WORKING PAPERS

IN LANGUAGE

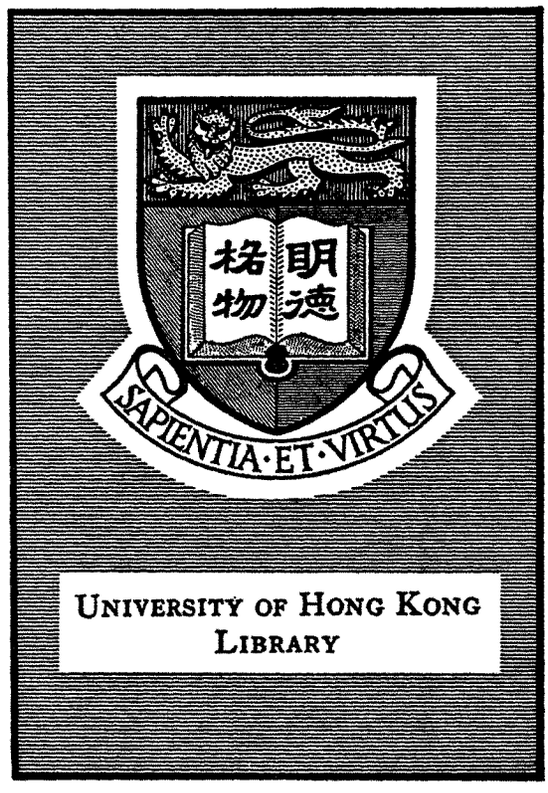
AND

LANGUAGE TEACHING

Language Centre

University of Hong Kong

May 1979



C O N T E N T S

no.1-2
(1979)

Editors:

Dr. A. Fok (Lecturer, Language Centre)
Professor R. Lord (Director, Language Centre)
Mr. G. Low (Lecturer, Language Centre)
Dr. B.K. T'sou (Lecturer, Language Centre)

Acknowledgements

The Editors are greatly indebted to the assistance rendered by Miss Ruth Lambert (Assistant Editor), Ms. Amy Lam (printing and coordination) and Miss Connie Chan (typing), as well as to the University Printing Unit, and the Centre for Media Resources.

Personalia

Gail Schaeffer Fu is Lecturer in English at the Chinese University of Hong Kong.

Yu Fong Ying is Senior Lecturer in English at the Hong Kong Polytechnic.

David Foulds is Head of Department of English at the Hong Kong Technical Teachers' College.

Among the many changes that have been taking place in Hong Kong in the past decade has been a growing professional concern for language teaching, and for the language learner and user. This is, of course, in line with what has been happening in the world as a whole, but in Hong Kong somehow (and perhaps it is to some extent an illusion) change always seems to be taking place faster than elsewhere. There is by now an acute need for useful and up-to-date information on a whole range of topics and issues which are of immediate interest to those engaged in the language education sector.

As one modest contribution to this the Language Centre of Hong Kong University announced some time age that it would shortly begin publication of *Working Papers in Language and Language Teaching*. This then is the first number, and it is hoped that *Working Papers* can appear at least twice yearly. For substantial items of local interest it may be that special supplements can be published from time to time.

The areas and topics to be covered include: language teaching methodology, information about and evaluation of teaching materials, language curriculum development, language testing, educational technology, language and language teaching surveys, language planning, bilingual education. It is hoped that *Working Papers* might also be of interest to specialists in other parts of the world, especially in Asia.

We shall try to gather information on the teaching of Chinese as well as on the teaching of English. As *Working Papers* is aimed primarily at Hong Kong, articles and notices printed in Chinese will no doubt appear from time to time.

Working Papers is intended to be informal in character, and it is hoped that in the course of time the publication will become a local focus for the exchange of information relating to a whole range of needs of the language educator. The next issue, we hope, will include a section in which contributors are invited to give their views on curricular aspects

of language teaching, or testing, on particular textbooks or other teaching materials. Readers are encouraged to submit anything from short or general comment and items of information to full-length papers, reports, in-depth reviews, etc. They might also through *Working Papers* want to seek advice from other colleagues in the profession, including sometimes ourselves.

The first issue of *Working Papers* is being distributed free of charge. Subsequent issues will be sent at a local nominal charge of $5.00 per issue, including postage. The overseas charge will be $6.00 per issue, again including (surface rate) postage. If you wish to receive a copy of the next issue, please fill in the slip below and return it as directed.

The Editors

To: The Editors,
Working Papers in Language and Language Teaching,
c/o The Language Centre,
University of Hong Kong,
Pokfulam Road,
Hong Kong.

Please send me a copy of Working Papers in Language and Language Teaching. I enclose postal order/draft/cheque for HK$5.00 (or HK$6.00). (Cheques should be crossed and made payable to the University of Hong Kong. Cheques in major foreign currencies are acceptable.) Please send the copy to:

(Please print) _____

_____

_____

_____

Signature: _____

Date: _____

BILINGUAL EDUCATION IN HONG KONG : A HISTORICAL PERSPECTIVE

Gail Schaeffer Fu

It will not take even a perceptive reader to notice the contemporary relevance of many of the issues covered in this short historical survey. It is for this reason that this article might provide a useful historical frame of reference for future discussions within the area of bilingual education in Hong Kong.

The Editors

In general, in the very early days, relationships between the British and the Chinese in Hong Kong were kept to a bare minimum and were characterized by what one historian has called a 'good-natured contempt,' each race for the other. The British looked down upon the Chinese (mainly dock-workers) and considered them a sub-human but useful race, to be kept firmly under control, and cooped up indoors after dark. In 1849 the first Bishop of Victoria, George Smith, was shocked by the 'moral improprieties and insolent behaviour' of contemptuous Europeans, which aroused the hatred of the Chinese.(1) There was no social mixing at the highest levels, and at the lower levels Chinese were distrusted as shifty, doubtless dangerous, and tangled in a web of mysterious religions and secret societies. Not unnaturally, these attitudes carried over to the Chinese language as well, and most British were not at all inclined to learn Cantonese, the most widely used Chinese dialect in the Colony. It was generally believed that a knowledge of Chinese warped the mind, destroyed common sense, and unbalanced the judgement. Samuel George Bonham, governor between 1848 and 1854, went so far as to deny promotions to any of his subordinates who learned Chinese. He also regarded complete ignorance of the language as a very strong recommendation when appointing consuls and vice-consuls to the treaty ports.

The Chinese, on the other hand, likewise rejected an English education (those who could afford it sent their sons to Canton), and adamantly refused to comply with English customs and habits of dress. All these symptoms of 'exclusivism' indicate, it has been said, that on the Chinese side at that time there was no desire to bridge the 'chasm that still separates Chinese and European life in this Colony.'

In Hong Kong 150 years ago the British literally started with bare rock and had at first to deal with plague, drainage, roads, docks, and later with hordes of refugees unsettled by political vicissitudes in China. Since upper and middle class children were largely being educated in China, local education (primarily in the hands of voluntary agencies) worked with the poorer members of the community. Both the population and the curriculum of the schools were fundamentally affected by these facts. The resulting educational system was predominantly of a western literary type, and there was a firm belief that the English language opened doors to a knowledge of trade and gain as well as to new horizons of knowledge.(2)

Back in Britain the 1840's saw the development of a national education system delayed by religious and sectarian jealousies. Early public education in Hong Kong was shaped not only by the pressure of local demands and by affairs in China, but also by the British system at home and by overall

colonial policy.(3) In the 19th century this policy, particularly evident in Hong Kong, was largely one of non-interference with existing institutions and of encouragement of missionary and voluntary efforts to spread enlightenment through the primary education of the masses.

The Early Years

In March 1847 a Select Committee of Parliament in London was appointed to 'enquire into the present state of the commercial relations between Great Britain and China.' In its report the Committee recommended more teaching of Chinese language in Hong Kong and more schools for the Chinese.(4) In the Colony itself, the first annual report of the Education Committee for 1848 made it clear that the policy to be pursued was one of non-interference in the traditional Chinese curriculum and teaching methods, except for the introduction of some Christian teaching on a voluntary basis. In 1850 the Education Committee recommended that the Anglican Bishop, George Smith, should be superintendent of schools and, in 1852, the Bishop became chairman of a reorganized committee. This seemed to imply an official policy of increasing religious influence in the schools; and by 1853 half the day was devoted to scripture and to 'books composed under the superintendance of foreigners.'(5) The other half of the day was devoted to the Chinese classics. In 1853 Dr. James Legge and Rev. M.C. Odell joined the Education Committee, whose policy could be described as follows:

> to encourage the study of English not only for the value of its literature but 'to prevent misunderstanding' and act as 'a bond of union between the many thousands of Chinese who have made this place their residence and the handful of Europeans by whom they are governed.'(6)

By 1854 the Education Committee Report made proposals for the improvement of government education, for the employment of assistant masters able to teach English, and for the weekly inspection of all government schools.(7)

Central School

To replace the existing but haphazardly located government schools Dr. Legge suggested in 1860 that a central school be established to give English teaching a more prominent place.(8) In 1862 Sir Hercules Robinson merged the government-aided Victoria schools into one. The new Central School was opened in 1862 with Frederick Stewart as headmaster, who in the Education Report for 1865 declared that the Chinese had no real education as he understood it. With difficulty, Stewart was able to adopt western methods, but he could find only one text-book in the Colony and that had to serve for all forms. He found that English seemed to have only a commercial value for his students, for many of them left as soon as they had acquired a mere smattering of the language. Central School was a success, he noted in his report of 1866, because of the money value of English, but it was a success which resulted in the neglect of the vernacular schools, since Chinese was 'unsaleable.'(9) Despite his interest in western education, this 'indifference of the scholars in learning Chinese' was a 'great disappointment' to him, a 'humiliating spectacle,' and a 'disgrace.'(10)

Despite Stewart's well-intentioned efforts the school came under critical fire from several sectors of the community. It was in disfavour

with some Chinese, apparently, because the boys gave themselves airs and affected a superiority they did not have, thus placing the school in an improper light.(11) There was also considerable criticism of standards, which many people felt were too low. At the Prize Day of Central School in 1878, Hennessy registered his disappointment when, on a personal visit to the school, he discovered that, in a class of 150, he had not found one pupil who could speak English.(12)

Governor Bowen arrived in 1883 eager to expand educational services and to introduce English in all government schools, partly because he wanted to initiate English-medium civil service examinations. At the Central School Speech Day of 1884 Bowen announced proudly that twelve former Central School students held posts of importance in the Chinese Imperial Service. He later spoke thus:

> The immediate benefits conferred upon the Colony by the Central School are fully appreciated by all who have taken the trouble to think about the matter. Every year a number of youths pass from the school to take their place in commerce, and their English education tells not only in their own favour, but in many ways in that of trade.(13)

While the Secretary of State, Lord Derby, urged that encouragement to acquire English should not be to the neglect of the vernacular, Central School had soon become an English school entirely, and its name had been changed to Queen's College.

Governor Hennessy : 1877-1882

Hennessy was the first governor to be shocked by the unequal treatment of the Chinese, and he tried to treat the 'native races' as human beings who had rights equal to those who regarded themselves as white overlords. He took the first steps to translate into reality the policy of non-discrimination which had appeared in the Governor's instructions in 1866 and in British colonial policy even earlier. Hennessy treated the Chinese as equals, and for this he was hated by the European community. When Hennessy went so far as to receive prominent Chinese at Government House he was regarded by British residents of Hong Kong as guilty of subversion. Hennessy, however, proceeded to permit persons of Chinese birth to buy land, build, or live in the European quarter of town, and even encouraged the Chinese to move into the hitherto exclusive area of Victoria.

Hennessy was also clearly keen to educate the Chinese but, despite his pro-Chinese sentiments, his educational policy was basically English-oriented. This has been seen(14) as inconsistent with Hennessy's general respect for the Chinese and their customs, and Endacott comments that it led to the Governor's wholesale condemnation of what had been achieved in vernacular education. But it has also been suggested that Hennessy's concentration on English education (leaving vernacular education to missionary and private efforts) did not really contradict his pro-China policy. The rapid commercial development of Hong Kong and the need in China for English-speaking Chinese was being taken account of, and the provision of English studies was considered to be of great practical value and benefit to China.(15)

English to the Exclusion of Chinese

On 25 February 1878 Hennessy called a conference which resulted in several significant resolutions. They included the following:(16)

[1] The teaching of English should be the primary concern of government education;

[2] The Central School entrance requirements in Chinese should be raised so that more class time could be devoted to English;

[3] Five hours a day should be devoted to English instruction but only two and a half hours to Chinese (English lessons being compulsory but Chinese lessons optional);

[4] To improve the quality of English teaching at the Central School there would have to be increased accommodation, more English-speaking masters, and smaller classes;

[5] As a preliminary step, the English-teaching staff should be doubled;

[6] English teaching should be introduced as soon as possible in all schools entirely supported by the government.

Though modest enough in size and scope, the conference and its resolutions articulated a change in the traditional policy of vernacular education and pointed to a new emphasis on English teaching which characterized the period until the end of the century. To his credit the Colonial Secretary criticized these resolutions as being too strong and as making it appear that government attention was focused on limited aspects only of the education of the Chinese.(17)

The tenor of the eductional times might best be summed up by the report of the Inspector of Schools, E.J. Eitel (28 April 1880). He commented on the failure of English education during the previous twenty years by pointing to the fact that in a colony of over 135,000 Chinese, not even half a dozen English-speaking Chinese could be mustered for jury duty. The principal cause of this failure, as he saw it, was the Government schools' attempt to divide their time between English and Chinese teaching. The Chinese written language was difficult; the pupils never heard English at home; and only three and a half hours per day (which had to include geometry, algebra, and chemistry) were devoted to English studies.

> It is not to be wondered at that an overwhelming majority of scholars leave our Government Schools year after year unable to speak English and with but a smattering of the written Chinese language, whilst sure to forget soon again most of the English knowledge acquired in school.(18)

He regretted that the Government, when first beginning to teach English in the Colony, had not confined itself to English teaching and had not left Chinese education to the Chinese. As he stated in an 1880 Prize Day address,

> when both English and Chinese languages are taught side by side in the same class, the children learn neither English properly nor Chinese satisfactorily.(19)

Hitherto, insufficient time had been devoted to English studies as the students' energy was spent amid 'so multifarious a number of diverse subjects as is here crowded into the short space of time allowed.' No time was left to consider using English as the teaching medium.

Despite what was said earlier about the original intentions of the Hong Kong Government, this emphasis on English and western knowledge indicated a growing thrust toward imperialism, expressed at its extreme by Governor Hennessy at Central School on 30 January 1880:

> It has been the ambition of nearly every man who preceded me in the Government of this Colony, and it has been the policy of all Secretaries of State who have written to my predecessors and myself ... that Hong Kong should be made an Anglo-Chinese Colony, where her Majesty should have thousands upon thousands of Chinese subjects, with a thorough knowledge of the English language ... amenable to English law and appreciating the British constitution, loyal to their QUEEN, and a strength to this distant part of her Majesty's Empire. Our educational scheme will accomplish a practical result if it assists in achieving that.(20)

To achieve what Hennessy wanted, the educational system would in future have to focus on English almost to the exclusion of Chinese. It would mean a revision of the whole educational policy, which the Inspector of Schools would have welcomed and which the Governor would have permitted.

The 1882 Report of the Commission on Education

The Commission was appointed by Hennessy in 1880 to look into a scheme to introduce English teaching in five new schools, so that pupils could enter Central School at collegiate level. It found the scheme unfeasible. However it again raised the question whether both Chinese and English, or just English, should be taught at Central School. The discussants ranged from those believing that a general education should be taught in(21) Chinese to those advocating education in the classics as moral training and others considering one and a half hours of Chinese per week an utter waste of time. In its report the Commission recommended that equal time be devoted to Chinese and English in the lower sections of Central School, whereas in the upper sections Chinese should only feature in translation classes.

