasingly wider range of surveys.

In late 1973, a Computer Advisory Committee was formed under the Chairmanship of the Deputy Dean of Academic Affairs. Its aims are to develop the Computer Centre and to look into the computerization problems of the Institute. A computerized student record system has been introduced, and it is planned to extend the computerization system to the payroll and inventory control. In this context, the present computer (IBM 360) has been found to be too small and unable to perform all the tasks required. A new computer of the Nova 1220 series has been ordered and will be installed at the beginning of 1975.

## **Engineering**

During the 1973/74 session, considerable effort was devoted to the planning and implementation of a two-tier system, with the first tier comprising three years of study and the second tier an additional two-and-one-half years. Students who successfully complete the first tier are awarded the Technical Assistant's Diploma with specialisations in Land Survey, Electrical Engineering (Electronics), and Civil Engineering. Of these students, a selected number not exceeding 30% will be admitted into the second tier, and those successfully completing their courses of study will be awarded the Advanced Diploma in Engineering with specialisations in Civil Engineering, Electrical Engineering (Power), Electrical Engineering (Electronics), and Mechanical Engineering. A Pre-Diploma in Engineering has also been introduced for students having inadequate qualifications for entrance into Diploma courses.

The total enrolment in the School was 309, with the largest number of candidates pursuing Civil Engineering. Seven graduates were awarded the Technical Assistant's Diploma in Land Surveying. And for the first time, seven additional graduates were awarded the Advanced Diploma in Engineering, of whom six had specialised in Mechanical Engineering and one in Electrical Engineering (Electronics). In the current year, the two tier system has been fully implemented and enrolment has risen to 582. Of these, 320 are first year students, some with advanced standing, and a total of 68 are enrolled in Advanced Diploma courses.

The School, which in the past worked closely with the University of Malaya in respect of laboratory facilities, has since begun utilizing its new facilities equipped with machinery worth more than £1 million funded through the British Withdrawal Aid programme. NISIR has borrowed our workshop facilities to carry out tests, and other organisations have also made requests to use these facilities.

In December 1973, James C. Gilfert, Professor of Electrical Engineering at Ohio University, visited the School to assess the academic status of the Electronics and Power components of the Advanced Diploma Courses. After examining the technical content of these courses, he found them comparable to the curriculum of Ohio University's Electrical Engineering courses. He was particularly impressed by the facilities available at the School. In August 1974, a 13-man committee from the PSD evaluated the School's courses for subsequent recognition of the Advanced Diploma at Division One level.

In keeping with the customary practice of institutions offering degree-standard course, the School has appointed external moderators to ensure that final examination standards are consistent with professional standards. This assures both the public and the students that decisions to award diplomas do not rest solely with the staff of the School. Moderators during the period under review were: Professor Chin Fung Kee, ex-Dean of University of Malaya Engineering; Encik Halaluddin bin Haji Ishak, Timbalan Ketua Pengarah Kerjaraya, for Mechanical Engineering; Encik Abu Zarim bin Haji Omar, Acting General Manager of LLN, for Power Engineering; and Professor Tan Ong Siang of the University of Malaya Engineering Faculty, for Electronics Engineering.

In order to increase the quality and number of teaching staff, it is planned to send out a recruiting team to Sri Lanka, India and Pakistan in October 1974. It is hoped to recruit about 20 engineers with working experience from these countries.

## **Hotel & Catering Management**

The 1973/74 graduating class of the Diploma in Hotel & Catering Management is an exceptionally small class of only 17 students, 15 of whom will be receiving the Diploma. This small number is largely the result of the massive recruitment drive of MAS in 1972/73 which lured away many students still in their second year. Other students left for employment because of the financial status of their families. Five graduates in this batch have been accepted by the Rochester Institute and the University of Denver for

further study in Hotel & Catering Management. Scholarships from the Swiss Government are being finalized for the majority of the remaining graduates. In the meantime, they have taken up temporary employment in various hotels and other organisations.

By June 1974, the Certificate in Hotel & Restaurant Services had produced six batches and a total of 424 certificate holders from the 616 who registered for the course. This seemingly low pass rate is attributable to three reasons:

- (i) A large number of students who failed in English did not return for the supplementary examinations although they were contacted well in advance. This includes a number of Malay-medium students.
- (ii) A large number of students, especially those in the waiting and assistant cooks courses, left before completion of the course because of job offers.
- (iii) The low number of passes for the November 1973 group of students is a reflection of the problem posed when practical training was undertaken without residential facilities for the students.

Nevertheless, the number of former students employed according to our school records is 514, or 90 more than the number that passed, and still more may have been employed without notifying the school.

Because of hotel recruitments, the CHRS Front Office groups are now being recruited mainly from MCE holders, not LCE holders. In addition the intake for the Waiting and Assistant Cooks groups has been doubled to meet existing demand. This course has been construed by getting well-experienced chefs and bar experts as full-time lecturers; such lecturers can only be obtained with difficulty even for part-time employment at ITM. This hampers staff control and the predictability of their availability. It also compounds the already great administrative burden of handling admissions, classes, examinations, practical training, and processing for three groups of students each year.

With the present growth rate of the hotel industry, the School's diploma and certificate holders are in great demand. Whereas diploma holders were not given an appropriate level of placement a few years ago, they are now receiving better positions. Those who have worked for more than two years after graduation are holding such positions as General Manager, Food & Beverage Manager, Banquet Manager and Executive Housekeeper. As for the certificate holders, the School is unable to meet demand, especially in categories like waiters, assistant cooks, and bartenders.

The School is very fortunate in the extensive facilities available at the Shah Alam complex, including four training kitchens, two demonstration theatres, two operational kitchens, two restaurants, one laundry, one bar, and a 12-bedroom hotel in addition to the usual classrooms and teaching facilities. The School has sent two lecturers for further degrees and three on Hotel Industrial Training with the Hotel Regent of Kuala Lumpur, the Atlantis Hotel in Zurich, and the Bahnhof Buffet in Zurich.

### **Mass Communication**

The School, which began in July 1972, accepted its second batch of students in July 1973 and at the end of the 1973/74 academic year had a total enrolment of 63 students, 27 of whom were proceeding into the final year.

The three-year Mass Communication programme offers specialisations in journalism, advertising, and public relations. Of the three components of each specialization — language, liberal arts, and professional — the first two are concentrated upon during the first year and the third in the subsequent two years. Staffing inadequacies, which did not surface during the first year, were quickly felt as students moved into the professional part of their curriculum. To fill these gaps in the short term, part-time lecturers, expatriate staff, and volunteers have been utilized. Although there is no separate broadcasting specialisation, classes in writing for broadcasting and radio production were initiated during the year with the assistance of part-time staff from Radio-Television Malaysia.

The School has established close links with newspapers, the national news agency, the government information services, public relations firms, and advertising agencies. All these organisations have offered opportunities to students for practical training. In addition, several professionals from these organisations have assisted the School with part-time lecturing. One faculty member has been taken on by an advertising agency as part of the Industrial Attachment staff training programme.