The home government evidently approved of the recommendations as they endorsed the resolutions of the 1879 conference, recognising the importance of English and stressing the need for it in sound elementary education alongside knowledge of the western sciences. The report was upheld by Hennessy, Bowen, and Eitel as applicable to all Chinese youth, but held little favour with the majority of Chinese since most of them were in free government district schools of which six out of thirty-four used the vernacular for elementary education. Only a small number of middle class Chinese were attracted to the English schools, despite the practical value of English; though by the turn of the century English education was being more widely encouraged and requested.

The Turn of the Century

The plagues of 1894 and after had repercussions which extended beyond

the field of health. The lack of Chinese cooperation with sanitary measures made it evident how little the Chinese had been influenced by western ideas, and this indirectly led to a demand for more teaching of English. Governor Robinson was determined to encourage more English in the schools in order 'to elevate the Chinese people of this Colony by means of English rather than Chinese teaching'(22) In a speech to the Legislative Council (25 November 1895) Robinson made his attitude clear:(23)

> It is extraordinary — not to say discreditable — that, after fifty-five years of British rule, the vast majority of Chinese in Hong Kong should remain so little anglicised.

By the turn of the century, not more than half of the Colony's children were in school. Only 1.24 percent of colonial revenue was being spent on education. The Chinese in any event seemed to favour Chinese private schools over the free government schools which gave a similar vernacular education. The period from 1900-1910 has been described as one of great change and debate, and of emphasis on English teaching along with western education.

Separate but Equal

In March 1901, eight prominent Chinese petitioned the Governor to establish a Chinese school for children of respectable families. They were opposed to the 'indiscriminate and intimate intermingling' of children from respectable Chinese families with children from families of other social classes. They hoped for a separate establishment run along western lines which would endow their young men with open minds and public spirit. This would result, they felt, in greater cooperation and understanding between the British and Chinese.(24) For the first time the Chinese expressed their educational opinions openly in the press.

British parents also felt that mixing the races was injurious to the European as well. Another 1901 petition to Government expressed particular dissatisfaction with the Chinese attitude of studying not for the sake of acquiring knowledge but for the sake of money.(25) Part of the objection to English children associating with Chinese during their most impressionable years was explained by the Board of Education in Britain as follows:

> The different views of the two nations, perhaps more as regards reticence than morals, forbid them from mixing. But, apart from this, English children cannot suitably be classed together with children who are ignorant of English, and attend school in order to learn the language. The English community is ... entitled to ask the Government for an assured means of educating its children in a far country.(26)

The British parents' request for a school was granted almost immediately; but the high school for Chinese was not opened until March 1903 as a result of Chinese rather than government objections. The language question was a fundamental issue in a chronic dilemma.

The Education Commission Report of 1902

In 1900 Governor Blake set up an Education Commission which tackled

the content of the curricula. In a report presented in 1902, the Commission recommended that the teaching of English, history and geography avail itself of more modern methods. It recommended separate schools for European British subjects and 'English' schools for those non-British children who required an education in the medium of English. The Commission criticized the standard of English teaching in the Anglo-Chinese schools and suggested they should not attempt higher form work without British teachers. It also recommended that the Chinese should pay greater attention to the study of their own language, but criticized the standard of the Chinese vernacular schools. The Commission suggested that the Chinese written language be taught on more practical lines, which would better serve the interests and needs of the students.

Another criticism of Chinese education was on the grounds that it was better to educate a few than to give a smattering to the many. The Commission was of the conviction that education should be thorough, and that it would be better to aim at the enlightenment of the upper class of Chinese than to force new ideas on the masses. The justification for such arguments was that taxes should not provide a modicum of education for children of parents who neither wanted it nor asked for it since many Chinese parents sent their children back to China for schooling. This effort to educate the upper classes seems to have remained a guiding principle of educational policy for many years.

The Commission seemed to recognize the value of both the Chinese and the English languages in Hong Kong. On the Chinese side it noted that the argument was often heard that Chinese students should learn English to the exclusion of their own written language. This was not worth serious consideration, the Commission felt:

> No Chinese, however learned in English and Western Knowledge, can hope to be of influence to his countrymen, nor can he indeed communicate with them, if ignorant of the written character which binds the Chinese Empire together.(27)

On the English side the Commission also recognized the interests of the Empire:

> It is desirable to offer instruction in the English Language and Eastern Knowledge to all young Chinese who are willing to study them, even though they are not residents of the Colony: provided that the instruction can be furnished at a reasonable cost.(28)

The Commission noted that most boys at Queen's College were from the mainland and recommended that both mainland Chinese and Hong Kong residents continue to be admitted. It should be noted, perhaps, that the arguments used for both languages were united by imperialistic motivations rather than by any inherent benefit they might confer on the student. Joseph Chamberlain, the Secretary of State, criticized the report and condemned the racial bias of setting up schools only for the British. He wrote to the Governor as follows:

> The expression of the opinion that, in the case of the Chinese, thorough teaching of the few should be attempted rather than more widely spread education did not commend itself to me ... Certainly it would need very strong grounds to justify withholding government assistance from vernacular education in a large community such as exists at Hong Kong, thereby presumably excluding the very poorest from the benefits of education ...(29)

Despite Chamberlain's opinions, the principles of concentrating on the upper classes and of emphasizing the importance of English remained characteristic of education in Hong Kong until at least the 1920's.

Vernacular Education : 1900-1901

In Hong Kong, vernacular education was not neglected in principle, but it remained largely in the hands of private concerns and voluntary bodies and never did achieve the prestige which an Anglo-Chinese education had. In September 1901 Governor Blake forwarded the petition of the eight Chinese gentlemen, mentioned earlier, to the Secretary of State. In his letter he argues in favour of founding St. Stephen's school:

> If we can secure the attendance of the children of the Chinese upper classes, many of whom will, if the schools succeed, come down from China, and some of whom will probably form part of the official class of the future, the consequences may be far-reaching and the benefit to this country may amply repay the small outlay that the scheme demands.(30)

Although such a school was eventually built after Education Committee approval, it is illuminating to note that by 1903 grants were given on the basis of the Inspector's report and not on the basis of examination results. Such grants were payable to English schools and to Chinese schools only if they were conducted along western lines. In 1911 Governor Lugard set up a Board of Vernacular Primary Education but, while Endacott claims that the principle of encouraging vernacular education was not again seriously challenged,(31) the present century has watched it slowly dissipate in practice. It has received relatively little government attention and support.

The University of Hong Kong

Frederick Lugard governed Hong Kong from 1907 to 1912. Of all the governors he and his wife were perhaps most sympathetic to and interested in the Chinese. Lady Lugard set aside two hours a day to learn Chinese 'as a relaxation,' and both she and her husband were so impressed by Chinese industry and intelligence that they even began to consider whether the yellow races might be superior to the white. Only through the determined efforts of this one man was the foundation stone of the University of Hong Kong laid in 1910, in the teeth of strident opposition from the business community, who feared that if 'Chinamen' were educated they would become serious rivals. The anti-university leader, Lord William Cecil, regarded Lugard's ideas as irreligious and full of danger. Other writers have, of course, noted that with the establishment of the University of Hong Kong there was a great advance in western learning and education as well as of Chinese studies.

Lugard tenaciously argued that a university in Hong Kong would indeed promote understanding between the races and would contribute to a Chinese Empire that was awakening to the necessity of acquiring western knowledge. He also felt that the understanding and knowledge could best be accomplished through an acquisition of the English language, arguing that Chinese would be an unsuitable medium, because it lacked western technical terms and because students from different regions of China would then need interpreters. Ultimately, of course, it was hoped that the University would be instrumental in making English the predominant language in the Far East, an asset both politically and commercially.

When the Ordinance of Incorporation for the University was finally drawn up, its preamble listed among its objects 'the maintenance of the good understanding with the neighbouring Empire of China.'(32) In his speech at the Opening of the University in March 1912, Lugard emphasized the 'enormous importance of the task' and the 'far-reaching effect it may and will have on the future of China, and on the relations between the East and the West.' He felt that the graduates of the newly established university would have influence in China: 'Just as they will speak English, so they will reflect the training received here from a British staff.'(33) The University's unauguration thus hinted rather broadly of what might today be called cultural imperialism. Certainly its founding was based on English language and western values.

The establishment of such an institution naturally had repercussions at the middle school level. Between 1901 and 1913 the number of pupils in English-medium schools increased by 60 percent, while the increase in the vernacular schools was only 10 percent. Gradually parents came to recognize the economic value of an education in English and this popular demand served to focus government's policy on English education in Hong Hong. The early efforts at promoting, through government grants, primary vernacular education for the masses gradually gave way to public demand and to utilitarianism and, by the early 20th century, there was a concentration on the provision of English education for middle-class Chinese. The establishment of the University of Hong Kong continued this policy and was justified(34) by the awakening of China to the demands of modernization and the need on the mainland for young men educated in English and in western sciences.

The Beginnings of a Bilingual Education Policy

In 1935 Mr. E. Burney, HMI. visited Hong Kong and submitted a report which criticised the Government's inattention to Chinese primary education. On the English side, he criticized the teaching because English studies took up too large a proportion of time, because attention was given largely to written not spoken English, and because the formidable examination syllabus usually resulted in mere memorisation. To begin rectifying the situation Burney recommended that the teaching of English in Hong Kong schools should be reformed on a frankly utilitarian basis. Pupils should be taught to understand and use just so much English as they would be likely to need in their later careers.(35) This meant that little or no time would be given to the study of English literature except insofar as examples of modern English prose might serve as models.

On the Chinese side, the schools were open to the accusation that they let their pupils 'fall between two stools,'(36) their English being unimpressive and their Chinese far behind their contemporaries. Burney felt that careful consideration should be given to: [1] the time spent on the Chinese language or through that medium; [2] the amount of instruction 'to pupils who are believed for the most part not to want it' in the Chinese classics; and [3] whether the medium should be Cantonese or Guo Yu, the dialect which the Government of China wished to establish as the universal spoken language in China.

In the end, Burney concluded that the educational policy in the Colony should be to secure two things for the pupils:

> First, a command of their own language sufficient for all needs of thought and expression, and secondly, a command of English limited to the satisfaction of vocational demands.(37)

Many years later T.C. Cheng hailed the report as the first effort in Hong Kong to discuss education as a balanced whole. He felt it was frank, practical, and realistic, putting the vernacular and English systems into proper perspective.(38)

Vernacular Education Encouraged : The Post-occupation Period

After four years of Japanese occupation of Hong Kong (1941-45) and after four years of disrupted education and no English language teaching, the Education Department again found itself faced with the fundamental problem of getting children back into schools, of finding buildings, materials, textbooks, and teachers. In the aftermath of the war there seemed to be a new recognition that government aid primarily to English-medium schools was perhaps not the best policy. In the *Annual Report of the Education Department, 1946-47*, the Director wrote:

> The system of education in Hong Kong in the past has tended to direct government aid towards education in English, particularly at the secondary level. Primary education in the vernacular has, therefore, been largely in the hands of private schools.(39)

In the future, the Director asserted, development should aim at greater government participation in vernacular primary and secondary education. Within the coming ten years he envisaged the establishment of fifty government vernacular schools. The general policy, then, was this:

> To improve vernacular education; to build Government vernacular primary and middle schools ... to provide free practical education for the children of poor working-class citizens; to increase subsidies toward vernacular education; to provide educational opportunities for all classes of children and to provide a school-leaving examination in the vernacular which would lead to entry into universities in China.(40)

Changes on the mainland in 1949 put this last possibility in a considerably different light, but in March 1950 the Director again registered his dissatisfaction with the fact that, in the past, too little attention had been paid to the Government Vernacular Middle School. Even though it was the counterpart of Queen's College, was nearly as old, and shared the same buildings, the Director noted 'a tendency to look upon it as an inferior institution.' At the primary level this concern for Chinese education seems to have been reflected also in the Fisher Report of December 1951,(41) which recommended the expansion of primary education as a separate and complete stage in the educational process. It recommended also the expansion of teacher training facilities. As a result, the Grantham Training College was opened in 1952 to train Chinese primary teachers who would be able to teach in Chinese.(42)

The Keswick Report of 1952

With the political changes taking place on the mainland, Hong Kong students no longer had the same kinds of educational options open to them as they had had previously. Out of increased concern about this, the Government asked John Keswick to head a Committee which would study the

problem. In its report the Committee wrote that it was in the field of higher education, as much as anywhere, 'that opportunity occurs for that interaction of English and Chinese thought which can stimulate and enrich both peoples and make for mutual understanding.(43)...Hong Kong should be a centre for the diffusion of English ideas and for interpreting the West to China. It should also be a centre for interpreting Chinese concepts to England and the West, a centre where Chinese and English thought can meet at all levels, and where comparative studies of language and philosophy can be developed. This bi-polarity is essential.'(44) The study goes on to call for an extension of studies offered by Hong Kong University, noting that its offerings in Chinese had been historically weak and that students from Chinese middle schools could not pass the Hong Kong University Matriculation Examination in English. Hong Kong University did not go so far as to duplicate courses in the Chinese medium but it put on more Chinese courses and established a Special Classes Centre in order to help students from Chinese schools pass the English School Certificate Examination a year after the Chinese School Certificate, and the Matriculation Examination one year thereafter. In March 1951 an Evening Course of Higher Chinese Studies was also instituted which offered a three-year diploma course in the arts, journalism, and commerce.

In the Department Report of 1952-54, the Director of Education notes that it had still not been possible for the University to duplicate courses in Chinese as the Keswick Report had suggested. The authors of *At What Cost?* see this reluctance to provide Chinese-medium courses as an illustration of the fact that post-1949 political uncertainty about the status of the Colony resulted in a passive educational policy, minimal involvement in educational administration, and minimal expenditure on education, and consequently no active pursuit of a language policy whatsoever. The Director of Education does point out, however, that the Government was devoting increased attention to the provision of post-secondary education in the medium of Chinese by assisting two private Chinese colleges (Chung Chi College and New Asia College) to construct buildings and expand their facilities.

The Jennings-Logan Report of 1953

The Jennings-Logan Report on the University of Hong Kong noted the political elements apparent at its inception. The authors felt it would be unfortunate if the original objectives were intended to make the University an instrument of propaganda or if the work there was to be determined by political motives. They considered that the objectives of Hong Kong University should be and are the same as those of universities in Britain, and that it was proper for the University to be cosmopolitan in outlook, retaining both its British and Chinese traditions.(45)

Jennings and Logan thought it essential to settle this question of objectives. The question of the medium of instruction, for instance, had to be decided purely on grounds of convenience rather than on political grounds. The authors further recognized a wide variety of environmental and cultural factors affecting a student's intellectual capacity, which go beyond purely linguistic considerations. For these reasons, the authors suggested two tentative but important conclusions. First, the University, as far as possible, should be staffed by people who are familiar with the students' social background. Secondly, they felt, it was not absolutely necessary to use Chinese (presumably Cantonese) as the medium of instruction:

> There is no doubt at all that the problem of leading the student from what he understands to what he does not is

> made much easier when it is explained in his primary or home language instead of a language which he has painfully to acquire and which is normally used in a different social context. The point must not, however, be pressed too far. English is not merely the language of the English but an international language. There are, too, many difficulties about using Chinese ... All we need say at the moment is that it does not seem essential as a matter of principle that English should be replaced by Chinese.(46)

The Jennings-Logan Report, in other words, looked askance at some of the University's original impulses, but their report seems to underscore a similar policy, albeit with different justifications.

The Chinese University, 1963

In 1957 three post-secondary colleges Chung Chi College, New Asia College, and United College formed the Chinese Colleges Joint Council in order to promote Chinese higher education in Hong Kong. In June 1959 the Government announced that it had plans for a Chinese University and that colleges meeting certain conditions would be given improved status. In 1962 the Government appointed a Commission under Lord Fulton to report on whether any post-secondary colleges were ready for advancement to university status,(47) to form a federal type of Chinese University in Hong Kong at the earliest possible date. The Commission determined that the colleges needed additional capital for teaching, research, additional staff, and accommodation, and that, given such reinforcement, the colleges could bring the course offerings up the necessary standard. They accordingly recommended the establishment of a federal Chinese University no later than 30 September 1963.