Students in the School have expressed continuing concern over the fact that the programme was only diploma level and that a degree would not be awarded to those successfully completing their course. It has been the School's contention from the start that the content of the course warrants degree status, but because the Institute is not authorised to confer degrees, no mechanism exists at

present for such an award. Consequently, the School submitted a memorandum to the PSD requesting recognition of the Diploma as equivalent in status to a first degree from a recognised university. The Department has since confirmed its regard for the Diploma in Mass Communication as being equivalent to a university general degree.

In July 1973 John Wilhelm, Dean of the College of Communications, Ohio University, Athens, Ohio, was invited for a six-week consultation to evaluate curricular progress. He was generally satisfied with the School's curriculum and made several useful recommendations on how this curriculum could be bolstered to deliver even better training to the students.

### **Library Science**

The School introduced a three year diploma course in July 1972 and thereby phased out the preparation of students for the Library Association (UK) examinations. Admission requirements of the School are the same minimum requirements as those in local universities. Submissions have been made for this Diploma course to be recognized by the Public Services Division as being equivalent to that of a general degree from a university. This recognition will enable successful diploma holders from the School to draw a salary on par with that of a general degree graduate from any local university.

The curriculum, based on a two semester system, includes library science courses as well as courses that are fundamental to the understanding of librarianship and emphasises the importance of preparing students for professional work in Malaysia. Students are also made aware of the trends and development of librarianship in the developed and developing countries, particularly that of Southeast Asia. The non-librarianship courses which are considered fundamental include, for example, sociology, education, management, human relations, English and Malay. Field work has always been an integral part of the course.

In July 1974 a one-year Post Graduate Diploma course will replace the previous programme of preparing graduates for the Library Association's (U.K.) examination. The P.S.D. will sponsor candidates for this programme. The concept of a close liaison with the public sector for overall manpower planning in librarianship is being vigorously pursued. Professional standards are maintained through a system of external examiners.

## **Preparatory Studies**

In July 1973 the School of Preparatory Studies was established. In part an administrative convenience, its larger purpose is to serve a centre for the study of low achievement and the development of a remedial function. The School subsumed some of the programmes of its predecessor, the School of Pre-University Studies, and now offers an Intensive English Course for students from Malay-medium Schools. Nearly 250 students take remedial courses in business mathematics, advanced mathematics, and the physical and biological sciences. It was decided to discontinue the H.S.C. Arts programme (The Diploma in Science Programme is now administered by the School of Applied Science) and the last batch will appear for their examinations in December 1974.

## **Secretarial Science**

Secretarial courses were initially under the purview of the School of Administration and Law and housed at Shah Alam. In December 1973, the facilities were moved back to the Jalan Othman campus in Petaling Jaya, and in March 1974 the School of Secretarial Science was created to administer these courses.

Students in the School follow either the English Stenography Course or the Malay Stenography Course and take examinations conducted by the London Chamber of Commerce (L.C.C.), Pitman, and Persatuan Penulis Trengkas Pitman Malaysia (P.P.T.P.M.). In the coming year, however, all students will be prepared for the M.I.T. Diploma in Secretarial Science, with some students being allowed to take certain subjects in the external examinations based on their individual performances.

In July 1974, it is planned to enrol the first batch of 36 students for a one-and-a-half-year course in bookkeeping for holders of the English-medium Lower Certificate of Education (L.C.E). These students will sit for examinations conducted by the London Institute of Bookkeepers.

One recurring problem is trying to retain the students throughout the entire course. The demand for stenographers, especially from the private sector, has led to offers of attractive salaries to second-year students. On average, only about 25% of the students complete the two-year course. The introduction of the M.I.T. Diploma should help to induce more students to remain for the full two years.

The West Malaysian National Manpower Survey shows that by 1975 there will be a demand for 5,717 stenographers and typists and 23,458 bookkeepers and cashiers. In view of this, the School hopes to increase its intake from 190 in 1974 to 280 in 1975. Consequently, there is a concurrent need to increase the number of teaching staff, and a request has been made to recruit at least six lecturers in 1975.

### **Language Centre**

The Language Centre began to offer its constellation of programmes in July 1972: one-year proficiency courses in any language; foreign language subjects of 2½ years duration to meet distributional requirements of professional courses throughout the Institute; six-month advanced courses for those who have taken the 2½ year course; one-year English courses related to professional or remedial needs of students; six-month or one-year Special Courses in intensive English for Malay-medium students entering ITM. This last programme has been shifted to the School of Preparatory Studies, but the Language Centre is continuing its involvement in an advisory capacity. The Centre also offers extension services and short courses to groups and organizations external to the ITM. During the past year, 962 students were enrolled in foreign languages; and groups from the RMAF, Bank Negara, MARA, and ITK made use of the Centre's Extension Services. Consultation services were rendered to the Ministry of Education, Universiti Pertanian, Maktab Kadir Adabi, The Police Training College, and to other Language Centres; translation services have also been rendered.

At the core of the Centre's facilities are four language laboratories (one in Jalan Othman, Petaling Jaya and three in Shah Alam) each having 30 to 32 booths for audio-active comparison activity, a master panel and access to 548 tapes, 1501 slides, 51 filmstrips, 29 records, and 25 films. In addition, one tape duplicating machine, four tape recorders, four slide-film strip projectors, and one record player are available. It is planned to set up a reading laboratory and a recording studio and to purchase sophisticated and fast tape-copying machines. A rich collection of books, periodicals, journals, and magazines is at the disposal of all teaching staff in the Resource Centre. One staff member was sent for a one-year course in audio-visual techniques and now serves the Centre as a Media Research Officer. It is intended in future to train some staff in

applied linguistics so that they can assist in creative activities such as the development of curricular, instructional, and testing materials.

## **Sabah**

Registration of the first batch of students took place on 16 July 1973, and the YS-ITM ( an acronym for Yayasan Sabah Institut Teknologi MARA, the joint venture partners in the campus) branch was officially opened by the Chief Minister, Tun Datu Haji Mustapha on 17 August. Because of the employment requirements of the state, it was proposed that courses be offered by the ITM School of Business and Management in business studies and secretarial science, and by the School of Applied Sciences in preparation for the Diplomas in Forestry Technology, Wood Technology, Planting Industry and Management, and Fisheries Technology. By the time students began applying, however, it became apparent that some modification in course structure would have to be made to suit interests and qualifications. Of the first intake of 157 students, 16 were enrolled in Business Studies, 31 students in the Secretarial Course, 17 in the Pre-Diploma in Applied Sciences, and 43 in an intensive preparatory course in English, mathematics, and economics to upgrade their qualifications for entry into professional courses.

Another 80 students waiting for MCE results were accepted for the January-June semester. Some entered a five-month diploma course in typing: those passing their MCE/SPM examinations could enter the Secretarial Course, those failing could find employment as typists. The rest of the new entrants took subjects in commerce, accountancy, and science to give them advance preparation for their acceptance into professional courses in July contingent on their passing the MCE/SPM examinations. These courses have proven useful in keeping students academically active during an interim when they would be otherwise inactive.

Until the new permanent campus opens, the intention is to offer first year subjects of diploma courses in business, accountancy, applied sciences, and administration, in addition to the secretarial course, the preparatory course, and subjects for students awaiting examination results. Second-year students in public administration forest technology, planting industry and management, and the secretarial course will stay in Kota Kinabalu; second year students in other applied science specialization will attend the main campus.



The Sabah Campus will ultimately specialize in Forestry, Wood Technology, Planting Industry and Management, and Fisheries Technology and will accept students from other campuses into these courses. The total number of students accepted for the academic year 1974/75 was 185. Because of the increasing number of students who wish to attend YS-ITM, it was decided in May 1974 that a temporary hostel would be constructed to enable the use of the entire temporary campus as a teaching facility for 420 students. The new hostel will accommodate all these students and be located one-quarter mile away from the temporary campus in Kota Kinabalu.

## **Sarawak**

The Sarawak Branch also began operation in July 1973, established on a basis similar to that for the Sabah branch, except that it is a joint venture with the Sarawak Foundation. Enrolment during the year 1973/74 was 119, with first-year subjects offered in business, accountancy, applied sciences, and the preparatory course for Malay-Medium students. An extension education programme was initiated as well in business studies, public administration, and accountancy for those who did not previously have the opportunity to pursue such fields with formal guidance.

The Sarawak Branch operates in borrowed premises at the Batu Lintang Teachers College in Kuching. These facilities were made available for an initial period of three years. These include two big lecture rooms which have been modified into four lecture rooms, a laboratory, a store room, and a house which has been converted for administrative use. Two additional lecture rooms have been made available by the Kuching Municipal Council in a nearby school. The Institute has constructed its own dormitories on the Batu Lintang College grounds, and kitchen and dining facilities will be ready for occupancy in January 1975.

## **Perlis**

Also during the year, negotiations were finalised for the es-

establishment of a third branch in Arau in cooperation with the Perlis State Government. It began operation in July 1974 with an initial intake of 257 students.

### **Tun Abdul Razak Library**

During the period under review there were many changes in the services offered by the library, mainly in Readers' Services and Audio-visual programmes. More materials have been acquired for these sections, including reports of all kinds, articles, films, and tapes. Relevant hardware has been added to the Audio-visual Department to facilitate effective exploitation of available materials. Despite limitations of staff and software readers have responded well to both these services. Emphasis in the current year will be given to the addition of 14,000 volumes of printed publications and a few hundred items of audio-visual materials.

### **Practical Training**

The importance of practical training is in complementing the classroom instruction and in better preparing students for their eventual careers. The programme suffers from two constraints: funding and the availability of positions. Funding has previously been on an ad hoc basis and should in future be tied to enrolment whereby a fixed amount is allocated for every student. Also, the securing of positions becomes more than a logistics problem in consideration of the short duration of each traineeship, the host company's being baffled at what to do with trainees, and the competition with other educational bodies which are trying to place their trainees in the same organisations. But solutions to these problems are largely administrative and by no means insurmountable.

Because of these constraints, it has been necessary to set out priorities for traineeships. Student eligibility is determined by seniority in the Institute and by whether practical training is essential or merely desirable in the students' curriculum. It is then possible to rank-order the students and allocate traineeships on the basis of funds available. The number of students trained during the

1973/74 academic year was 1506 at a cost of \$139,516. This compares favourably with the previous year in which 1067 traineeships were arranged during interims with an expenditure of \$140,607.

### **Extension Education**

The Extension Education programme was initiated in January 1973 and has expanded considerably during the year under review. The programme offers degree, advanced diploma, diploma professional and semi-professional courses to qualified bumiputras who are presently pursuing studies as private candidates and desire formal instruction; and who have left the Institute before completing the requirements of these external courses and now want to complete these courses with formal guidance. The programme is conducted on a part-time basis at the Jalan Othman Campus of ITM in Petaling Jaya. Intensive lectures are held weekdays between 6.00 p.m. and 10.00 p.m. The number of lecture hours varies according to individual course requirements, but does not exceed ten hours per week.

The enrolment in this programme has increased from 317 in July 1973 to 488 in January 1974, with demand continuing to be in excess of the number of available places. An enrolment of 700 is expected by January 1975.

Fifteen courses of study are offered. They fall into three categories: courses leading to external degrees — LL.B (U.K.) and Bar-at-Law (U.K.); courses leading to external diplomas — Association of Certified Accountants (U.K.), Institute of Cost and Management Accountants (U.K.), Securities Institute of Australia (Australia), Institute of Marketing (U.K.), Institute of Chartered Secretaries and Administrators (U.K.), Chartered Insurance Institute (U.K.) and Chartered Institute of Transport (U.K.); courses leading to professional diplomas of ITM — Accountancy, Business Studies, Public Administration, Banking, Statistics, and Town and Regional Planning.



# **FACULTY**



## COMPOSITION

The number of full-time staff for the year under review was 295, generating a student-staff ratio of 15:1; of these, 111 were female, 184 male. The number of full-time staff for the current year increased to 365; the number of part-time staff required, to 133. Additional data is presented in the tables below.

**Table 1. ACADEMIC QUALIFICATIONS**

	1973/74	1972/73
Doctoral Degree (Ph.D)	8	6
Masters Degree	66	53
First Degree and Post Graduate Diploma	7	13
Professional	53	47
First Degree	111	96
Diplomas	47	16
Total	295	231

**Table 2. ETHNIC GROUPS**

	1973/74	1972/73
Malay	103	78
Chinese	106	81
Indian	59	43
Others	27	29
Total	295	231

**Table 3. VOLUNTEERS AND CONSULTANTS**

Volunteers	1973/74	1972/73	Consultants	1973/74	1972/73
Australia	15	12	Colombo Plan	2	2
Canadian	1	4	International Executive		
French	1	1	Service Corps	—	4
Japanese	3	3	Ohio University/ MIT/Asia		
United States	13	18	Foundation	2	1
United Kingdom	—	3			
Total	33	41		4	7

## STAFF DEVELOPMENT AND TRAINING

With an increased budget for staff training, ITM has been able to send a greater number of staff for post-graduate training abroad. The Asia Foundation, Fulbright Hays, the East-West Centre, the British Council, and the Corporation of British Industry continue to assist in staff training and in sponsoring a number of ITM staff for conferences and seminars. Through the PSD the Institute has also been able to secure Colombo Plan Scholarships and awards by foreign governments.

During 1973/74 "The Young Lecturers Training Scheme" was introduced whereby graduates of ITM and other universities are sent abroad for higher degrees. On their return they join the ITM faculty to fill existing gaps in the requirements for well-trained personnel.

Another new feature is the introduction of "Industrial Attachment", which enables staff with sufficient academic standing to receive professional training with various firms in the country. The period of attachment ranges from one to two years. On completion of the training period, the staff return to ITM better equipped through first-hand experience to inform students of the nature and needs of their eventual profession. The learning experience for students therefore becomes more meaningful, relevant, and up-to-date.

**Table 4. STAFF TRAINING**

	1972	1973	1974	Projected 1975
Staff sent abroad for post-graduate training	15	27	27	30
Young Lecturers Scheme	2	8	10	50
Short Courses, Conferences and Seminars			42	50
Staff returning from study abroad	18	17	23	22
Industrial Attachment	—	—	3	5



## **PROFESSIONAL ACTIVITIES**

The continuing participation of I.T.M. faculty in a variety of professional activities represents a significant contribution to scholarship. Though this contribution still largely focusses on teaching and related classroom activities, there is promise that it will move into other directions such as research and consultancy.