The Government accepted the recommendations of the report in 1963, and officially inaugurated the Chinese University of Hong Kong in October of that year. The promise of a higher education in the medium of Chinese was an attractive possibility to many middle school students, especially to those who had attended Chinese schools. While commendable enough in principle, the Chinese University apparently does not always satisfy in practice the intentions of its founders. The teaching medium was intended to be 'mainly Chinese,' but much lecturing is done in English and textbooks are often, if not always, in English out of sheer necessity. This means in reality that only students who do well on the English paper of the Chinese University Matriculation Examination have much chance of being admitted. In recent years the percentage of students from Anglo-Chinese schools has surpassed the percentage of students from Chinese schools. Even granting the larger proportion of Anglo-Chinese schools in Hong Kong, this situation does not encourage Chinese middle school education, and it has become increasingly apparent that the Chinese University is not, in fact, very 'Chinese.'

Marsh and Sampson : The Education Commission of 1963

The Marsh and Sampson Report of 1963 seemed to share in the concern for more educational opportunities in the Chinese language. It recognized that the achievement of pupils in Anglo-Chinese schools can but be admired, albeit with reservations:

> This requirement must at the same time impose a very great burden on some of the pupils. With the establishment of a

> Chinese University of Hong Kong, consideration should be given to the proportion of children placed in schools where the medium of instruction is English, with a view to increasing the provision of Chinese schools where English is taught as a second language.(48)

While the Education Commission saw a need to increase the proportion of Chinese schools, the Working Party on the Recommendations of the Education Commission reacted as follows:

> We appreciate the importance to Chinese youth of making a thorough study of their own language and cultural heritage, and the educational advantage of learning through the mother-tongue. Indeed, we consider that many of the pupils in Anglo-Chinese secondary schools are unable to benefit fully from the education provided because of the difficulty of studying through the medium of a second language. Nevertheless, we are reluctant to endorse this recommendation in face of the marked parental preference for Anglo-Chinese secondary education, the fact that the English language is an important medium of international communication and that a knowledge of it has undoubted commercial value in Hong Kong. Moreover, in the context of approved policy for secondary education, the proportion of provided Chinese education could only be increased by reducing the proportion of provided Anglo-Chinese education.(49)

Given this dilemma, the Working Party struck what they presumably supposed was a balance by advising that the standards of Chinese studies in Anglo-Chinese schools and of English in Chinese secondary schools should be improved. Nevertheless, the 1965 Education Policy report which grew out of the working party considerably dimmed public hope that the inauguration of the Chinese University would appreciably encourage Chinese-medium education at the lower levels.

The All Hong Kong Working Party to Promote Chinese as an Official Language

Beginning in the 1960's, some leading citizens in Hong Kong began calling for Chinese to be made an official language. The continuing lack of status however disturbed some people and in October 1968 Dr. Denny Huang and others began to organize a committee to promote Chinese education. At a seminar in City Hall in February 1970, this group invited educationalists and students to discuss how the movement to make Chinese official could gain impetus; and a detailed recommendation on how to make Chinese equal with English within three years was sent to the Colonial Secretariat. On 14 June 1970 various groups united in the All Hong Kong Working Party to Promote Chinese as an Official Language with Dr. Huang as chairman. Another conference — this time with standing room only — was held in September and a signature campaign which aimed at 500,000 signatures was announced. On the same day the Government announced a Chinese Language Committee to study the use of Chinese in official proceedings and documents.

In April 1971 the chairman of the Working Party visited the United Nations and spoke with the Human Rights Committee as well as with the British delegation. In London he talked to the Hong Kong Committee in Parliament and delivered a letter to the Prime Minister. This letter read, in part, as follows:

> I, therefore, once again earnestly appeal to you and to members of the Cabinet to consider with great circumspection the request of the Chinese in Hong Kong on the ground of human rights and justice. If the out-dated policy of colonialism is permitted to take its course by ignoring the public opinion and by engaging in delaying tactics, then our General Committee's invariable policy of achieving its aim only through peaceful and lawful procedures is bound to meet with failure.(50)

In June the Working Party received a letter from the Colonial Secretary advising them to be patient and to await the report from the government committee which was exploring these issues.

The status of Chinese was changed in February 1974 after a peaceful and legal campaign, but some feel that the campaign is not yet over, even though interest in the issue faded and people seemed to rest content with the advances already gained. Dr. Huang notes, however, that Chinese still has no real equality with English in the courts, and feels that Government should be pressed to accord full status to the Chinese language in all respects.

The Chinese Language Committee

It seems reasonably safe to say that it was in response to the Working Party's efforts that the Government appointed a Committee to look into the practicality of using Chinese for matters of communication between Government and the public. Their starting point was the statement that

> Ways and means should be found of giving: 'CHINESE AND ENGLISH AS NEAR EQUALITY OF USE AND STATUS AS IT IS PRACTICALLY POSSIBLE TO DO.(51)

Eventually the Committee produced four reports which dealt with: [1] meetings of government bodies; [2] communication between Government and the public; [3] court proceedings and the law; [4] government translation and interpretation services. Nevertheless, much of the Committee's attention was turned to ways and means rather than policy.

Although education was not strictly within the Committee's terms of reference, the closest they came was when they noted the dual system of secondary education and the need 'for an analysis based on the proper perspective of the relative importance of both Chinese and English in our community.' Given the fact that Chinese is the mother tongue of 98 percent of the population, they felt it would be 'patently wrong to relegate the Chinese language to a position of secondary importance.'(52) However, in the light of the international and commercial importance of English, they are 'convinced that both the Chinese and English languages are of equal importance for Hong Kong.'

> Therefore, ideally, we should have an educational system which places equal emphasis on both languages and which produces a breed of graduates who are equally adept at communicating in either of the two languages.(53)

As the Committee members were, by self-admission, not educators, they declined to make recommendations of their own, but they did urge the Director of Education to examine the ways in which English and Chinese

standards of secondary school graduates might be 'equalized and improved.'

The Committee recommended (a) that Chinese and English be declared to have equal status, and (b) that Chinese and/or English be used by Government in accordance with all the recommendations contained in their reports. They concluded by recommending that the Government consider following a firm policy in which both Chinese and English were official languages.

At What Cost?

At What Cost? is the work of four young Chinese who have been through the Hong Kong educational system and who have felt compelled to point out what they see as a vital weakness in that system. This unofficial and unsolicited report concerns itself with the use of English as the medium of instruction in Hong Kong schools and concludes with recommendations for change. As the first stage in implementing a new language policy, the authors propose an expanded use of Chinese as the medium of instruction up to Form 3 and the introduction of English as a subject from primary 1 until Form 5. Far from advocating that English be ignored, the authors feel that it should be taught in Hong Kong, but it should be taught well as a *second* language: greater attention should be given to methods, materials, and needs. There should be greater concentration on Hong Kong's particular situation and educational requirements.

Perhaps the value and interest of *At What Cost?* lies in the fact that it was written at all, and written by ex-students in a society where students are stereotyped as mousey individuals who merely memorize notes for regurgitation in examinations.

The Education Department Green and White Papers, 1973-74

The preliminary *Report of the Board of Education on the Proposed Expansion of Secondary School Education in Hong Kong over the Next Decade* invited public response in advance of the publication of the Education White Paper on the same subject which appeared in the fall of 1974 and which constituted final and official policy on the matter. While the Green Paper dealt with many aspects of the educational system, only two paragraphs are of particular interest for those involved in the language question. Because it promised a radical change in the educational system, the relevant passage is here quoted in full:

> The medium of instruction bears significantly upon the quality of education offered at post-primary level. Pupils coming from primary schools where they have been taught in the medium of Cantonese have a grievous burden put on them when required to absorb new subjects through the medium of English. We recommend that Chinese become the usual language of instruction in the lower forms of secondary schools, and that English should be studied as the second language. We recommend that every effort be made to develop good textbooks for all subjects written in Chinese, to train teachers capable of instructing through the medium of Chinese, and to adopt improved techniques of language teaching for both Chinese and English. Whilst we are aware that our recommending Chinese as the language of instruction in lower secondary forms will affect the large number of children who will complete their education at Form 3 level and for whom a high standard of English will not be essential to gain employment, we are nevertheless conscious of the need to maintain and improve standards in the teaching of English for those who will proceed beyond Form 3 level in preparation for continuing their education at the tertiary level.(54)

On the face of it this statement seems to constitute a considerable departure from earlier policy. Certainly the Green Paper initiated considerable discussion both in the press and in private. At that point in time it seemed as if the winds of change were blowing, and that the Government was being asked to deal with new and different kinds of pressures. When the White Paper finally appeared, however, it was hailed as a disappointment by most and a failure by many. It appeared to them to have backed down from the proposed position stated in the Green Paper and recommended only that each school make its own decision about whether it would use English or Chinese as the medium of instruction. Given that prestige and promotion still go to the English-speaking individual in Hong Kong, this position was considered by most of those concerned with the language issue as amounting only to a vote for the status quo.

The Official Language Ordinance 1973

On 30 January 1974 the Secretary for Home Affairs, Mr. Bray, put before the Legislative Council a bill which affirmed the equality of status of English and Chinese. He drew the following conclusion, however:

> This bill is offered to the people of Hong Kong as an act of good faith. As such, some may regard it as unnecessary. Those who trust us do not need it. The bill is nevertheless a meaningful statement of purpose and demonstrates the Government's earnest intention that language itself be no longer used as a pretext for any difficulty of communication between the Government and the people.(55)

When the bill again came up for discussion on 13 February 1974 Bray further explained that the bill did not mention any spoken version of Chinese or particular dialect because the bill's main purpose was to outline the broad terms of equality of status. The dialect used would be governed by the practicability of the situation. He confirmed that parties and witnesses in court would be permitted to speak in any Chinese or English dialect they chose. In connection with the bill, a Legislative Councillor, The Honorable Hilton Cheong-leen, urged that attention be paid to a long-term programme for improving the standard of Chinese among Hong Kong's population. As part of this programme he saw the provision of nine years of general education for Chinese students in the medium of Chinese, with English as an effective second language.

The bill as amended and passed read in part as follows:

> [1] The English and Chinese languages are declared to be the official languages of Hong Kong for the purposes of communication between the Government or any public officer and members of the public.
>
> [2] The official languages possess equal status and, subject to the provision of this Ordinance, enjoy equality of use for the purposes set out in subsection [1].(56)

However, the Ordinance goes on to say that 'every ordinance shall be enacted and published in the English language' and that proceedings in specified minor courts may be conducted in either English or Chinese as the court thinks fit. Proceedings in the Full Court, the Supreme Court, and the District Courts will, however, be conducted in English. Although these seem to be significant exceptions to the equality of the language,

and although we have already noted Dr. Denny Huang's reservations on the matter, Mr. Hilton Cheong-leen was more optimistic:

> In the years to come it will be even more fully realized than it is today that the Official Languages Bill of 1974 will have done much to reaffirm the cultural dignity and pride of the Chinese residents of Hong Kong.(57)

Only the years to come can judge the truth or untruth of such predictions or reveal what this change of status may mean for educational language policy in Hong Kong.

In Retrospect and Prospect

Whatever the future may reveal itself to be, however, one thing is certain: the history of the English language situation in Hong Kong illustrates that considerable distance has been covered since Macaulay described Oriental languages as being 'fruitful of monstrous superstition.' Considerable progress has been made since the time when Bonham refused to award promotion to anyone who learned Chinese. English and Chinese are now equal in many areas of use and communication, both in Government and education, and are both recognised as having equal status. Having sketched this progress over the years, and having seen what factors have contributed to the present language situation, we are perhaps now in a better position to contemplate and possibly to mould the future. We should now be better able to assess the place of English in Hong Kong education and to regard the student as the primary focus of the educational system. The language needs, abilities, and attitudes of that student should command the attention of Hong Kong educators and should largely define what the future bilingual educational policy in Hong Kong will be.

Notes

1 Pope-Hennessy, J. 1969. Half-Crown Colony: A Hong Kong Notebook. Jonathan Cape, London, p.49.

2 Triennial Survey 1964-1967. 1968. Hong Kong Government Press, Hong Kong, p.1.

3 Lun Ngai-ha, A. 1967. Educational Policy and the Public Response in Hong Kong, 1842-1913. (Master's dissertation, Faculty of Arts, University of Hong Kong, p.307.)

4 Endacott, G.B. 1964. Government and People in Hong Kong, 1941-1962: A Constitutional History. Hong Kong University Press, Hong Kong, p.78.

5 Ibid., p.137.

6 Ibid.

7 Ibid., p.138.

8 Ibid., pp.139-140.

9 Anon. 1877. Dates and Events Connected with the History of Education in Hong Kong, 1877, p.13.

10 Hong Kong Government Gazette. 1866. pp.137-140, cited in Lun, op.cit., p.110.

11 Endacott. 1964. p.231.

12 Lun. 1967. p.201.

13 Hong Kong Telegraph, 17 February 1885, as cited in Lun, op.cit., p.220.

14 Endacott. 1964. p.182.

15 Lun. 1967. pp.200-201.

16 Hong Kong Government Gazette, 9 March 1878. 24 90.

17 Endacott, G.B. A History of Hong Kong. Oxford University Press, London, pp.234-235.

18 Hong Kong Blue Book for the Year 1879. April 1880. 28.

19 Ibid.

20 Ibid.

21 Lun. 1967. p.212.

22 Endacott. 1964. p.241.

23 Ibid., p.243.

24 'Report of the Committee on Education.' Sessional Papers, 1902. Hong Kong, p.36.

25 Ibid., p.31.

26 Board of Education, Great Britain. 1905. Education Systems of the Chief Crown Colonies and Possessions of the British Empire, Including Reports on the Training of Native Races. Wyman and Sons, London, p.82.

27 Sessional Papers. 1903. Hong Kong, p.9.

28 Ibid., p.378.

29 Sessional Papers. 1903. Hong Kong, p.486.

30 Sessional Papers. 1902. Hong Kong, p.39.

31 Endacott. 1958. p.282.

32 Lugard, Sir F.J.D. 1912. Hong Kong University: Present Position, Constitution, Objects and Prospects. Noronha, Hong Kong, p.3.

33 Hongkong Daily Press. 12 March 1912.

34 Lun. 1967. p.309.

35 Burney, E. 1935. Report on Education in Hong Kong. Hong Kong Government Press, Hong Kong, p.24.

36 Ibid., p.11.

37 Ibid., p.25.

38 Cheng, T.C. 1949. The Education of Overseas Chinese: A Comparative Study of Hong Kong, Singapore, and the East Indies. (Master's dissertation, University of London. p.312.)

39 Education Department, Hong Kong. n.d. Annual Report 1946-47. Hong Kong Government Press, Hong Kong, p.30.

40 Ibid., p.32.

41 Triennial Survey 1964-1967. 1968. p.6.

42 Ibid.

43 Committee on Higher Education in Hong Kong. 1953. 'Higher Education In Hong Kong,' The Colonial Review 8 17.

44 Ibid.

45 Jennings, J. and Logan, D.W. 1953. A Report on the University of Hong Kong. Cathay Press, Hong Kong, p.12.

46 Ibid., p.5.

47 Fulton, J.S. 1959. The Development of Post-secondary Colleges in Hong Kong. Acting Government Printer, Hong Kong, p.1.

48 Education Policy. 1965. Hong Kong Government Press, Hong Kong, p.83.

49 Ibid., Appendix 2, p.83.

50 Letter from Dr, Denny M.H. Huang, Chairman, The All Hong Kong Working Party to Promote Chinese as an Official Language, to R. Hon. Edward Heath, Prime Minister, 1 Downing Street, London, April 20, 1971.

51 Chinese Language Committee, The Second Report of the Chinese Language Committee: Oral and Written Communication between Government and the Public. 1971. Hong Kong Government Press, Hong Kong, p.2.

52 Ibid., p.7.

53 Ibid.

54 Board of Education, Hong Kong. 1973. Report of the Board of Education on the Proposed Expansion of Secondary School Education in Hong Kong Over the Next Decade. Hong Kong, p.6.