A significant number of seminar papers were delivered by various faculty members in such areas as educational planning and administration, economic education, town planning and library science. Other faculty members have attended seminars both within and without the country in areas such as mass communication, library science, tourism, linguistic, business administration and guidance and counselling.

The staff has also been active in providing assistance and guidance to students in organising seminars, such as the symposium on self-sufficiency in feeding stuffs for increasing animal production (January 1974).

Most of these seminar papers are subsequently printed in the ITM *Quarterly Journal*.

## **COMMUNITY SERVICE**

The Institute has continued with its efforts to make its resources more extensively available to the community and the nation.

These efforts have been effectively demonstrated by the Programme for Executive Development (PED) organised in February 1974, whereby graduates in liberal arts were given a one-month intensive course in business subjects conducted by staff of the School of Business and Management. The success and popularity of this course has led to the decision to offer PED courses twice a year, in March and September.

Tun Abdul Razak library offers bibliography compilation services to external users and has made its facilities available to members of the Shah Alam community.

The School of Applied Sciences continues to conduct routine research projects for the industrial sector on a contract basis in such areas as screening new drugs, testing new fertilisers and testing rubber, plastics and other materials. In November 1973 a seminar was held on the role of applied sciences in developing economics.

Also, veterinary science students, with assistance from staff, hold annual seminars on problems related to the veterinary industry.

The School of Preparatory Studies will continue its involvement with the Ministry of Education in giving facilities to pure science students who are awaiting their Malaysian Certificate of Education results and to science students who have been unsuccessful in gaining admission into Form Six and are waiting for such vacancies to occur.

The School of Art and Design is becoming a regional centre for artistic activities and in the process will exchange exhibits and works with neighbouring countries. To establish contacts with other art institutes, it holds shows, seminars, workshops and forums pertaining to the arts of the region. The School will continue to undertake research to discover new applications and to influence public and private sectors in the promotion of a national identity for Malaysian art. In addition, a production unit will be created to make works of the students available to the public.

The Language Centre will continue to give short term language courses to special groups external to the Institute. Its translation services have been offered for the Islamic Conference in June 1974 and a banking conference earlier in the year. It has also advised the Malaysian Armed Forces on the setting up of their language unit. In addition, staff from the language unit at Universiti Sains Penang have made two visits to study our operation and facilities.

Professional staff related to the teaching of building trades at I.T.M. have a consortium arrangement whereby they provide consultancy services in town planning, architecture, building economics, engineering, and estate management. Services rendered to date include the Pangkor-Lumut Sub-regional Study on Tourism undertaken for the Perak State Government in December 1973, the planning of the Shah Alam campus, and the planning of the Sabah branch campus. The consortium will also assist in planning the branch campuses in Arau and Kuala Trengganu.

Workshop facilities of the School of Engineering have been made available to the National Institute for Scientific and Industrial Research (NISIR), and additional requests to use these facilities have been received from private engineering organisations.

# **STUDENTS**



## GENERAL ENTRANCE REQUIREMENTS

The educational standard required for admission to ITM is Grade II of the Overseas School Certificate of the Malaysian Certificate of Education with credits in five subjects including English Language and Mathematics. Additional conditions and requirements are prescribed for some specialised courses of study. To be admitted to the Institute, students must satisfy general entrance requirements and requirements of the particular course of their choice. Applicants must be at least 16 years of age; applicants over 25 and possessing minimum educational qualifications may also be considered.

In the past, the Institute maintained a flexible policy whereby students of clear promise, who because of local or personal circumstances lacked required educational qualifications, have been admitted. But with competition for available places getting more stringent every year, the stated admission requirements will be adhered to with fewer exceptions. Character, intelligence, and seriousness of purpose are also taken into consideration.

## ENROLMENT

**Table 5. STUDENT ENROLMENT BY SCHOOL**

	1971/72	1972/73	1973/74	1974/75
Accountancy	410	554	823	935
Administration and Law	473	518	312	414
Applied Sciences	255	361	487	843
Architecture, Planning and Surveying	285	248	377	549
Art & Design		264	284	297
Business & Management	475	504	752	991
Computer Science and Mathematics	158	147	187	244
Engineering	96	210	333	579
Hotel and Catering Management		219	338	296
Library Science		32	76	94
Mass Communication		40	72	108
Preparatory Studies	550	502	434	264
Secretarial Science				291
Total	2,802	3,598	4,684	5,905

Accountancy, and Business and Management remain the most popular schools in terms of courses of study offered. Preparatory Studies includes HSC level courses in science and arts and for 1973 the Special Course in intensive English for Malay Medium students. The MIT will cease to conduct HSC classes after January 1975.

Enrolment in 1974/75 totalled 5,963: male students numbered 3,848; female students, 2,115.

Insofar as the criteria used in admission of candidates is based on performance and ability, the Institute has received a larger number of suitable applicants from such states as Selangor and Johore. These states therefore place more students at MIT. It is expected, however, that with the increasing quality of applicants, admission will become more proportionate to the populations of individual states. For 1974/75 session alone the MIT received 19,000 applications for 3,000 places available at the Shah Alam and branch campuses.

## **FEES PAYABLE**

Under the existing system, parents or guardians of students are expected to pay contributions up to \$600.00 per term to the Institute. This amount payable is determined by family circumstances. Deserving students are awarded ITM scholarships which provide for free tuition, board, lodging, books and monthly pocket money; and more than 80% of students in the period under review received such scholarships. This system will be revised to a combination of loan and scholarship as determined by the student performance with effect from the next intake of students. A number of organisations public and private award scholarships/loans to students at the Institute. A total of \$525,990 was received during the academic year 1973/1974 and the Institute would like to extend its gratitude to these organisations.

**Table 6. FINANCIAL AID**

In 1973/1974 the following organisations awarded scholarships and loans to students.

<b>Organisations</b>	<b>Amount per year</b>	<b>No. of recipient</b>	<b>Total Amount</b>
	<b>\$</b>		<b>\$</b>
Federal Scholarship	1,600.00	240	384'000.00
	1,070.00	2	2,140.00
<b>Organisations</b>			
Perak State Scholarship	1,500.00	3	4,500.00
Kedah State Scholarship	1,170.00	2	2,340.00
Penang State Scholarship	1,800.00	1	1,800.00
Perlis State Scholarship	1,200.00	3	3,600.00
Pahang Tenggara Scholarship	1,200.00	8	9,600.00
United Malayan Banking Bhd.	1,050.00	2	2,100.00
Bank Bumiputra Scholarship	1,500.00	1	1,500.00
Harrisons Lister Engineering	2,500.00	2	5,000.00
	2,750.00	1	2,750.00
Consultants Engineers	1,500.00	2	3,000.00
FELCRA Scholarship	2,400.00	3	7,200.00
ESSO Scholarship	2,000.00	3	6,000.00
Malaysian Royal Navy	1,100.00	1	1,100.00
Sabah Port Authority	1,200.00	8	9,600.00
Sabah Foundation	500.00	76	38,000.00
			<hr/>
<b>TOTAL</b>			<b>525,990.00</b>

## **SERVICES TO STUDENTS**

The fiscal allocation made to the Student Affairs Division is directly related to the student population of the Institute. The Division is resource-consuming: whereas expenditures incurred in other operating divisions can be assessed in terms of profit and loss, it is virtually impossible to analyse performance of this division with such criteria. At present the Division operates five categories of services: hostel; medical; guidance and counselling; religious; sports and games.

**Hostel:** Virtually all students at the Institute live on campus. This meant provision of basic living requirements for 3,600 students in 1972/73; the number has increased to more than 4,500 for 1973/74. Insofar as recreational facilities are necessary to hostel life, such items as furniture sets, games and sports equipment, and basic decoration a substantial expenditure, even when kept to a minimum. The hostel system incorporates accommodation facilities for Resident Tutors. Because these officers are essential to the hostel community, basic domestic and social requirements are provided for such personnel through this Division. In 1973/74 resident tutors were appointed to each hostel, thereby providing better control and communication. When the Shah Alam complex is completed in 1975, the four hostels will accommodate 4,500 students. Hostels I & II were completed and occupied during 1972/73. Hostel III was occupied in late 1973. Hostel IV will be completed in July 1974. Because of the strains imposed on available hostel space by the increasing student body, we are forced to rent nearby terrace houses from PKNS to accommodate 1,500 male students. Only 1% of the student population is currently living off-campus.

**Medical:** The Institute previously employed a panel of doctors and nurses on a regular but part-time basis. This system was costly in terms of variable and incidental costs. With effect from 1 April 1974, we managed to secure the appointment of a full-time doctor with supporting staff for the Shah Alam campus. Nevertheless, a private practitioner is still required for office-hours. We have been successful in reducing significantly the medical costs incurred per student, without sacrificing student welfare. This marks further progress towards the establishment of our own Student Health Centre by 1975.

**Guidance and Counselling:** The major function of this unit is to assist students in attaining the educational and vocational objec-



tives of the Institute and to help them overcome educational, vocational, social and personal problems. With the move to Shah Alam, three counsellors were installed to serve the students on that campus. One counsellor was available at the Jalan Othman campus. Counselling is normally by appointment but, in cases urgent to the student, can be immediately arranged. Services also include vocational information, educational guidance, group counselling, and placement.

**Religious:** This unit, managed by a full-time Ustaz and Ustazah, provides guidance and counselling services in matters of Islamic religious and ensures provision of facilities required for religious activities. The unit has received many inquiries from students who are interested in the religious position on such contemporary problems as banking, science and modernisation. Weekly classes are conducted and the unit also publishes *Mimber Islam*, a magazine that includes religious articles, interpretations of the Holy Quran and religious problems. An Islamic centre for the ITM complex is in the planning stage and is scheduled for completion in 1975.

**Sports and Games:** All sports activities of the Institute are organised by the ITM Sports Council in conjunction with a full-time sports officer. Since its inception in 1965, the Institute has been without playing fields except on a sharing basis with other institutions. This has not deterred students from participating in sporting activities at state, federal, club and inter-college level, but the need for a permanent facility is obvious. In response to this, a fully equipped Sports Complex is being planned and will be operational by 1975.

## GRADUATES

The figures in Table 7 present the number of students who have left the Institute after completing their courses and obtaining diplomas or certificates. Many are hired directly by private and public bodies. Others proceed for advanced degrees at university level, here and abroad, before entering their careers. Another category of student includes those who have left the Institute with only partial qualification. They also have marketable talents.

**Tables 7. GRADUATES**

	1973 (Inclusive)	1974	1975 (Projected)	1976
<b>Accountancy</b>				
Association of Certified Accountants	18	19	13	15
Institute of Cost and Management Accountants	47	7	10	12
Diploma in Accountancy	124	50	80	80
<b>Administration and Law</b>				
Bachelor of Laws (LLB London)	8	10	20	20
Chartered Institute of Secretaries	133	10	20	20
Diploma in Public Administration	105	46	57	57
<b>Art and Design</b>				
Diploma in Textile Design	24	11	12	12
Diploma in Fine Art	19	8	13	15
Diploma in Fashion Design	2	4	6	6
Diploma in Industrial Design	5	5	8	6
Diploma in Pottery (Ceramics)	4	4	6	8
Diploma in Graphic Design	27	11	11	15
Diploma in Jewellery & Silversmithing (Fine Metalwork)	5	8	8	8
Diploma in Photography	—	—	—	—
Art Teachers' Diploma	6	25	25	25

**Applied Science**

Diploma in Planting Industry				
Management	70	20	25	27
Diploma in Forestry	37	18	20	22
Diploma in Industrial Chemistry	10	8	15	17
Diploma in Animal Health and Production	25	18	35	30
Diploma in Rubber and Plastics Technology	10	8	10	20
Diploma in Food Technology	—	—	20	20
Diploma in Wood Technology	—	—	18	18

**Architecture, Planning and  
Surveying**

Architecture	31	11	21	25
Building Economics	32	7	19	19
Town and Country Planning	23	8	17	20
Valuation	24	9	15	22
Technician (T.C.P.)	9	17	15	20

**Business and Management**

Advanced Diploma in Business Management	—	—	—	16
Diploma in Business Studies	274	65	45	40
Diploma in Banking Studies	82	20	65	70
Institute of Marketing	33	15	25	30
Chartered Institute of Transport	1	9	15	17
Chartered Insurance Institute	2	7	12	15
Diploma in Office Management	13	—	—	—
British Institute of Management	15	—	—	—
Institute of Purchasing & Supply	7	—	—	—
Credit Management	9	25	25	30

**Computer Science, Actuaries  
and Statistics**

Institute of Statisticians	2	7	11	15
Computer Science	8	4	10	13
Institute of Actuaries	—	—	—	—

**Engineering (*adv. Dip*)**

Mechanical Engineering	6	6	4	6
Electrical Engineering (Power)	—	—	3	5
Electrical Engineering (Electronics)	1	—	3	5
Civil Engineering	—	—	4	6
Technical Assistants (Electronics)	—	—	12	14
Technical Assistants (Land Surveying)	7	—	10	12

**Hotel & Management**

Diploma in Hotel & Catering Management	68	16	27	27
Certificate in Hotel & Restaurant Services	198	430	430	430

**Library Science**

Diploma in Librarianship	4	8	18	25
Associate of Library Association	7	10	15	20

**Mass Communication**

Advertising	—	—	6	5
Journalism	—	—	8	15
Public Relations	—	—	6	10

**Secretarial Science**

Diploma in Stenography and Public Secretaryship	521	81	81	81
<b>Total</b>	<b>1,989</b>	<b>417</b>		<b>1,456</b>

**Pre-University Arts (H.S.C. Arts)**

Full Certificates	105	—	—	—
Minimum Entry to University	337	40	60	50

**ADMINISTRATION, FINANCE  
AND PHYSICAL PLANT**

**Table 8. ADMINISTRATIVE ORGANIZATION**



## **ADMINISTRATIVE SERVICES**

The Institute is constituted by five main areas of responsibility, each administered by a service division head who reports to the Director. Administrative staff totalled 609 as at 30th February 1974: Division I, 22; Division II, 27; Division III, 181; Division IV, 379.