55 Official Languages Ordinance (Legislative Council Minutes, 1974). 1974. Hong Kong, p.414.

56 Ibid.

57 Ibid., p.455.

A REPORT ON AN ASSESSMENT OF THE STANDARD OF ENGLISH OF PUPILS IN HONG KONG

Yu Fong Ying

1. *Preliminaries*

1.1 This report attempts to answer two questions:

1. What are the standards of English of pupils and students in Hong Kong?

2. Have their standards of English dropped in recent years?

1.2 The report takes the form of a survey of the available evidence indicative of standards of English of our pupils. There has been no published result of any standardised tests that have been administered to the pupils for the specific purpose of assessing their standards, nor has there been any study conducted on this topic, as far as I know.

1.3 I have made use of documents and information which are *readily* available, mainly those that are supplied to me by the Examinations Section and through the Advisory Inspectorate, in addition to those that I have come across. I have neither called for any additional analyses nor pursued with tenacity clues which might have yielded somewhat clearer results. The report was completed in three months, outside a regular work schedule. Its limitations will be all too obvious.

1.4 The starting-point of the investigation was the information by the Chief Inspector of Schools that the G.C.E. Board of the University of London had expressed concern that the standard of English in Hong Kong schools seemed to have dropped, and that now it would take a Grade B in the English Paper of the local Certificate of Education Examination (Syllabus B) to reach a standard equivalent to a pass at 'O' level in the English Paper of the G.C.E.

1.5 It seemed to be the agreed opinion of certain colleagues that the standard of English of our pupils is in various ways unsatisfactory.

1.6 A perspective to be borne in mind is the increase in the proportion of the population able to speak English. According to the 1971 Census, the percentage of the population claiming to be able to speak English has increased considerably since 1961:(1)

	Male	Female
1961	16%	4%
1971	30%	20%

It can be seen that:

1. There has been a considerable increase over the past 10 years, (females five-fold, males two-fold) in the sector of the population who claim to be able to speak English.

2. A large proportion of the population in 1971 (70% male, 80% female of the population) claims not to have the ability to speak English.

2. *'Standard of English'*

2.1 It is obviously crucial to an assessment to know what is being assessed. So the question has to be asked as to what constitutes the subject of English and knowledge of it. The view is taken here that to be good in English is to be able to do things with English and to engage in acts of communication appropriate to the context in English.(2) Some examples of such acts of communication through English in Hong Kong are the reading and writing of commercial letters, understanding and applying the knowledge contained in a technical manual, answering questions from English-speaking tourists, the writing of letters of enquiry to overseas educational institutes, the reading of newspapers for information and points of view, talking about aspects of life in Hong Kong with English-speaking people, and so on. Ability in English, then, does not consist only or even largely of knowledge of isolated points of grammar, usage, vocabulary and structures.

2.2 Several approaches can be taken to determine the standard of English of a group of pupils on a large scale:

1. to describe their achievement in relation to the content of an English test,

2. to compare a particular group of pupils with another group in relation to the same test,

3. to compare different groups over different periods of time against the same test.

Only information from the first two approaches is available; the third approach has not been tried in Hong Kong.

2.3 Basically the standard of English of a group of pupils is measured against the demands placed on them to use English in various situations. Such demands fall into two categories: those formally set up, such as a public examination, and those belonging to real-life situations, largely connected with employment. The two kinds of comparison, the one against a public examination and the other against specific demands of real life, parallel the distinction between 'norm-referenced tests' and 'criterion-referenced tests' in educational testing.

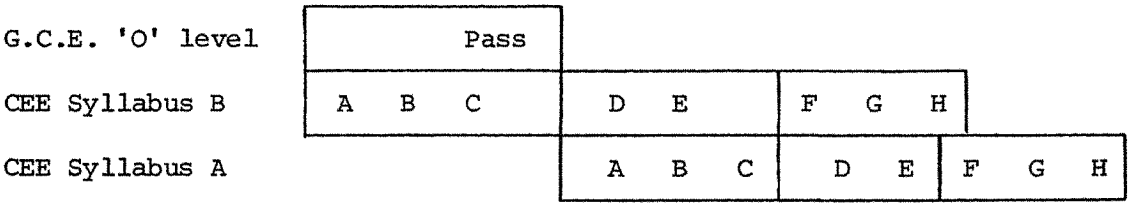
2.4 The evidence considered also belongs to one of these two types: evidence from tests in public examinations (*eg* the SSEE, the English Attainment Test) and evidence from specific tests designed to measure how well someone meets certain criteria (*eg* Lyon's listening test given to science students in the University of Hong Kong, and Webb's study of the use of English to meet employment demands).

2.5 Public examinations are a valid measure of the true standard of English in so far as their contents are consonant with abilities central to the use of English as described in 2.1. Otherwise they would not be a good measure of standard of English.

2.6 The standard of English considered as constituting a 'pass' in the CEE is defined as grade E (out of a range of 8 grades from A to H) of whichever syllabus. 'An average candidate who has satisfactorily completed the approved course (normally 5 years) in a subject in a secondary school, might be expected to achieve grade E[5] or above.'(3) The proportion of such 'average' students is 60% or over in Syllabus B, and about 55% in Syllabus A.

2.7 However, the actual minimum societal demand is really a Grade E of Syllabus B (for Anglo-Chinese Schools). This requirement must be met for someone to enter into many types of employment and technical training. Any job involving English in the Civil Service requires 'knowledge of English at a standard equivalent to Grade E in English language (Syllabus B) in the Hong Kong Certificate of Education.'(4) That grade is also the entrance requirement of courses in the Technical Institutes at the technician level (See Appendix),(5) and the minimum qualification for entering the Matriculation Examination of the University of Hong Kong.

2.8 The standard of English of pupils at the school-leaving level (CEE) is academically aligned to an external examination, the G.C.E. A credit in the English paper of Syllabus B (*ie* Grade C or above) is recognised by the G.C.E. Board as being equivalent to a pass in their 'O' level English language paper.(6) With Syllabus A, a credit in the English paper (Grade C or above) is recognised locally as being equivalent to a pass in Syllabus B (Grade E). Pupils of Syllabus A are reckoned by the Examinations Section to be '2 years behind' pupils of Syllabus B at the same level.(7) The English paper of Syllabus A is not recognised by the G.C.E. Board. The system of alignment of pupils at those grades can be diagrammed as follows:



2.9 The alignment of CEE with GCE raises a number of questions. First, although the GCE has come to serve the function of a proficiency test, it is primarily an achievement test for L1 speakers. In that respect, it is different from TOEFL which is, as the name signifies, a proficiency test of English as a foreign language. A related point is that the pass rate of GCE for British candidates is not a hundred percent,(8) so one is comparing the performance of the British students who pass the GCE with that of students in Hong Kong whose learning and required uses of English are quite different. A third point is that the level of acceptability of English implied in such an alignment represents a target of the highest level of acceptability.(9)

2.10 It will be conceded that such an alignment will by itself not 'keep up the standard.' What it can do is to monitor and indicate standard and give some international standing to the CEE. It is useful for the purpose of further study in the U.K., but this does not really concern the majority of pupils. The U.S. has instituted a different check in the form of the TOEFL. The most important thing, as far as validation of the standard of the CEE English paper is concerned, is to see how well it meets the needs of the use of English in Hong Kong.

3. *The Primary Level*

3.1 The SSEE is a selection examination with the purpose of allocating government-subsidised places to successful candidates. It is therefore primarily a screening device. The amount of screening it has to do is indicated below:(10)

	No. of candidates	Places allocated	% with places
1974	94,508	46,762	49%
1975	98,088	48,554	49.5%
1976	99,262	63,266	63.7%

3.2 Since the questions differ from year to year, there is strictly speaking no way of telling whether the standards have changed. However, it is possible to derive from the raw marks a comparison such as the following:(10)

	Total No of Candidates	% scoring low third marks	% scoring middle third marks	% scoring top third marks
1973	87,250	34.1	41.6	25.3
1974	93,408	38.6	40	21.4
1975	96,030	35.4	43.3	21.3
1976	97,830	30.5	43.6	25.9

The English tests have become easier, relative to the candidates who took them, as can be seen from the item analysis:(10) (11)

	% of item		
Facility value	1974 n=64	1975 n=75	1976 n=74
10-19	3	1	0
20-29	8	15	12
30-39	33	17	8
40-49	22	30	24
50-59	16	21	24
60-69	13	9	23
70-79	6	5	5
80-89	0	1	3
90-99	0	0	0

3.3 There is high variability in the 1976 results of the SSEE among different types of schools,(12) with a wide range of mean marks among all types of schools (from 76 to 130). Government schools show the most uneven achievement among their pupils (as indicated by a high S.D.). Private schools show much more uniformity of achievement among their pupils. In terms of achievement in English, the order of merit of the different types of schools is : [1] private, [2] subsidised,

and [3] government. This is confirmed by the percentage of pupils being allocated places in secondary schools in 1976:(13)

Government	Aided	Private
50%	65%	73%

3.4 The reception of ETV in schools points to a quite serious deficiency in the pupils' hold on English. The ETV unit comments: 'The Remake Series (of the ETV English programme for classes from Primary 3 to Form 1) are easier to follow and pupils have no difficulty in coping with the drills, which exemplify the teaching points. Ironically, however, the majority of pupils are still unable to understand reasonably well all the speeches and narrations in the performances, for the simple reason that these are done in English. Their poor listening ability can be attributed to the fact that they are seldom exposed to spoken English apart from during English lessons. And it is not uncommon to find English teachers often resorting to Cantonese... We believe that what we have said about primary pupils concerning their listening ability is also true of secondary pupils.'(14)

3.5 Since 1967 the Research, Testing and Guidance Centre of the Education Department has designed and conducted English attainment tests for primary pupils. So far, tests have been administered to classes from primary 3 to 6 in all years since 1971. However, the results are as yet not available.

3.6 As tests, the SSEE and the English Attainment Test, based on the Primary School English Syllabus, sample a rather narrow range of discrete-point language skills. As such they are not a sufficient indicator of the range of abilities that make up 'knowledge of English'. For example, the 1970 English Attainment Test consists mainly of items on synonyms, punctuation marks, synonymous sentences, prepositions and vocabulary (about 40 items out of 60).(15) What these measure is not central to the ability to use English. And they are not free from errors.(16) The method adopted for measuring ability to communicate in English seems to be first to think of a grammatical point to be tested and then to concoct a sentence or a few sentences round it so that pupils either get the right answer or fail to do so.

4. *The Secondary Level*

4.1 The acceptable standard of English in Hong Kong is set at 'E' of the English syllabus. The percentage of pupils not reaching that standard is as follows:(17)

	Syllabus A		Syllabus B	
	% not reaching C (D or below)	% not reaching E (F or below)	% not reaching C (D or below)	% not reaching E (F or below)
1973	88.42	45.72	87.94	39.43
1974	87.94	42.88	88.22	35.20
1975	88.79	44.78	88.79	38.79
1976	89.60	48.23	89.60	39.89

In 1976, the number of pupils who 'fail' the English paper in Syllabus B and Syllabus A totals respectively 23,831 and 3,839 pupils.

It may be argued whether the cut-off points are not too stringent, given the adverse conditions of learning which exist in many schools. Certainly the pupils of Chinese-medium schools are in a terrible condition, and only about 12% of them stand a chance in the employment and educational rat-race.

There is again very wide variability in the performance of pupils from different types of schools: (18)

HKCEE 1976

Anglo-Chinese (Syllabus B)

			Grade Analysis		
	No. sat	% of total sat	A - C	D - E	F - H
All schools	26,295	100	8.02	60.11	39.89
Govt. Sec.	2,544	9.7	18.36	84.08	15.92
Aided Sec.	9,822	37.4	20.48	89.66	10.34
Private					
Non-profit making	3,368	12.8	5.4	63.98	36.02
Profit making	10,561	40.2	1.28	38.31	61.69

Chinese (Syllabus A)

			Grade Analysis		
	No. sat	% of total sat	A - C	D - E	F - H
All schools	3,397	100	10.4	51.77	48.23
Govt. Sec.	375	11	46.13	92.27	7.75
Aided Sec.	1,232	36.3	19.64	77.68	22.32
Private					
Non-profit making	1,032	30.4	15.02	70.74	29.26
Profit making	758	22	1.85	19.26	80.74

Total number of candidates	A - C and Chinese	29,692
	A - C	88.6%
	Chinese	11.4%

4.4 How good is the CEE English Paper as an instrument measuring ability in using English? From a logical point of view, one can claim that its content validity(19) can at least be improved. For example:

1. The Examination Syllabus (B) does not reflect the emphasis put on speaking and listening in the *Suggested Syllabus*. Only 10% of the marks in the CEE English papers is awarded to the Oral section; there is only incidental testing of listening ability.

2. With Syllabus A the requirement of writing about 150 words on a topic and 75 words in the form of a letter makes it look like an exercise done for its own sake. It is a taxing job indeed to write in 75 words to the Consumer Council, making a complaint, 'giving details and suggesting what should be done.'(20)

3. A study by Webb throws doubt on how well the grades obtained in the CEE English paper indicate command of the English language for specific needs. (More of this in Section 6, below.)

4. If it is accepted that the present English Syllabuses need to be re-organised more along communicative/functional lines, then it follows that the examination syllabuses too need to be modified to fall in line with that concept.

4.5 The Chief Examiners' Reports(21) are, by their very nature, critical and frank assessments. They make distressing reading. When the same serious faults occur over a number of years, they must point to some quite fundamental flaws in the learning of English of our pupils, *eg*:

- 'candidates were unable to express themselves in correct and idiomatic English' (Paper III, Syllabus A, 1974)
- 'the essays were very stereotyped and showed a marked lack of expression and original thinking' (Paper I, Syllabus B, 1974)
- 'only a small minority showed a real sense of condifence in their spoken English! Quite a number of candidates were almost unintelligible'
- 'it is clear that many did not appreciate the meaning of the word *conversation*' (1974, Syllabus B, Oral)
- 'the general weakness ... was their inability to use the tone and wording appropriate to a letter of this kind' (Paper I, Syllabus A, 1975)
- 'common errors ... still appeared in the majority of scripts' (Paper I, Syllabus A, 1975)
- 'There was frequent misuse of *he* and *she*, *his* and *her*' (Oral, Syllabus B, 1975)
- 'pupils must be encouraged to *speak up* and *communicate*' (Oral, Syllabus B, 1975)
- 'a great majority of candidates showed little competence in the use of punctuation and structures' (Paper II, Syllabus B, 1976)
- 'most candidates could not express what they understood in simple English' (Paper III, Syllabus A, 1976)
- 'unfamiliar with common expressions used in everyday life situations'

There are also remarks about falling or unimproved standards in some of the papers over the past three years (Paper IA, 1976; Paper IB, 1975). Only in one paper (Paper I, Syllabus A, 1974) is there a mention of a slight improvement, in all the three years 1974-76. Such critical remarks may have a common source in that English may have been taught as an object to be learned and memorised and not as a means of doing things with people for a purpose.

5. *External Examinations*

5.1 The figures for passing the GCE 'O' level English examinations is as below:(22)

	No. sat	% passed	Rank among 14 territories(23)
1972	11,247	22.1	-
1973	11,618	18.86	-
1974	12,335	21.53	9
1975	12,829	21.26	3
1976	10,792	20.52	7

Dr. Etherton comments: 'The English Language results were obtained in competition with some areas in which English is virtually the mother-tongue. However, the percentage of successful candidates in this subject has declined steadily since 1974. A comparison of the 1975 and 1976 figures shows that, whereas the standard rose in 11 of the 14 places, it fell in 3, one of which was Hong Kong.'

It needs to be pointed out that the candidates who took the examination may or may not be representative of the pupil population in Hong Kong. In fact, it is often those who do not reach Grade C on the CEE who enter for the GCE at a later time to make up for it. In any case the candidates are different. However, the overall rank in relation to candidates in other territories has come down.

5.2 The figures for TOEFL results is like this:(24) (25)

Year	Score
1966 - 1971	525
'the past few years'	496 to 508

The figure of 525 is the average score of 9,914 candidates over 5 years. It is virtually the same as the mean score of Singapore and stood as the third highest in Asia, after Sri Lanka and the Philippines, among a total of thirty territories and countries. It was considerably above the world average of 490. The average score for the 'past few years' would seem to indicate a drop in standard; but again it may not. It is certainly impossible to generalise from that to all pupils in Hong Kong, since the sample is almost certainly not representative. The score is probably higher than the hypothetical average score of pupils in Hong Kong. However, this information seems to coincide with what Dr. Etherton pointed out about the GCE results, and together they probably indicate a noticeable decline.

6. *Adequacy of English for Meeting Employment Demands*

6.1 A.E. Webb conducted a study to find out whether the written English ability of Hong Kong school leavers meet the demands for comprehension and production of written English in commercial employment.(26) He sampled 126 individuals applying for employment in 1972 and compared their written English with the formal and actual English language requirements or commercial firms they applied to. Comparison was also made between the HKCE English language examinations and company written English language tests and between the English language content of commercial documents and school textbooks. His main findings are:

'1. ability in written and oral English was a major factor in failure to gain employment and HKCE English language grade was of no consequence,

2. company interviews and tests are conducted in English,

3. the actual duties of young employees generally involve the understanding and production of written English,

4. the sample generally were not able to write an application letter in English without making a considerable number of mistakes,

5. the variation in usage in English textbooks and commercial documents together with the wider use of abbreviations, probably constitute the aspects of commercial English for which school leavers are least well equipped,

6. the results of this limited investigation validate the stated hypothesis (that the written English ability of Hong Kong school leavers does not meet the demands for comprehension and production of written English in commercial employment).'

6.2 His recommendations are:

'1. more practical research is needed in Hong Kong to determine and provide ... materials and methods relevant to the English language needs of secondary school leavers taking employment.

2. Secondary school students would benefit from an informed and rational reduction in the very large number of English language books presently in use.

3. There is a need for more career guidance and career prospects in schools ...

4. Tests administered by companies should be designed to assess the actual abilities required of young employees.

5. Educational television could well play a leading role in providing both English language and career-oriented programming.'

6.3 Webb's is one of the very few studies setting out to investigate real-life requirements. Some of its limitations are, firstly, that only 4 big commercial firms were studied and, secondly, that the proportion of school-leaving pupils going into commerce each year is estimated to be only about 20%.(27) The applicability of the study is therefore not very wide, but it is revealing at a point in the pupils' career where English really matters.

7. *The Universities*

7.1 The pass rate of the Matriculation Examination of the Chinese University of Hong Kong reveals the inadequacy of the English standard of Chinese-medium school pupils, English being a compulsory subject in the Matriculation examination:(28)

Year	% Pass Chinese-medium	% Pass English-medium
1966	90	100
1967	70	98
1968	54	99
1969	60	99
1970	58	99
1971	55	98
1972	47	94
1973	42	91

The number of English-medium and Chinese-medium pupils sitting the examination is as below:

Year	Chinese-medium	English-medium
1966	1,015	706
1967	1,517	743
1968	1,837	931
1969	2,014	1,847
1970	2,386	2,656
1971	2,731	3,733
1972	2,642	4,094
1973	2,565	4,865

Dr. Etherton has this to say about the pass rates: 'Normally,(i) English language is a compulsory paper in the Matriculation examination, (ii) the weakest 25% fail it, (iii) candidates from EM (English-medium) schools are better at English than those from CM (Chinese-medium) schools. As the number of candidates from EM schools increases, candidates from CM schools are pushed towards the bottom of the pass list.'

At a later point in the same article Dr. Etherton remarks: 'At Chung Chi College, the exemption rate (from doing General English) has risen from 17% to 40% in the past few years, and this is an indication of a rising standard on entry into the University.'

7.2 A questionnaire completed by 170 first-year students of Chung Chi College in December 1972 (46% from Anglo-Chinese schools and 54% from Chinese-medium schools) shows the degree of confidence students have about their own ability in the 4 skills of English:(29)

	Very good/Good
Speaking	4%
Writing	6%
Listening	10%
Reading	13%

7.3 It is interesting to note that the University of Hong Kong has evolved a rather different policy regarding the requirement of English. Since 1970 it has required only that the students have 'taken the Use of English Examination immediately preceding entry to the University.'(30) Before that time English was a compulsory examinable subject, as it is in the Chinese University now. For the Faculty of Arts of the University of Hong Kong : 'from 1971, Grade D in the Use of English will be expected but special consideration will be given to candidates with a lower grade in the Use of English Examination if the grades achieved in the Advanced Level subjects are exceptionally high.'(31) For students of other Faculties, all that is required is sitting the Use of English Examination before entry. One development of this is that the Language Centre of Hong Kong University is increasingly being called upon to provided English courses for the very weak students of other faculties — a more expensive arrangement but one that can cater for the immediate needs of English as a medium of learning and communication in university studies. Only the Arts Faculty now imposes a requirement for their students to achieve 'a standard acceptable to the department(s) in which he is enrolled. No student shall be permitted to enter the third year of the curriculum until he has reached a standard acceptable to his head of department.'(32) The policy might be described as To Each According To His Needs.

7.4 Listening and comprehension tests carried out by Professor John Lyon and others at the University of Hong Kong(33) provide confirmation of the weakness of students in understanding English. A test passage of straightforward scientific English was read twice (the second time in sections) to 143 first and second year science students and the results compared with those of native speaker pupils. The findings are:

1. About one third of the intake showed as good listening comprehension as native English speakers. They probably have a fully adequate basis for benefitting from oral instruction in English.

2. On the other hand, at least one third obtained scores (<15/20) which show serious difficulties in listening comprehension: they probably miss or misunderstand about one third or more of what is given to them in purely oral form.

3. Reading comprehension (tested with the same passage) was markedly better and is probably not a major problem for our students.

4. The group who had failed the Use of English Examination obtained exactly the same average score (with many in the 18-20 range) as those who had passed it. There was no correlation between Use of English grade and listening comprehension score.

5. No evidence was found of any improvement in second year students; if anything the reverse.

6. Female students were significantly better than men (average scores 17.4 and 15.8 respectively).

7.5 Professor R. Lord of the Language Centre, University of Hong Kong, judged that: 'For the majority of students entering the University of Hong Kong English is not a viable means of communication at all. About a fifth of them cannot make themselves understood in English, and their comprehension of spoken English is poor in the extreme. Few students can write English which is not bizarre; unless, that is, they lift it bodily out of source books (a very common practice among students).'(34)

Professor Lord's view is based on the diagnostic test, the 'Language Analysis Sessions', conducted every year for students admitted to the Faculty of Arts. The percentages of students in that Faculty taking remedial English courses for the last two years are given below and they indicate the degree of lack of proficiency in the various aspects of language skills:(35)

	Remedial English (1 or more courses)	Speaking Skills	Writing Skills	Reading Skills	Listening Skills
1975	74.5%	48.9%	56.8%	68.5%	54.4%
1976	79.9%	60.4%	67.8%	53%	46%

	Vocabulary	Speech Production	Integrated Language Skills
1975	61.5%	2%	-
1976	50%	3%	12.6%

The tests used in the 2 years overlap only to some extent, so the percentages cannot be used to show variation in standard. They indicate rather the gap between the students' English and the linguistic criteria thought to be necessary for the pursuit of academic studies.

8. *Conclusions*

1. There is a lack of evidence of the sort from which firm and clear conclusions can be drawn about our pupils' standard of English and change of standard.

2. Two-fifths of pupils from English-medium schools and four-fifths from Chinese-medium schools do not attain a standard of English that is acceptable to society, either educationally or for employment.

3. In particular, the vast majority of pupils from Chinese-medium schools attain such a low standard of English that both their job prospects and educational opportunities are severely restricted.

4. There are some fundamental flaws in the pupils' ability of English; these relate particularly to the speaking and listening aspects of using English.

5. The kind of English learned by our pupils may not serve their needs for employment and higher educational studies.

6. The public examination and attainment tests, reflecting somewhat inadequate syllabuses, may not be very good instruments for measuring ability in English.

7. There is a higher degree of variability in English attainment among different types of schools than one would like to accept.

8. Although the population of Hong Kong is now more able to speak English, the standard of English of the pupils appears to have dropped to a noticeable but not great extent.

9. *Some Suggestions*

1. Knowing the actual standard of English required in the various fields of employment and education in Hong Kong will help to set relevant and realistic goals in English teaching. So the suggestion that 'a more detailed survey into the needs of English in specific areas (such as Banking)'(36) is to be welcomed as a way of determining actual skills of English to be achieved, and of defining the content of the English Syllabus.

2. The standard of English of pupils, especially those in junior secondary, should be monitored periodically through a validated instrument.

3. Efforts should be made to help the large minority of pupils who do not attain an 'average' standard, in particular, those in Chinese-medium schools.

Acknowledgement

I wish to thank the following persons for the help given in compiling this survey: Mr. H.H. Woo, Mr. K.C. Ng, Miss Cecilia Wong, Miss Cindy Cheung, all of the Examinations Section, and, most of all, Mrs. Carmen Low.

Notes and References

1 The figures apply only to persons aged 10 and over. The percentages are taken from a diagram. See the 1971 Hong Kong Census. 'Ability to Speak English' was judged by whether the interviewee was able to answer two questions in English, viz. 'Do you understand English?' and 'Where did you learn it?'

2 The view is a reflection of the ideas of Austin (1962), Ervin-Tripp (1964), Widdowson (1972), and others.

3 Hong Kong Certificate of Education Examinations Regulation and Syllabuses, 1977.

4 From advertisements for Civil Service vacancies.

5 Technical education is offered at three levels: craftsmen (post-Form 3), technician (post-Form 5) and technologist (post-matriculation or at university).

6 Examinations Section, Examination Processing in Hong Kong, 1971, p.3.

7 Personal communication.

8 A. Flew, in Sociology, Equality and Education, 1975, Macmillan, quoted the figure of 50 - 60 % as passes in the GCE, as overall results not results of English.

9 Peter Strevens postulates 4 levels of acceptability: local acceptability, regional acceptability, international acceptability, and native acceptability.

10 SSEE Annual Report, 1974, 1975 and 1976.

11 Facility value indicates how easy an item is to the candidates as a whole. A high value means an easy item.

12 Comparison table of SSEE results, supplied by the Examinations Section, Education Department.

13 Secondary School Entrance Examination, 1976. Analysis of participating schools and candidates by area, supplied by the Examinations Section.

14 Written reply of Educational Television Centre, Education Department.

15 Hong Kong Attainment Tests: English, Primary 6, H.A.T. No. 6E1, Research, Testing and Guidance Centre, 1976.

16 *eg* In the 1973 English Test is this item (No. 28, p.4):

I spent one hour in the park.
I spent two _____ to do my homework.

17 Hong Kong Certificate of Education Examination, Analysis of Overall Results (Major Subjects), 1974-76, supplied by the Examinations Section, Education Department.

18 Based on Comparative Table for 1976 HKCEE Results and Analysis of Overall Results (Major Subjects), 1974-76, supplied by the Examinations Section, Education Department.

19 On content validity, see for example Nuttal and Willmott; British Examinations, NFER, 1972, p.160, where it is defined as 'the extent to which an examination comprehensively samples all the content and objectives of the course.'

20 1976 English Paper (Syllabus A) Paper I.

21 HKCE Board, Chief Examiners' Report, 1974-76.

22 University of London, General Certificate of Education Examination. Analysis of Results, 1972-76, supplied by the Examinations Section, Education Department.

23 Letter to the South China Morning Post, May 9, 1977, by Dr. A.R.B. Etherton.

24 Letter of Mervin Haworth, Cultural Affairs Officer of the American Consulate, to Carmen Low, April 25, 1977.

25 TOEFL score 400-549 means 'No restriction on academic course load (in Colleges). Some remedial English desirable.' See Edinburgh Course in Applied Linguistics, Vol.4, p.28.

26 A.E. Webb. Relevance of Written English Ability of Hong Kong School Leavers to Employment Demands. (Unpublished M.Phil. dissertation, University of Hong Kong, 1974.) As I have not been able to trace Mr. Webb, the dissertation is quoted without his permission.

27 Webb quoted this from a career guidance officer of the Education Department.

28 A.R.B. Etherton 'English and the Chinese University'. In The First Ten Years of the Chinese University of Hong Kong. Students Union, Chinese University of Hong Kong.

29 Helen Cheng *et al.* At What Cost?, 1973, p.9.

30 University of Hong Kong, Calendar, 1969-70, p.67.

31 University of Hong Kong, Calendar, 1970-71, p.71.

32 University of Hong Kong, Calendar, 1976-77, p.135.

33 John Lyon, 'Listening Comprehension Test (September/October, 1973). Preliminary Report', 20 October, 1973. Unpublished report to the Faculty of Science, University of Hong Kong.

34 R. Lord. 'English — How serious a problem for students in Hong Kong'. In The English Bulletin, Vol. VI, No. 3, 1974, pp.1-10.

35 The records of the Language Centre, University of Hong Kong.

36 Ken Westcott. 'Actual Need in Employment', March 1977. Paper presented to the Working Party.

Other References

Austin, J.L. 1962. How to Do Things with Words. Oxford University Press.

Bullock, A. *et al.* 1975. A Language for Life. HMSO.

Davies, S. 1968. Language Testing Symposium. Oxford University Press.

Ervin-Tripp, S. 1964. 'An analysis of the interaction of language, topic and listener.' In A.S. Dil (ed.) Language Acquisition and Communicative Choice, 1973, Stanford University Press.

Kvan, E. 1969. 'Problems of bilingual milieu in Hong Kong: Strain of the two-language system.' In T.C. Jarvie and J. Agassi (eds.) Hong Kong: A Society in Transition, pp.327-343.

Widdowson, H. 1972. 'The teaching of English as a communication', English Language Teaching, 27(1).

Appendix : English and Technical Education

TECHNICAL INSTITUTES

Guide to both Present Students & New Applicants — Evening Courses/Programmes, Session 1977/78