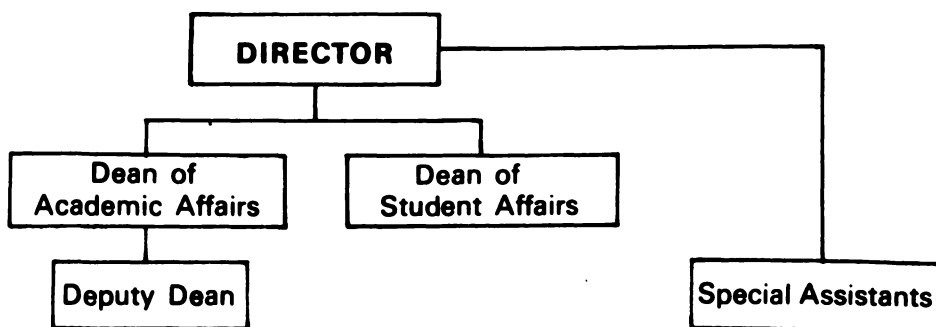
### **Office of the Director**

The departure on study leave of one special assistant has left this office with two, one in charge of academic affairs, and the other for scholarships and training. Apart from these, there is one public relations officer and one personal assistant to help the Director in the administration of the Institute.

The special assistants perform functions in the following areas: 1) research and development of new and revised academic programmes; 2) assistance in the creation of programmes to implement policy decisions of the Governing Council and the Director; 3) coordination of the efforts of consultants who are looking into various current problems and programmes at the Institute; 4) coordination of the administration of staff and student scholarships abroad; 5) writing reports (especially to the Governing Council), papers, and speeches; 6) handling other official correspondence.

The Public Relation Officer has full responsibility for informing the public of current developments at the Institute and for informing the staff of public opinion and requirements. During the past year, the public relations effort largely involved liaison with the media and organisation of function, visits, and special programmes. However, Heads of School often act independently to liaise with industry, especially in relevant fields. The Principals also handle their own public relation efforts.

The administrative hierarchy of the Director's office is as follows:



## **Office of the Registrar**

The Registrar is assisted by two deputies, three assistant registrars, and a number of administrative assistants. Personnel matters, student admission and records, security and general administration of the Institute are the main functions of the Registrar's office. In addition, hostel, food and catering services also come under the Registrar's wings. The Registrar is also the Secretary of the Governing Council.

**Personnel:** Efforts during the year continued to be dominated by recruitment for all categories of staff and by documentation for staff overseas, visiting professors and resigning staff. Personnel administration also includes support activities for all employees: medical, provident fund, economic rent, cost of living allowance, social security, and for volunteers, housing and transport. In July 1973 the number of employees was 710; in June 1974 this had risen to 1076 and is projected by the end of this year to rise to 1959. This does not include the 31 volunteers not on ITM's payroll.

**Academic:** Included under this office are student admissions, student records, student allowance, external examination, loan and scholarship applications and graduation.

In July, 19,000 applications were received, 3,000 places were offered, and 2,682 registered. The difficulty of the selection process was compounded by a four-fold increase in the number of applications received. Because of the magnitude of error in mechanized processing of applications in the past, documentation for 1974 admissions was again done by hand.

The difficulty in certifying parental income, which determines allowances and scholarships, continues to be a problem. Based on information provided, attempts have been made to make awards as equitably as possible. Complaints still exist, and where made, awards have been investigated and rectified. The new system of student financing, which is now under consideration by the Governing Council, will eliminate this problem.

## **Finance Section**

Finance has been a brighter area since the installation of a mechanised accounting system in April 1973. We are entering the second year of reorganizing the Finance Section to the establishment of a sound accounting system. Under this new system, ac-



counting information will be extracted more readily and the costs expended by each section will be better controlled.

Another accounting machine was purchased to meet increased requirements originating from the establishment of departmental budgets and the formation of ITM branches in Sabah, Sarawak, and Perlis. The Finance Section controls departmental expenditures according to approved budgets, consolidates the accounting system of all branches, and prepares the salaries of about one thousand staff.

For the year ending 31st December 1973, the Institute had a surplus of \$2,337,435.30 from the total Government grant of \$18,025,530.00. This surplus was due to the late arrival of a supplementary grant from the Treasury. As a result of that, the purchase of some number of equipment was made in the following year.

The first estimate approved by the Government for 1973 was M\$10.5 based on the outright grant of \$2,500 per student. But, to enable the Institute to provide better physical facilities and ancillary services to meet with the increased academic programmes, the Federal Treasury has increased the grant to \$3,300 per student per year.

### **Comparative Costs and Allocations**

With the recognition in principle by the Government of the Institute's status to be raised to University level, much more development has to be carried out in order to be in line with other Universities in terms of improved physical facilities and ancillary services. In 1974, the Institute has received approval for a Government grant of \$20.7 million by the Treasury for 6,460 students at the unit cost of \$3,300 per student. But, if the Government grant per student is compared with other institutions of higher learning, it is evident that the ITM is the lowest. The grant per student of National University is \$6,600, University of Malaya \$4,363, University Science \$6,785, University of Agriculture \$6,133, and the National Institute of Technology \$4,670.

Salaries and wages as a percentage of approved expenditure were 49% for MIT, 50% for University of Agriculture, 56% for National Institute of Technology, 68% for the University Science and the National University and 70% for University of Malaya. This percentage is expected to increase in the next few years with the recruitment of more highly qualified staff in various specialised fields.

**Table 9.**  
**CONSOLIDATED STATEMENT OF INCOME AND**  
**EXPENDITURE FOR YEAR ENDING**  
**31ST. DECEMBER, 1973.**

<b>INCOME</b>	<b>\$</b>	<b>\$</b>
Government Grant	18,025,530.00	
Special Development Grant	998,600.00	
Student Fees	451,110.69	
Miscellaneous Income	192,247.03	
Miscellaneous Sales	92,633.59	
Donations/Gift	12,063.66	
Investment Income	43,749.81	
Rent	12,896.61	
	<hr/>	19,828,831.39
<b>Less: EXPENDITURE</b>		
Salaries and Wages	6,186,241.35	
Equipment and Instrument	1,206,522.01	
Special Development Grant		
Equipments	305,424.48	
Library Books	647,850.89	
Food	2,085,389.16	
Instructional Expenses and		
Materials	477,587.01	
Student Allowances	641,219.61	
Other Student Expenses	312,510.96	
Staff Expenses	331,478.91	
Scholarship	289,230.23	
Consultants	202,227.96	
Electricity and Water	479,833.32	
Repair and Maintenance	438,176.03	
Stationery, Supplies and		
Expenses	422,248.79	
Rental of Building	527,285.00	
Other Administrative and		
Miscellaneous Expenses	244,904.96	
ITM Sabah	500,005.50	
ITM Sarawak	363,504.95	
	<hr/>	15,661,641.12

<b>Less</b> Deficit brought forward from previous years written off( 1,136,579.45)		3,030,610.82
<b>Less</b> Surplus from Special Development Grant School of Engineering (British Withdrawal Aids)		148,826.84
Telephone PABX system	322,052.68	
Hostel and Lecture room Equipments	222,296.00	
	<hr/>	693,175.52
<b>Excess of Income over Expenditure carried forward (Surplus)</b>		<b>\$2,337,435.30</b>

### **Aid to the Institute**

In addition to the organizations listed in Table 6 (p. 51), various other local and foreign organizations have given aid to the Institute in the form of book loans and grants, and staff and student scholarships. We wish to record our appreciation to the organizations listed below:--

**Student Scholarships:** In 1972 the British Community in Malaysia donated a sum of \$25,000 to commemorate the visit of the Queen and the Duke of Edinburgh. The interest earned from this sum has been used to provide five annual scholarships worth \$400 each.