工業學院 1977／78 年度夜班課程入學須知

（有關開辦各類課程之工業學院及其地址請閱後頁）

Courses/Programmes Available 所設課程

Department 系	Name of Course/Programme 課程名稱	Course/Programme 課程編號	Offered by 開辦學院	Length of Course/Programme (Years) 修業年期	Medium of Instruction 授課語言	Evenings per week 每星期上課晚數	Fee per Session 每年學費	Entry Qualification 入學資格 (Applicants will be required to attend Entrance/Grading Exams./Interview 申請人須參加入學試或面試)
Commercial Studies 商科	**Commercial Course 商科課程：**							
	Audio-typing	106	1, 2	½	English	2	$60 per Course	Pass in English Language (Syllabus B) in H plus recognized Cert. of typing speed w.p.m. (minimum).
	Book-keeping (L.C.C. Syllabus)	104	1, 2	2	〃	3	$60-$75	Pass in P2. or Form 3 or equivalent for Yea L.C.C. Intermediate Bk. Cert. for Year 2.
	Costing (L.C.C. Syllabus)	103	1, 2	2	〃	3	$60-$75	Form 4 plus knowledge of Book-keeping at elementary level for Year 1. L.C.C. Intermediate Costing Cert. for Year 2
	Ordinary Certificate in Business Studies	115	1	2	〃	3	$75	Technical Institute's Office Studies Cert., or H with Grade E or above in 5 subjects in English (Syllabus B) and Mathematics, or equ
	Typewriting (L.C.C. Syllabus)	116	1	1	〃	2	$60-$75 for ½ Session	Form 5 or equivalent for beginners. Recognized Intermediate typing Cert. for Ad stage.
	Pitman's Shorthand (from Theory to 140 w.p.m. each completed in ½ Session).	117	1, 2	½	〃	2	$60-$100 for ½ Session	H.K.C.E. with Grade E or above in English La (Syllabus B) for Theory Class & Pitman's Q Speed Class. (Speed in w.p.m. must be spe
	Chinese Factory Accounts 工廠會計	105	1, 2	2	中文	2	$60	中三或同等程度。
	Business Machines 商業儀器	107	1, 2	½	〃	1	$60 per Course	由僱主乘處。
	Ordinary/Higher Certificate in Accountancy	134	2	4	English	3	$75	H.K.C.E. with Grade E or above in 5 s including English (Syllabus B), or equivale
Construction 營造	**Craft Course 技工課程：**							
	(*)Carpentry, Joinery & Cabinetmaking 木工（全科）	213	1, 4	3	中文	3	$60-$75	（*）課程及畢業試題目由倫敦市工聯會學院小學畢業。 (P1, P2 學生亦可選修。)
	(*)Plumbing & Pipefitting 潔具及喉管裝配	216	1, 4	3	〃	3	$60-$75	
	Painting, Decorating & Polishing 油漆裝修	217	1, 4	2	〃	3	$60	
	Signwriting 招牌繪製	219	1, 4	1	〃	2	$60	
	Bricklaying 泥水	237	1, 4	1	〃	3	$60	
	Plastering 批盪	238	1, 4	1	〃	3	$60	
	(*)Bricklaying, Plastering & Tiling 泥水批盪	215	1, 4	1	〃	3	$75	修畢 237 及 238 號課程。
	Technician Course/Programme 技術員課程：							
	Furniture Design	212	1	2	Eng./Chi.	3	$75	Pass in G2. or Form 5 or equivalent, & an for design. All candidates must pass an E Exam.
	Contractor's Accounts	211	1	1	English	2	$75	Pass in G2, or Form 5 or equivalent.
	Housing Superintendents	220	1	1	〃	3	$75	
	Certificate in Building Studies	214	1, 4	3	〃	4	$75	Minimum of 4 Grade E passes in H.K.C equivalent, including English (Syllabus B), Physics and ONE other Subject, and interview.
	Certificate in Civil Engineering	280	1, 4	3	〃	4	$75	
Electrical 電機	**Craft Course 技工課程：**							
	Electrical Fitting & Installations 電器裝置及修理	307	1,2,3,4	3	中文	3	$60-$75	P2 合格，或中三或同等程度。
	Radio Servicing 無線電修理	306	1, 3	2	〃	2-3	$60-$75	中三或同等程度，須參加無線電常識入學試
	Television Servicing 電視修理	308	1, 3	2	〃	3	$75-$100	工業學院無線電修理科畢業。
	Colour Television Servicing 彩色電視修理	309	1	1	〃	3	$100	工業學院電視修理科畢業。
	Electrical Appliance Servicing 電器用具維修	365	4	3	〃	3	$60-$75	P2 合格，或中三或同等程度。
	Technician Course/Programme 技術員課程：							
	Certificate in Electrical Engineering	361	1,2,3,4	3	English	4	$75	Same as Course No. 214.
	Certificate in Electrical Installations (Building Services)	351	2, 4	3	〃	4	$75	
	Certificate in Electronic Engineering	305	1,2,3,4	3	〃	4	$75	
	Endorsement Electrical/Electronic Technicians	310	1	2	〃	3	$100	Successfully completed Course No. 301/3 equivalent.
Mechanical 機械 (To be Cont'd on Page 2)	**Craft Course 技工課程：**							
	Air Conditioning & Refrigeration 空氣調節及冷凍	415	1, 3	3	中文	3	$60-$75	P2 合格，或中三或同等程度。 —請閱入學申請表格 E.D. 337 (Revised) 第 5 節說明。
	Mechanical Engineering Craft 機械技工	414	1,2,3,4	3	〃	3	$60-$75	
	Tool & Die Making 工具工模	411	1, 2, 3	3	〃	3	$60-$75	
	Motor Vehicle Mechanics 汽車修理	413	1, 3	3	〃	3	$60-$75	
	Plastic Mould Making 塑膠模型	418	2	3	〃	3	$60-$75	
	Instruments Repairing Craft 量度儀器修理	474	4	3	〃	3	$60-$75	
	Optical Instruments Mechanics 光學儀器技工	475	4	3	〃	3	$60-$75	
	Welding 焊接	417	1	1	中文	3	$75	工業學院機械技工科畢業或同等程度。
	Endorsement Mech. Engineering Craft (Fitting & Machining) 機械技工增修科（打磨與機床）	424	1	1	中文	3	$75	機械技工科畢業或同等程度

（請保留此表以備參閱）

...tment ...系	Name of Course/Programme 課程名稱	Course/Programme 課程編號	Offered by 開辦學院	Length of Course/Programme (Years) 修業年期	Medium of Instruction 授課語言	Evenings per week 每星期上課晚數	Fee per Session 每年學費	Entry Qualification 入學資格 (Applicants will be required to attend Entrance/Grading Exams./Interview) (申請人須參加入學試或面試)
...hanical ...械 ...ont'd ...tom ...e 1)	**Technician Programme 技術員課程：**							
	Certificate in Mechanical Engineering (With Instrumentation & Plant Maintenance Options)	420	1, 4	3	English	4	$75	Minimum of 4 Grade E passes in H.K.C.E. or equivalent, including English (Syllabus B), Maths., Physics and ONE other Subject, or Pass in G1 or equivalent, and by interview.
	Certificate/Higher Certificate in Automobile Engineering	436	3	5	"	3-4	$75-$100	
	Certificate in Production Engineering	461	2, 3	2	"	3-4	$75	
...ine & ...ication ...機及 ...造	**Craft Course 技工課程：**							
	Marine Engineering Craft 輪機技工	476	4	3	中文	3	$60-$75	P2 合格，或中三或同等程度。
	Welding 焊接	477	4	3	"	3	$60-$75	
	Foundering & Patternmaking 鑄造及木模	478	4	3	"	3	$60-$75	
	Yacht & Small Boat Maintenance 小型船艇修理	479	4	1	"	3	$60-$75	由僱主舉薦。
	Technician Programme 技術員課程：							
	Certificate in Shipbuilding and Ship Repair	470	4	3	English	4	$75	Same as Course No. 420, 436 & 461.
...L... ...程	**Preparatory Course:**							
	Pre-General Course 工學預科先修班：分 P1, P2 兩年，修畢可讀工學預科，或技工課程。	501	1	P1 一年	English	3	$50 per Course	Form 1 or equivalent.
				P2 一年	"	3	$50 per Course	Pass in P1, or Form 2 or equivalent.
...neral ...dies ...工學	General Course 工學預科：分 G1, G2 兩年，畢業後可申請選修香港理工學院或工業學院適當夜班課程，如建築，電機，機械，紡織，製衣等等。	502	1	G1 一年	"	4	$60 per Course	Pass in P2, or Form 3 or equivalent.
				G2 一年	"	4	$60 per Course	Pass in G1; or completion of Form 4 or equivalent and by Exam.
							$15 per Subject (Unit)	Direct Entry to Corresponding G2 Units Grade F or G of H.K.C.E. in English (Syllabus B) Maths., Physics and Technical Drawing; and by interview.
...inting ...印	**Craft Course 技工課程：**							
	General Technical Knowledge in Printing 基本印刷學	721	3	1	中文	2	$60	P2 合格，或中三或同等程度；並須任職於印刷或有關機構。
	Proof Reading & Copy Preparation 校對及稿件編排	722	3	1	"	2	$60	
	Technician Course 技術員課程：							
	Graphic Design	723	3	2	English	2	$75	Pass in G2, or Form 5 or equivalent.
	Estimating for Printers	724	3	2	"	2	$75	Form 5 or equivalent plus tech. knowledge of printing processes.
	Cost Accountancy for Printers	725	3	2	"	2	$75	Form 5 or equivalent plus Book-keeping at L.C.C. adv. level.
	Departmental Management (Printing)	726	3	2	"	2	$75	Form 5 or equivalent plus relevant employment in the printing industry.
...extile ...織	**Craft Course 技工課程：**							
	Yarn Manufacture Mechanics 紡紗技工	841	2	3	中文	3	$60-$75	P2 合格，或中三或同等程度。
	Woven Fabric Manufacture Mechanics 梭織技工	842	2	3	"	3	$60-$75	
	Textile Mechanics 紡織機械技工	843	2	3	"	3	$60-$75	
	Knitwear Manufacture Craftsmen 針織衣物製造技工	891	3	3	"	3	$60-$75	
	Technician Programme 技術員課程：							
	Certificate in Textile Manufacture	831	2	2	English	3-4	$75	H.K.C.E. with Grade E or above in 4 subjects including English and one science subject; or equivalent.
	Certificate in Textile Colouration	832	2	2	"	3-4	$75	
	Certificate for Knitting Supervisors	881	3	3	"	3-4	$75	Completion of Form 5 or equivalent.
...othing ...衣	**Craft Course 技工課程：**							
	Retail Bespoke Tailoring Craftsmen (Ladies/Gentlemen) 服裝成製（女裝／男裝）	941	2, 3	3	中文	3	$60-$75	P2 合格，或中三或同等程度；並須從製衣工業從業員。
	Technician Programme 技術員課程：							
	Certificate in Clothing Manufacture	931	2, 3	2	English	3	$75	H.K.C.E. with Grade E or above in 4 subject including English; or equivalent.

ECHNICAL INSTITUTES OFFERING COURSES ARE AS FOLLOWS:— * 開辦各類課程之工業學院及其地址：—

...號碼	Name of Technical Institutes 工業學院名稱	Address 地址
1	MORRISON HILL TECHNICAL INSTITUTE 摩理臣山工業學院	6, Oi Kwan Road, Wan Chai, Hong Kong. 香港灣仔雲間道6號
2	KWAI CHUNG TECHNICAL INSTITUTE 葵涌工業學院	Hing Shing Road, Kwai Chung, Kowloon. 九龍葵涌興盛道
3	KWUN TONG TECHNICAL INSTITUTE 觀塘工業學院	25, Hiu Ming Street, Kwun Tong, Kowloon. 九龍觀塘曉明街25號
4	HAKING WONG TECHNICAL INSTITUTE 黃克競工業學院	Lai Chi Kok Road, Cheung Sha Wan, Kowloon. 九龍長沙灣荔枝角道

Please see Reverse Side of Application Form, E.D. 337 (Revised), for Instruction to Applicants 請參閱申請表後頁說明

A SURVEY OF STUDENT ON-COURSE LANGUAGE REQUIREMENTS FOR DIPLOMA AND ORDINARY CERTIFICATE COURSES CONDUCTED BY THE HONG KONG POLYTECHNIC AND THE TECHNICAL INSTITUTES

David Foulds

Introduction

The great majority of technician students in Hong Kong, together with a very large proportion of their lecturers, are Cantonese-speaking Chinese, and questions regarding the relative weighting given to the Chinese and English languages both as teaching/learning media and as channels of communication of scientific, technical, and commercial information are to be taken very seriously indeed. There is undoubtedly a growing respect for the Chinese language which reflects the emergence over the past few years of the Peoples' Republic of China as a major world power and as the heir to an age-old and highly sophisticated culture; at the same time there is a compulsive need for more and more technical information, which is increasingly being published and taught in English.

This urgent need for English, existing alongside a very strong and natural desire to have young Chinese men and women educated through the medium of Chinese — either in the form of the local vernacular or the national language — has led to a complex and quite sensitive situation in modern-day technical education in Hong Kong. It is a situation which needs to be looked at with great care, particularly where language policies for education are being determined, and where the provision of training in language skills directly relevant to student needs is called for.

In the following pages I have outlined a survey conducted in December 1976 to examine the sort of language skills generally demanded of students taking Technician Certificate and Technician Diploma courses in Hong Kong. To some extent at least, the survey is representative of a new, more empirical approach to the development of language training syllabuses locally and a corresponding dissatisfaction with rough, rule-of-thumb assessments and the uncritical acceptance of methodology devised elsewhere.

The article is divided into three sections. In the first I give a general background to the survey. In the second I detail some of the more interesting points in its organisation and execution, and the processing of data. Finally I discuss the results of the survey and attempt to bring out the more significant aspects of its findings.

Background

Technical education in Hong Kong has from the very beginning shown a strong tendency to follow lines laid down in the United Kingdom. Apart from social and economic considerations, this is understandable to the extent that most higher level courses are directed towards the eventual acquisition of a British technical qualification or membership of a British professional association which, in either case, will give the holder a certain degree of international recognition of his knowledge and skills.

In the early 1970s, the Technician Education Council of the United Kingdom began to draw together the various strands of British technical education into an all-encompassing unit-credit system. This, not surprisingly, led to a reconsideration of the structure of technical education in Hong Kong where the lower and middle sectors (Craft and Technician courses)

were just entering a period of very rapid and extensive expansion; with the establishment of five new technical institutes planned within a decade. The moment seemed opportune not only for arranging everything on the most up-to-date lines, but also for establishing an even closer match between British and Hong Kong technical education.

The immediate objective of this reappraisal was the development of parity in the teaching and examining of subject syllabuses (units) within course curricula (programmes) throughout Hong Kong in order to ensure that courses taught and qualifications awarded by one section would be, as far as possible, equal to those of its counterparts elsewhere in the locality. The unification of syllabuses and standards also held out the possibility of allowing students much greater freedom of choice with regard to both the timing and the location of their studies. Underlying these purely local advantages was the equally important endeavour to obtain United Kingdom validation for training done in Hong Kong.

One of the stipulations of the Technician Education Council was that all technician students should take a sixty-hour course named 'General and Communications Studies', which was to be divided into two (thirty-hour) parts called respectively 'Level I Unit' and 'Level II Unit'. In November 1976 a Working Party consisting of English Language and General Studies teachers was set up to make initial proposals for the organisation and content of this subject.

The first thing that had to be done was to reinterpret a policy made in the United Kingdom, essentially for domestic purposes, in such a way that it would suit local conditions. It was agreed that the principle of the standardisation of course work and assessment should be adhered to, and that the unit might most fittingly concentrate on the development of language skills required by local students. These, when divided into two main fields — on-course skills and on-job skills — would coincide very conveniently with the division of the unit into two levels.

The Survey

Having agreed on these preliminary terms of reference the Working Party decided to concentrate its efforts on the proposed Level I Unit. It set itself three immediate tasks. These were: (1) to check the validity of the generally held opinion that English Language skills played a major part in technical education, (2) to find out as precisely as possible which skills were actually needed by technician students undergoing their respective courses, and (3) to determine which of these could most suitably be taught in a Level I Unit taken by all technician students no matter what their specialism.

It was argued that information pertaining to all three points might be gathered by asking technician course tutors which classroom language skills were used by themselves and their students. This would settle, or at least give a considerable degree of guidance towards resolving points (1) and (2). Furthermore, by identifying the skills used most often in most classes, the Working Party would be able to draw up a language skills development syllabus that would be of immediate practical benefit to most students most of the time, and which would at least have the merit of avoiding a wastage of time and effort on language studies that were patently non-beneficial.

A list of skills was drawn up and discussed, with every care being taken to make it as extensive as possible. The list was divided into the four 'basic' areas — listening, speaking, reading and writing. Although it is realised that at the level of competence expected of technician students the skills under consideration are more often than not a complex of fundamentals, this approach was held to be useful in that it obliged

the Working Party to view the position from a variety of angles, and it resulted eventually in a questionnaire (see *Appendix I*) that appeared relatively familiar and not too difficult to understand — more useful, in the circumstances, than one embodying unexpectedly new approaches, which would require much explanation, and which, from either point of view, might produce a feeling of antipathy in the respondents.

Whether or not the final version is actually complete or the way in which it has been structured satisfactory might perhaps be the subject of further discussion. Be that as it may, it should be added that subsequent to the finalisation of the list no one, either on the Working Party or taking part in the survey in some other capacity, suggested that anything of major importance had been left out, and the 'escape' question — 5 (d) — drew a blank.

Respondents were asked to indicate whether or not a particular skill was required by students taking their courses and, at the same time, to indicate its relative frequency of use by marking the appropriate box on a four-point scale. The variables were named *frequently*, *occasionally*, *very rarely*, and *never*. By using an even number of variables, indecisive centre-line responding was avoided and, by creating a wider gap between *frequently* and *occasionally* than between the other variables, it was hoped that respondents would feel obliged to decide, very firmly, whether or not the skills they demanded of their students really did play a major part in their course-work. In one instance at least, this tactic seems to have worked. Reading English language technical magazines is often one of the first items mentioned by technical tutors in response to casual enquiries about the language needs of technician students and, on the basis of this opinion, many an English language course tutor has attempted to give appropriate training. However, less than 40 percent of all the tutors who responded marked the skill as required *frequently* and, although it is clear that a fair number of courses draw on the student's ability to handle reading matter of this sort, it is by no means essential for all technician students.