The O.U.B. Group of Companies provided four scholarships worth \$2,000 each.

**Book Loans and Grants:** Book loans and grants are provided directly to students in varying amounts from state Governments and from MARA.

Additional instructional materials for the Language Centre in the form of books and tapes were received from the Russian, French, German and Japanese Embassies.

**Staff Training Scholarships:** Various organization have assisted the Institute in its staff training programme. The Netherlands Government and Belgian Government gave partial support to one faculty member each, while Ohio University and the Asia Foundation gave partial support to three faculty members each.

**Table 10. COSTS AND ALLOCATIONS FOR**

	National University			University of Malaya			University	
Year	1972	1973	1974	1972	1973	1974	1972	1973
Number of Students	1080	1760	2540	8972	9124	8626	1286	2137
Approved Expenditure	\$9.55m	15.4m	22.0m	32.1m	38.8m	40.74m	10.59m	14.1m
Unit Cost per Student	\$7,700	7,900	6,600	3,583	4,255	4,363	8,241	6,639
Salaries as a percentage of Expenditure	66%	66%	68%	70%	70%	45%	56%	65%

Figures for 1972 in respect of University of Agriculture and National Institut

All cost and expenditure figures are in Malaysian dollars.

# INSTITUTIONS OF HIGHER LEARNING

Science	University of Agriculture			National Institute of Technology			Mara Institute of Technology		
	1972	1973	1974	1972	1973	1974	1972	1973	1974
1974	1972	1973	1974	1972	1973	1974	1972	1973	1974
2796	—	1700	2201	—	1363	1970	3729	4903	6460
18.9m	—	10.5m	13.5m	—	5.5m	9.2m	9.5m	10.5m	20.7m
6,785	—	5,600	6,133	—	4,035	4,670	2,891	3,300	3,300
68%	—	54%	50%	—	66%	56%	41%	54%	49%

of Technology not available.

## FACILITIES, COMPLETION DATES AND COSTS

Progress in the building construction programme has been hampered by the nation-wide shortage of building materials. Thus, Phase 3 of Hostel III, which was expected to be completed in August 1973, was completed only in May 1974. In addition, the completion dates for the Director's House, the Great Hall, the Sports Pavilion and other buildings have been postponed to next year.

**Table 11. EXISTING BUILDINGS**

	<b>Completion Date</b>	<b>Budgeted Cost</b>	<b>Actual Cost</b>
Hostels I & II	June 1970	\$5,060,296	\$4,074,827
Hostel III			
Phase 1	June 1972		
Phase 2	June 1973		
Phase 3	May 1974	\$3,000,000	\$3,403,000
Hostel IV	August 1974	\$4,000,000	\$4,133,181
School of Hotel & Catering	September 1973	\$2,120,000	\$1,804,011
School of Engineering	July 1974	\$2,600,000	\$2,600,000
Engineering Workshop	September 1972	\$1,200,000	\$1,225,743
School of Art & Design			
School of Architecture, Planning & Surveying	May 1973	\$2,860,000	\$2,388,271
Multi-storey Building			
Circular Lecture Theatre	June 1972	\$5,208,258	\$5,208,258
Administration Block			
School of Applied Sciences	July 1974	\$1,860,000	\$2,241,062
Central Library	June 1972	\$2,244,580	\$2,244,580

**Table 12. PROPOSED BUILDINGS**

	<b>Planned Completion Date</b>	<b>Budgeted Cost</b>
Great Hall	July 1975	\$1,500,000
Student Centre/ Swimming Pool	End 1975	\$2,000,000
Sport Pavilion	May 1975	\$1,500,000

Director's House	End 1975	\$100,000
Islamic Centre	1975	\$500,000
Faculty Club	1975	—
RE Office	1975	\$350,000
School of Mass Communication	1975	—
School of Library Science	1975	—

## **THE GOVERNING COUNCIL**

On 14 th March, 1970 the Institute became independent of the MARA Training Division in accordance with the MARA (Institut Teknologi) Regulation, 1970. It is now managed by a Governing Council consisting of a Chairman, a Deputy Chairman, and between 9 to 21 members appointed by the Minister of National and Rural Development.

The Governing Council has all the powers necessary for effective administration of matters related to the management and development of the ITM. The following five sub-committees regularly report to the Council for policy-making decisions:

Board of Studies  
Board of Student Welfare  
Board of Examinations  
Personnel Management  
Finance and Development

Chairman	Y.B. Tan Sri Datuk (Dr.) Mohd. Ghazali Shafie, PMN, DIMP, PDK Minister of Home Affairs
Deputy Chairman	Y.A.B. Datuk Mansor Osman, KMN, PJK Chief Minister, Negri Sembilan
Members	Y.B. Tan Sri Syed Jaafar Albar, PMN Chairman, Malaysia Pacific Insurance Co. Sdn. Bhd.  YM Tengku Tan Sri Razaleigh Tengku Hamzah, PSM Managing Director Bank Bumiputra  Encik Baharuddin Abu Kassim, AMN Akitek Team 3  Encik M.J. Gent Manager & Director Guthries Waugh (M) Sdn. Bhd.  Encik Wong Tok Chai, KMN Managing Director Amoy Canning Corporation  Datuk Abdulah Salleh, KMN, DHCM Director-General, Public Service Department, Bangunan UMBC, K.L.



**Puan Khatijah Ahmad,**  
**Director**  
**KAF, P. Murray Jones International Sdn. Bhd.**  
**Kuala Lumpur**

**Director, Training & Career Development Division,**  
**Public Services Department**  
**(Representative: Encik Nik Ahmad b. Hj. Nik Hassan)**

**Secretary-General**  
**Treasury, Ministry of Finance**  
**(Representative: Tuan Hj. Othman b. Abdul Malek)**

**Director-General**  
**Implementation, Coordination, and**  
**Development Administration Unit,**  
**(Representative: Encik Sulaiman Abdullah, KMN)**

**Encik Nasaruddin Mohammad, JMN**  
**Secretary-General**  
**Ministry of Commerce and Industry**

**Secretary-General**  
**Ministry of Education**  
**(Representative: Tuan Syed Abdullah Syed Yahya)**

**Encik Abdul Aziz Mohd. Ali**  
**Secretary-General**  
**Ministry of National and Rural Development**

**Chairman**  
**Urban Development Authority**  
**(Representative: Encik Samad Yahya)**

**Encik Sulaiman Osman**  
**Director General,**  
**MARA**

**Encik Abdul Wahab Alwi, KMN**  
**Director of Training**  
**MARA Headquarters**

**Director General of Education,**  
**(Representative: Encik Abd. Rahman Arshad,**  
**JSM, BCK)**

**Datuk (Dr.) Arshad Ayub, JMN, DPMP**  
**Director**  
**MARA Institute of Technology**

**Secretary**      **Encik Abdul Kuddus Hj. Ahmad**  
                          **Registrar**  
                          **MARA Institute of Technology**  
  