It was also hoped that the gap between *frequently* and *occasionally* would confound, to some extent at least, the respondent who chose to give an 'official' answer rather than his honest appraisal of the situation. Faced with an uncomfortably over-positive *frequently*, he would perhaps be forced into the *occasionally* column. As it was agreed that the *frequently* responses were to be considered far more significant than the *occasionally*, the effect of the 'official' position would, except in the most brazen cases, be greatly diminished.

A further consideration with regard to the use of a broad rather than a narrow scale of variables was that the Working Party suspected some respondents would possibly be unfamiliar with the finer subtleties of the language of gradation in English, and great care would therefore need to be taken with qualifiers such as 'rather' and 'quite' — in fact it seemed better to avoid them altogether. Perhaps the writing of a numerical scale beside the verbal might have emphasised the fact that the comparatively large gap between *frequently* and *occasionally* was intentional. However, to do so and thereby reveal to some extent the intentions of the Working Party with regard to processing the responses, might have been counter-productive, particularly in a teaching situation where the use of English as the medium of instruction is widely held (the 'official' responders, seeing that *occasionally* was to be rated rather low, would feel obliged to opt for *frequently*) to be obligatory. In any case, subsequent to the finalization of the questionnaire, no comments or complaints were received indicating difficulty or confusion over this point.

The wording of the lead-in question — 'How often are students expected to ...?' was the outcome of considerable thought and debate. Using the

simpler 'How often do students ...?' might have had the unsatisfactory outcome of producing a picture of student practice rather than student need and, on the other hand, a question such as 'How important do you think it is for students to ...?' with a scale of importance variables would give little more than a range of subjective opinion. Clearly, there is a certain ambiguity in the use of 'are expected', but it was finally agreed that this form of question, in combination with the scale of frequency variables, would produce responses centering on the expectation of necessity rather than the expectation of mere hopefulness. Also, it is to be doubted that more than a very small number of respondents, if any, ticked the boxes to indicate the frequency of their expectation (a possible but unlikely interpretation) rather than the frequency of their planning the use of a particular skill by students in their course work. Although further tests would be necessary before yielding total certainty, it is with some confidence that the questionnaire is regarded as most likely to give a fair picture of what actually happens in technician courses.

Once agreed and printed up, the questionnaire was issued to as many course tutors in the Technical Institutes and at the Hong Kong Polytechnic as possible. For the most part, responses were made by staff actually teaching the courses surveyed; in a few cases the Head of Department completed returns for each technician course his section handled. The quality of the responses appears to have been very satisfactory, with only a few returns showing evidence of any inability to understand or unwillingness to cooperate. A good range of courses was covered, with the main subject areas dealt with in technician education well represented.

Once the questionnaires had been filled in and returned, data from sections 1 - 4 was transferred to Raw Data Sheets, a specimen of which is given in *Appendix II*. Section 5 of the questionnaire turned out to be rather less informative than had been hoped. The paucity of helpful (or even unhelpful!) suggestions — 5(d) and 5(e) — was taken to indicate that the previous four sections had covered the subject adequately as far as the respondents were concerned and, beyond that, the section was ignored.

The Raw Data Sheets give a complete picture of information received in the first four sections of the questionnaire. No attempt has been made to select or modify, and even incomplete returns remain as they stand, with the few responses they give included in subsequent analysis.

Responses on these sheets are coded (3) = *frequently*, (2) = *occasionally* (1) = *very rarely* and (0) = *never*. (-) is used to indicate missing values, which were either truly missing (*ie* no response was given) or uninterpretable as in the case of a tick placed on a line, or two different responses to the same question. Although (0), for *never*, seems to imply some sort of logical relationship between variable name and code number, values were treated as purely nominal — simply as a means of identification — in the analysis. Totals on the Raw Data Sheets show the number of times a frequency variable has been chosen by the respondents. They do not represent an arithmetical summation of code values.

The totals from the Raw Data Sheets were then used to compile the Tables in the Master Results Sheets (see *Appendix III*). These give the percentage of tutors opting for each of the four variables with respect to every skill listed in (a) Technical Institute returns only, (b) Hong Kong Polytechnic returns only, and (c) all returns taken together. From these Sheets further Tables were drawn up which will be referred to in the following section.

A final point of interest, albeit a fairly obvious one, is that the processing of data has up to this point been carried out in a very simple manner and with the aid of nothing more complicated than a pocket calculator

and a battery of willing student helpers from the Technical Teachers' College (who, amongst other things, endured a fourfold check of all transcription and calculation with remarkably good grace). Clearly, much more information might be drawn from the data, given sufficient time and the use of more sophisticated data processing aids; and if, as it is hoped, further sample surveys are made for the purpose of verification and clarification, the use of a computer facility will become virtually essential. However, even at this basic level, a good deal of useful information was obtained, sufficient, as will be seen, for the Working Party to make certain recommendations with a perhaps greater degree of confidence than it might otherwise have had.

The Findings

The interpretation of statistical data is a matter, as most writers on the subject warn us, requiring as much caution as an afternoon's stroll through a minefield; and where the statistics are concerned with language, the dangers,one suspects, are multiplied. It is therefore with good reason that I emphasise the need for circumspection in handling the data produced by this survey, and I hope that in the following discussion of the findings I shall not, myself, make any fatal errors!

The percentage show on the Master Analysis Sheets must, from the outset, be read correctly. They do not indicate the importance pure and simple of one skill as opposed to another, even less an entire language. Take the reading of notes and handouts produced in Chinese [item 2(b)], for example. Of all the questionnaires returned, 1.7 percent stated that this skill is required *frequently*, 4.2 percent *occasionally*, 20 percent *very rarely*, and 74.2 percent *never*. A quick and rather thoughtless appraisal of these figures might result in the view that the reading of notes and handouts produced in Chinese is not important. Yet, on the contrary, it is important and very likely essential where a small number of courses is concerned. Taking the technician student body as a whole we can state that in the great majority of cases this particular skill is not required; but, if we then go on to decide not to include it in a language-training scheme for a Level I Unit, it does mean that here and there a few students will not receive assistance that might very well have been beneficial. The converse is also worth considering. For reading notes and handouts produced in English we have 91.6 percent of the returns stating that this is required *frequently*, 5.9 percent *occasionally*, 1.7 percent *very rarely*, and 0.8 percent (one out of the 122 returns) *never*. Where only one tutor is concerned, then, the training of his students in this skill would be a sheer waste of time.

These are, of course, extreme cases, and it would also be fair to comment that other factors need to be taken into consideration (very few courses, for instance, are taught entirely by just one or two tutors) but they do, I believe, highlight the need for careful thinking, and they also illustrate to some extent the difficulties latent in the promotion of a broad, standardised language-training policy that is to apply to all students equally.

Given these cautionary remarks it can nevertheless be seen that the findings of the survey did give the Working Party a fair degree of guidance in its attempts to clarify the language situation in technician course-work. Its first need — to check the validity of the commonly held belief that English Language skills played a large part in technician education — was well substantiated. Of all questionnaires returned, over 50 percent stated that students were frequently expected to make use of the following skills:

2h 91% Reading notes/handouts produced in English
2l 84% Reading test/exam papers produced in English
2g 83% Reading text-books published in English
4e 81% Answering technical questions in English (written)
1b 78% Listening to lectures given in English by Chinese lecturers
3i 63% Asking questions in English (oral)
4f 63% Writing at length on technical subjects in English
3h 62% Answering technical questions in spoken English
3g 51% Discussing course-work in Cantonese
4k 51% Making notes in English only, from oral sources.

Over 75 percent of all questionnaires returned stated that students were expected to make use of the skills listed above either *frequently* or *occasionally*. This slight widening of parameters brought to light one more skill not already mentioned — the reading of technical articles in English magazines (item 2i). Percentages for the 75+ percent *frequently* or *occasionally* categories are as follows: 2g - 97%, 2h - 97%, 1b - 95%, 4e - 95%, 2l - 95%, 3h - 89%, 3i - 86%, 4f - 86%, 3g - 83%, 2i - 76%, 4k - 76%. Of these, all but one (3g) are English Language skills and, on this basis, it would be fair to conclude that the use of English does play an important role in technician course-work for a very large number of technician students.

However, an examination of the Chinese language skills used in technician education is also quite revealing. Of these, the following are expected frequently in a significant number of cases:-

3g 51% Discussing course-work in Cantonese
4i 41% Writing notes in either Chinese or English from oral sources
1a 26% Listening to lectures given in Cantonese
4l 22% Writing notes in either Chinese or English from published sources
3f 21% Talking on non-technical subjects in Cantonese
3b 21% Asking questions in Cantonese

Over one third of all questionnaires stated that the above skills were required either frequently or occasionally, at the following percentages: 3g - 83%, 4i - 69%, 1a - 58%, 4l - 67%, 3f -38%, 3b -58%. In addition, five other skills can be grouped in this broader category:

3a 46% Answering questions orally in Cantonese
3d 46% Holding discussions in Cantonese
3e 46% Conversing on technical subject in Cantonese
2e 36% Reading non-technical articles in Chinese publications
3c 34% Giving technical talks in Cantonese

These figures indicate quite clearly that the use of Chinese in technician education is not to be discounted; in fact in one form or another it plays a leading part in the training of one student in every five, and it is by no means an insignificant factor in the education of as many as one third of all students.

The fact that many of the skills mentioned involve the use of Cantonese — the local Chinese dialect and language of everyday life — should not of itself lead us to draw hasty conclusions.

In examining the relative weighting of the Chinese and English languages in technician education the Working Party was able at the same time, on the basis of the lists appearing above, to identify those skills most widely used — the second of the three tasks it had set itself. The third proved rather more difficult in that there appeared to be considerable

TABLE I

Item expected: (A) *frequently* - (3) by 50%+;
or (B) *frequently* or *occasionally* - (3)/(2) by 75%+ returns.

Item	Technical Institutes		H.K. Polytechnic		All returns	
	A 50%+ (3)	B 75%+ (3)/(2)	A 50%+ (3)	B 75%+ (3)/(2)	A 50%+ (3)	B 75%+ (3)/(2)
1a		*				
1b	*	*	*	*	*	*
1c			*	*		
2g	*	*	*	*	*	*
2h	*	*	*	*	*	*
2i				*		*
2l	*	*	*	*	*	*
3b		*				
3g	*	*	*	*	*	*
3h		*	*	*	*	*
3i		*	*	*	*	*
3l				*		
3n			*	*		
4e	*	*	*	*	*	*
4f	*	*	*	*	*	*
4i			*	*		
4k			*	*	*	*
4l				*		
4n				*		

TABLE II

Number of times items occur in Table I					
6	5	4	3	2	1
					1a
1b					
				1c	
2g					
2h					
				2i	
2l					
					3b
3g					
	3h				
	3i				
					3l
				3n	
4e					
4f					
				4i	
		4k			
					4l
					4n

differences — not so much in the skills called for as in the relative frequency at which they were demanded— between the two major sectors of technician education: the Hong Kong Polytechnic and the Technical Institutes. As the working party had been asked to make proposals for a language development programme which would be common to all technician students it was decided to consider only those skills expected at a high rate of frequency right across the board. This was worked out from the Tables given below (see *Tables I* and *II*).

From these tables it was concluded that the following skills were probably used a great deal in technician courses throughout Hong Kong, and that a General and Communications Studies unit that centred on these skills would at least have the merit of relating to the situation as it is and providing training in skills which would very likely be of direct relevance to the immediate needs of the students. These are:

1b Understanding lectures given in English by Chinese lecturers
2g Reading text-books published in English
2h Reading notes/handouts written in English
2l Reading test/exam papers produced in English
3g Discussing coursework in Cantonese
3h Answering 'technical' questions in class in spoken English
3i Asking questions in class in spoken English
4e Answering 'technical' questions in written English
4f Writing at length on 'technical' subjects in English
4k Making notes in English from oral sources only

A further set of tables concentrating exclusively in Chinese Language skills has also been drawn up:

TABLE III

Items (Chinese language skills only) that are expected: (A) *frequently* - (3) by 20%+, and (B) *frequently* or *occasionally* - (3)/(2) by 30%+ returns.

Item	T.I.s		H.K.P.		All	
	A	B	A	B	A	B
1a	*	*		*	*	*
2a		*				
2c	*	*				*
3a		*				*
3b	*	*		*	*	*
3c		*				
3d	*	*		*		*
3e	*	*				*
3f	*	*		*	*	*
3g	*	*	*	*	*	*
4i	*	*	*	*	*	*
4l		*	*	*	*	*

TABLE IV

Number of times items appear in TABLE III

6	5	4	3	2	1
	1a				
					2a
			2c		
				3a	
	3b				
					3c
		3d			
			3e		
	3f				
3g					
4i					
	4l				

The following are the skills most frequently and most commonly demanded:

1a Listening to lectures given in Cantonese
3b Asking questions in Cantonese
3d Joining in classroom discussions in Cantonese
3f Speaking on non-technical matters in Cantonese
3g Discussing course work in Cantonese
4i Making notes from oral sources in either Chinese or English
4l Making notes from published sources in either Chinese or English

The last two indicate that note-taking is the particular skill required, and many teachers do not specify which language is to be used. Where this is the case, it is possible that some students, feeling more confident in using Chinese (as opposed to English), try as best they can to take their own notes in Chinese. Quite possibly they might benefit from some appropriate training.

The two sets of tables are not on a par. The skills listed in the first set are required more often and by more teachers than those in the second set. However, as has already been noted, where the second set is concerned, we are dealing with matters that affect a large number of students, and this in itself is sufficient to call for a certain amount of caution in setting up language-training schemes.

Appendix I

1

Questionnaire

A Institution (MHTI, KTTI, KCTI, HKP) .....

B Department .....

C Course .....

1. Listening skills.

How often are students on this course expected to understand lectures or talks ....

	Frequently	Occasionally	Very rarely	Never	
a) ... given in Cantonese?					1a
b) ... given in English by Chinese lecturers?					1b
c) ... given in English by non-Chinese lecturers?					1c

2. Reading skills.

How often are students on this course expected to read ....

	Frequently	Occasionally	Very rarely	Never	
a) ... text books published in Chinese?					2a
b) ... notes/handouts written in Chinese?					2b
* c) ... articles from 'technical'* magazines or journals published in Chinese?					2c
d) ... 'technical' articles from Chinese newspapers?					2d
e) ... 'non-technical' material from Chinese publications?					2e
f) ... test/exam papers produced in Chinese?					2f
g) ... text books published in English?					2g
h) ... notes/handouts written in English?					2h
i) ... articles from 'technical' magazines or journals published in English?					2i
j) ... 'technical' articles from newspapers published in English?					2j
k) ... 'non-technical' material from English language publications?					2k
l) ... test/exam papers produced in English?					2l

Please state roughly how much each language is used for producing test/exam papers throughout the course.
(E.g., tests produced in Chinese, 40%, in English 60%)

Chinese ..... % English ..... %

Please name the essential text books for this course

.....

.....

Please name the magazines/journals which students are required to read.

.....

.....

Please attach one set of recent final examination papers.

---

* NOTE Departments providing courses in essentially non-technical areas, e.g. Commerce, Management, Tourism etc., should understand the terms 'technical' and 'non-technical' as meaning directly related ('technical') or not directly related ('non-technical') to the subject matter taught in each course.

3

3. Speech skills.

How often are students on this course expected to ....

	Frequently	Occasionally	Very rarely	Never	
a) ... answer 'technical' questions in class in Cantonese?					3a
b) ... ask questions in class in Cantonese?					3b
c) ... speak at some length in class on 'technical' subjects, in Cantonese?					3c
d) ... take part in classroom discussions in Cantonese?					3d
e) ... engage in 'technical' conversations in class in Cantonese?					3e
f) ... speak in class on 'non-technical' matters in Cantonese?					3f
g) ... discuss their coursework in Cantonese with Chinese tutor?					3g
h) ... answer 'technical' questions in class in English?					3h
i) ... ask questions in class in English?					3i
j) ... speak at some length in class on 'technical' subjects, in English?					3j
k) ... take part in classroom discussions in English?					3k
l) ... engage in 'technical' conversations in class in English?					3l
m) ... speak in class on 'non-technical' matters in English?					3m
n) ... discuss their coursework in English with non-Chinese tutors?					3n

4. Writing skills.

How often are students on this course expected to ....