**Council members whose terms expired during the**  
**period under review:**  
  
**Datuk Abdullah Ayub, KMN**  
**Representative**  
**Treasury**  
**Ministry of Finance**  
  
**Encik Jamil Jan, KMN**  
**Deputy Secretary -General**  
**Ministry of Commerce and Industry**  
  
**Mr. Thong Yaw Hong, PMN, SMP**  
**Deputy Director General**  
**Economic Planning Unit**  
**Prime Minister's Department**  
  
**Dr. A.H. Moseman**  
**Director**  
**MARDI**  
  
**Encik Ali Saad**  
**Registrar**  
**MARA Institute of Technology**

## **ADMINISTRATION**

<b>Director</b>	<b>Arshad Ayub, DMP, JMN, PTD,</b> <b>LL.D. (Honorary) (Ohio);</b> <b>B. Sc. (Hons) (Wales)</b> <b>Dip. Bus. Admin. (IMEDE) (Lausanne)</b> <b>Dip. Agric. (Malaya), M.B.I.M., A.I.S.</b>
<b>Special Assistants</b>	<b>Chandriah Appa Rao, B.Sc., M.Sc.</b> <b>(Econs) (London), Ph.D. (Ohio)</b>  <b>Sharifah Mariam Syed Mansor</b> <b>B.A. (Hons),</b> <b>Dip. Ed. (W. Australia),</b> <b>M.Sc. (Journalism) (Ohio)</b>

**Personal Assistant  
to the Director**                      **Zurida bte. Hj. Abdul Kahar (ITM)**

**Public Relations Officer**                      **Vacant.**

**Administration Division**

**Registrar**                      **Abdul Kuddus Hj. Ahmad, PTD,  
B.A. (Hons) (Malaya,  
MPA (Pittsburgh), IEM (Harvard)**

**Deputy Registrar**                      **Bahadon Ismail, A.C.I.S. (U.K.),  
B.B.A., M.A. (Econs) (Ohio)**

**Normah Ahmad, C.I.S., C.C.S.,  
Assoc. in Arts Degree (Ohio)**

**Assistant Registrar**                      **Haron Jaini,  
B.A. (Hons) (Malaya)**

**Sulaiman Shamsuri,  
B.A. (Malaya) Cert. Ed.**

**Academic Affairs Division**

**Dean of Academic  
Affairs**                      **Tahir Abd. Majid,  
Dip. Quantity Surveying  
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A.R.I.C.S. (U.K.), MIS (M)**

**Deputy Dean**                      **Mohd. Zain Hj. Omar,  
B.Sc. (Hons), Dip. Ed. (Malaya),  
M. Ed. (Edu. Admin.) Ohio.**

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(Sabah Campus)**                      **Abd. Kadir Hassan,  
Dip. Agric. (Malaya),  
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<b>Principal (Sarawak Campus)</b>	<b>Mansor Hj. Ali, B.A., M.B.A. (Marketing) (Puerto Rico), Dip. Export Promotion (Marketing) Germany, Inst. of Marketing (U.K.)</b>
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<b>Head, School of Applied Science</b>	<b>Dr. Lee Fah Onn, B. Sc. (Hons) (Malaya), M. Sc. (Hawaii), Ph.D. (Lehigh)</b>
<b>Head, School of Architecture Planning &amp; Surveying</b>	<b>Ezrin Arbi, B. Arch. (Melbourne) Post-Grad., Dip. T. &amp; RP (Melbourne), Cert. Project Analysis (Bankok).</b>
<b>Head, School of Art &amp; Design</b>	<b>Ibrahim Ismail, M.S.Ed. (III), Dip. A.D. (Hons), M.S.I.A., Dip. A.D. (London)</b>
<b>Head, School of Computer Science &amp; Mathematics</b>	<b>Gee Boon Kee (Mrs), B.A. (Hons) (Econs) (Malaya)</b>
<b>Head, School of Engineering</b>	<b>Toh Weng Fook, F.R.M.I.T. (Melbourne)</b>
<b>Head, School of Hotel &amp; Catering Management</b>	<b>Azizah Mokhzani, B.A. (Hons) (Malaya), Dip. in French Studies (Caen) (France), Dip. Hotel Industry Mgmt. (Hawaii).</b>
<b>Head, School of Library Science</b>	<b>Oli Mohamed, B.A. (Hons) (Malaya), A.L.A. (London), Dip. Librarianship (Wales), Cert. Ed. (Penang).</b>

<b>Head, School of Mass Communication</b>	<b>Marina Samad, B.A. (Hons) (Malaya), M. Ed. (Guidance &amp; Counselling) (Ohio), M.A. (Television-Radio) (Michigan State University).</b>
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<b>Head, School of Secretarial Science</b>	<b>Chin Thean Siew, A.C.I.S., F.S.C.T., F.N.G.A., Normal Trained (M), Pitman College Trained (London).</b>
<b>Head, Extension Education</b>	<b>Wan Ghazali Wan Abdullah, DBS (ITM), B.B.A., M.A. (Ohio)</b>
<b>Head, Language Centre</b>	<b>S. Rathichandran, B.A. (Hons) (Madras), M.A. (Texas).</b>
<b>Head, Student Counselling and Guidance Unit</b>	<b>Fauziah Elyas, B.A. (Hons) (Malaya), M.S. (Extension Ed.) (West Virginia), M.Ed. (Counselling, Boston) (Boston Univ.).</b>
<b>Student Health Officer</b>	<b>Rahmah Mohd. Kunju, M.B.B.S. (Karachi), L.R.C.P. &amp; L.R.E.P.S., D.C.H. (Glasgow)</b>

### **Student Services Division**

<b>Dean of Student Affairs</b>	<b>Sheikh Salim Sheikh Salleh, Bar-at-Law (Lincoln's Inn) Cert. Ed. (Language Inst.), M.C.L. (Dallas)</b>
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**Religious Counsellors**

**Ustaz Mohd. Nakhaie Hj. Ahmad,  
B.A. (Hons) Al-Azhar**

**Ustazah Faridah Ahmad,  
B.A. (Sociology), Al-Azhar.**

**Ustaz Ramli Ibrahim,  
B. Is. (Hons) UKM.**

**Sports Officer**

**Ameran Rerah**

**Hostel  
Superintendent**

**Mohd. Nor Nasir**

**Catering Manager**

**Abdul Rahman Razali**

**Finance Division****Bursar (Acting)**

**Aliah bt. Mohd Yassin,  
A.C.I.S., B.B.A. (Ohio)**

**Assistant Bursar**

**T.O. Baby**

**Assistant Bursar (Acting)**

**Matlasa Hitam**

**Library****Chief Librarian  
(Acting)**

**Rugayah Rashid,  
F.L.A. (U.K.), M.I.S. (Hawaii)**

**Deputy  
Librarian**

**Rahmah Mohammad,  
A.C.I.S. A.L.A. M.L.S.**

**Assistant  
Librarian**

**Zahrah Mahmood,  
A.C.I.S., A.C.C.S., A.L.A.**