	Frequently	Occasionally	Very rarely	Never	
a) ... answer 'technical' questions in written Chinese?					4a
b) ... write at length on 'technical' subjects in Chinese?					4b
c) ... write at length on 'non-technical' subjects in Chinese?					4c
d) ... write letters in Chinese?					4d
e) ... answer 'technical' questions in written English?					4e
f) ... write at length on 'technical' subjects in English?					4f
g) ... write at length on 'non-technical' subjects in English?					4g
h) ... write letters in English?					4h

Note taking.

i) ... make notes in either Chinese or English from oral sources, e.g. lectures, radio broadcasts, etc.?					4i
j) ... make notes in Chinese only from oral sources?					4j
k) ... make notes in English only from oral sources?					4k
l) ... make notes in either Chinese or English from published materials?					4l
m) ... make notes in Chinese only from published materials?					4m
n) ... make notes in English only from published materials?					4n

5. General.

a) What language qualifications are stipulated for entry to this course?

G1 English, G2 English, HKCE English grade A,B,C,D,E.

Any other .....

b) Are students with the required entry qualification (language) usually able to work through the course to a satisfactory standard?

YES/NO

c) What proportion of students on the course at the present time are not working to a satisfactory level because their Chinese/ English is not good enough?

Difficulties with Chinese, approximately ..... %

Difficulties with English, approximately ..... %

d) Are there any important language skills that have not been mentioned in this questionnaire which are required for studying this course?

YES/NO If 'Yes', please give details.

.....

.....

.....

e) We would appreciate any further comments that you would like to make about student language requirements on this course.

.....

.....

.....

.....

.....

.....

.....

.....

RAW DATA SHEET I

Coding : 3 = Frequently 2 = Occasionally
1 = Very rarely 0 = Never
- = Missing value

Course / Item	1a	1b	1c	2a	2b	2c	2d	2e	2f	2g	2h	2i	2j	2k	2l	3a	3b	3c	3d	3e	3f	3g	3h	3i	3j	3k	3l	3m	3n	4a	4b	4c	4d	4e	4f	4g	4h	4i	4j	4k	4l	4m	4n
Kwun Tong Technical Institute																																											
100 PRINT & GD. OC	2	2	1	2	0	0	1	0	0	2	3	2	1	2	3	2	2	2	2	1	2	2	2	1	2	1	1	0	0	0	0	0	0	2	1	0	0	1	0	1	2	1	1
101 CLOTH IND. PTDR/PTÉ TECH.	1	3	2	1	0	1	1	3	1	2	3	2	2	1	3	2	2	1	1	1	2	2	3	3	2	1	1	1	1	0	1	1	2	3	1	1	2	2	1	3	1	1	3
102 ELEC. ENG. TECH.	2	3	2	2	1	3	3	3	0	3	3	3	3	3	3	2	2	1	1	1	2	2	3	3	2	1	1	1	1	0	1	1	2	3	3	3	2	3	1	3	3	2	2
103 MECH. ENG. TD	3	3	1	1	1	1	1	3	0	3	3	2	2	2	3	2	2	1	2	1	2	3	3	3	3	3	3	2	2	1	1	1	1	3	3	2	2	2	1	3	2	1	3
104 MECH. ENG. OC	2	3	1	1	1	1	1	3	0	3	2	1	1	1	3	3	3	2	3	2	2	3	2	2	2	2	2	1	1	1	1	1	1	3	3	1	1	2	1	2	1	1	2
105 TEXT. IND. TD	1	3	1	0	0	1	1	0	0	3	3	3	2	0	3	1	1	1	0	0	1	2	3	2	2	2	3	1	0	0	0	0	1	3	2	1	1	2	0	2	2	1	2
Kwai Chung Technical Institute																																										
700 ELEC. ENG. OC PTDR/PTE	2	3	1	2	1	2	2	3	0	3	3	3	2	2	3	2	2	2	3	3	3	3	3	3	3	2	2	1	1	1	1	2	3	3	3	2	2	3	1	3	2	2	2
701 ELEC. ENG. TD	2	3	1	2	1	3	2	3	0	3	3	3	2	2	3	2	2	2	2	2	3	3	3	3	3	3	3	2	0	1	2	3	3	3	3	2	2	3	1	3	2	2	2
702 CLOTH IND. CLO. MAN. TECH.	1	3	2	2	1	0	1	3	2	2	2	2	0	0	2	1	2	2	1	3	3	2	2	2	1	1	0	0	2	1	1	2	3	3	2	2	2	2	1	2	2	1	2
703 TEXT. TEXT. MAN. TD	2	3	2	2	0	1	1	1	0	3	3	3	1	1	3	2	2	1	0	1	1	2	3	3	3	3	3	3	2	0	0	0	0	3	3	2	2	2	1	3	2	0	3
704 MECH. PTDR/PTE & PROD. ENG.	2	3	1	1	0	1	1	1	0	3	3	3	3	2	3	1	1	1	1	1	1	3	3	3	3	3	3	2	1	0	0	0	0	3	3	2	2	1	1	3	2	1	2
705 MECH. TD IN PROD. ENG.	2	3	1	1	0	1	1	1	0	3	3	3	3	2	3	1	1	1	1	1	1	3	3	3	3	3	3	2	0	0	0	0	0	3	3	2	2	1	1	3	2	1	2
TOTALS																																										
No.(3)s	1	11	-	-	-	2	1	7	-	9	10	7	3	1	11	1	1	-	2	2	3	6	9	8	6	5	6	1	-	-	-	1	3	11	8	1	-	3	-	8	1	-	3
No.(2)s	8	1	4	6	-	1	2	-	1	3	2	4	5	6	1	7	8	5	3	2	5	6	3	3	5	3	2	4	3	-	1	2	2	1	2	7	9	6	-	3	9	3	8
No.(1)s	3	-	8	5	6	7	9	3	1	-	-	1	3	3	-	4	3	7	5	7	4	-	-	1	1	4	3	5	5	5	6	4	3	-	2	3	2	3	10	1	2	8	1
No.(0)s	-	-	-	1	6	2	-	2	10	-	-	-	1	2	-	-	-	-	2	1	-	-	-	-	-	-	1	2	4	7	5	5	4	-	-	1	1	-	2	-	-	1	-
	1a	1b	1c	2a	2b	2c	2d	2e	2f	2g	2h	2i	2j	2k	2l	3a	3b	3c	3d	3e	3f	3g	3h	3i	3j	3k	3l	3m	3n	4a	4b	4c	4d	4e	4f	4g	4h	4i	4j	4k	4l	4m	4n

RAW DATA SHEET II

Morrison Hill Technical Institute

Course / Item	1a	1b	1c	2a	2b	2c	2d	2e	2f	2g	2h	2i	2j	2k	2l	3a	3b	3c	3d	3e	3f	3g	3h	3i	3j	3k	3l	3m	3n	4a	4b	4c	4d	4e	4f	4g	4h	4i	4j	4k	4l	4m	4n
500 ELEC. MATHS.	3	3	2	1	0	0	0	2	0	3	2	0	0	1	2	2	3	1	1	2	1	2	3	3	1	1	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
501 ELEC. ENG. (205)	0	3	-	2	0	1	0	0	0	3	3	1	0	0	2	0	0	0	0	0	0	2	0	3	0	2	0	0	0	0	0	0	0	0	0	0	0	-	0	2	3	0	0
502 CONST: CONS. TECH. OC1	3	2	2	1	0	1	1	1	0	3	3	3	3	3	3	2	2	2	3	3	3	2	1	1	1	1	1	0	1	0	0	0	0	3	3	3	3	1	1	2	1	1	2
503 CONST: OC CTE	3	2	0	1	0	1	2	2	0	3	3	2	2	1	3	1	2	2	3	2	3	3	3	2	2	2	2	1	0	0	0	1	1	3	3	2	3	2	0	2	1	1	1
504 CONST: PC1 PTDR	2	3	0	1	0	0	0	0	0	3	3	0	0	0	1	2	3	0	3	3	0	0	2	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	1	0	0	0
505 CONST: OC CONST. TECH.	3	3	2	1	0	1	1	1	1	3	3	3	2	1	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	2	3	3	3	1	3	2	3	2	2	2
506 CONST: OC1 CONST. TECH.	2	3	1	1	0	0	1	2	0	3	3	3	3	2	3	2	2	2	1	2	3	3	2	2	1	1	1	0	0	0	0	0	0	3	3	1	0	0	0	0	0	0	0
507 CONST: OC1 CONST. ENG. PTDR	2	1	1	1	0	1	1	0	0	1	3	2	1	1	3	2	3	1	2	2	1	3	2	2	2	2	2	1	0	0	0	0	1	3	3	2	2	1	0	1	1	1	1
508 CONST: OC CONST. TECH.	3	3	2	1	0	1	1	1	1	3	3	3	2	1	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	2	3	3	3	1	3	2	3	2	2	2
509 CONST: OC1 MATHS.	1	3	0	2	0	3	1	1	0	3	3	3	3	3	3	1	2	1	1	2	1	3	2	2	1	1	1	1	0	0	0	0	0	3	3	0	0	3	1	1	1	1	2
510 CONST: PTE OC1 A/B	3	2	-	2	1	1	1	2	2	2	3	2	1	1	3	3	3	2	3	2	1	3	2	1	2	0	0	0	-	0	0	0	1	2	0	0	2	0	0	0	0	0	0
511 CONST: CONST. TECH.	3	2	-	0	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	3
512 CONST: OC CONST. TECH.	3	2	0	0	0	0	1	0	0	2	3	1	1	1	2	3	2	2	3	2	1	1	1	2	0	0	2	1	0	0	0	0	0	3	3	1	1	2	0	2	1	0	1
513 CONST: SCIENCE OC2A	3	2	1	2	0	2	2	3	0	3	3	1	2	1	3	3	3	1	2	2	1	3	1	1	0	0	0	0	1	0	0	0	0	3	1	0	0	1	1	1	1	0	1
514 CONST: CONST. TECH.	3	2	-	0	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	3
515 CONST: PC2K SAN. & SER.	2	2	0	0	0	0	0	0	0	3	3	0	0	0	3	2	2	2	2	2	1	0	2	3	3	2	2	1	0	0	0	0	0	3	3	0	0	2	0	2	0	0	0
516 CONST: PC2 PTDR	-	3	3	0	0	0	0	0	0	3	3	3	3	1	3	1	1	2	2	2	1	3	2	2	2	2	2	1	0	0	0	0	0	3	3	0	0	1	0	1	2	1	2
517 CONST: OC2 C. ENG. PTDR	2	3	2	2	2	2	2	2	0	3	3	3	3	2	3	1	1	1	1	2	1	1	3	3	3	3	3	3	-	1	1	1	-	3	3	3	-	2	1	1	2	1	1
518 ELEC. OC1A	3	2	.-	0	0	0	0	0	0	2	3	0	0	0	1	2	2	1	0	1	1	3	2	2	1	2	2	1	1	0	0	0	0	3	2	2	2	1	0	1	2	0	2
519 ELEC. OC1B/C	-	-	-	2	0	2	1	3	0	3	3	2	1	1	3	2	1	0	-	2	1	2	2	1	1	0	1	0	1	0	0	1	1	3	2	2	3	1	0	3	3	0	2
520 ELEC. ENG. OC1B/C	1	3	-	1	1	1	1	1	1	3	3	1	1	1	-	2	1	1	1	1	1	1	3	3	3	3	3	3	1	1	1	1	1	2	2	2	1	2	1	2	1	1	1
521 ELEC. ENG. OC1 (305)	2	3	1	0	0	3	2	3	0	3	3	1	1	1	2	2	2	2	2	2	1	0	2	3	3	3	2	1	0	0	0	0	0	2	1	0	0	3	0	3	0	0	1
522 MECH. ENG. TECHNICIAN COURSE	2	3	0	0	0	0	0	0	0	3	3	2	1	0	3	2	3	2	2	1	1	3	2	1	1	1	1	0	0	0	0	0	0	3	3	0	0	0	0	3	0	0	1
523 MECH. ENG. OC1	2	3	1	2	1	0	0	3	0	3	3	0	0	0	3	3	1	2	2	3	3	3	3	3	3	3	3	1	0	2	2	2	1	2	1	-	-	0	3	1	3	1	1
524 MECH. ENG. OC1C/D	2	3	0	0	0	0	0	0	0	3	1	0	0	0	3	0	3	2	0	0	0	3	3	3	3	0	1	1	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0
TOTALS																																											
No.(3)s	11	14	1	-	-	2	-	4	-	19	21	7	5	2	16	4	7	-	5	3	4	11	6	8	6	4	3	2	-	-	-	-	-	17	13	4	3	4	1	5	3	-	2
No.(2)s	9	9	5	7	1	3	4	5	1	3	1	5	4	2	4	13	10	13	9	15	2	6	13	9	6	8	9	2	2	1	1	1	2	6	3	5	3	5	2	6	5	2	7
No.(1)s	2	1	5	9	3	8	10	5	3	1	1	5	7	12	2	4	5	7	5	3	14	3	3	5	7	5	7	11	6	4	4	6	6	1	4	2	4	6	5	8	7	8	9
No.(0)s	1	-	7	9	19	10	9	9	19	-	-	6	7	7	-	4	1	3	3	2	3	3	1	1	4	6	4	8	13	18	18	16	14	1	3	11	11	7	15	4	8	13	7
No.(-)s	2	1	7	-	2	2	2	2	2	2	2	2	2	2	3	-	2	2	3	2	2	2	2	2	2	2	2	2	4	2	2	2	3	-	2	3	4	3	2	2	2	2	-
	1a	1b	1c	2a	2b	2c	2d	2e	2f	2g	2h	2i	2j	2k	2l	3a	3b	3c	3d	3e	3f	3g	3h	3i	3j	3k	3l	3m	3n	4a	4b	4c	4d	4e	4f	4g	4h	4i	4j	4k	4l	4m	4n

RAW DATA SHEET III

Morrison Hill Technical Institute (Contd.)

Course / Item	1a	1b	1c	2a	2b	2c	2d	2e	2f	2g	2h	2i	2j	2k	2l	3a	3b	3c	3d	3e	3f	3g	3h	3ı	3j	3k	3l	3m	3n	4a	4b	4c	4d	4e	4f	4g	4h	4i	4j	4k	4l	4m	4n
525 MECH. ENG. OC1	2	3	0	1	0	1	1	2	0	3	3	2	2	0	3	2	2	2	3	2	3	2	2	2	2	1	1	0	2	0	0	0	0	2	2	1	1	1	0	2	1	0	3
526 MECH. ENG. OC TECH.	3	1	0	1	0	2	2	2	0	3	3	2	2	1	2	2	3	3	3	3	2	3	2	1	2	0	1	0	2	0	0	1	3	3	2	1	2	2	0	1	1	1	1
527 MECH. ENG. OC2	2	2	1	2	1	2	3	2	2	2	3	2	2	1	3	2	2	2	2	2	1	3	-	2	2	2	2	1	3	2	2	1	1	2	2	2	2	2	1	1	2	2	2
528 MECH. ENG. OC2	2	3	1	1	0	1	0	0	1	3	3	1	0	0	3	1	1	1	1	2	2	3	3	3	1	2	1	1	1	0	0	0	0	3	0	0	0	0	0	1	0	0	2
529 ELEC. ENG. OC1 D	3	2	0	0	0	0	2	0	2	2	2	1	2	2	3	2	2	2	2	2	2	3	2	2	3	2	2	2	2	2	2	2	1	3	2	2	3	2	1	2	2	2	2
530 ELEC. OC1 E&F	3	3	1	2	0	2	2	2	0	3	3	2	2	2	3	3	3	3	3	3	3	2	2	2	1	1	1	0	0	0	0	0	0	3	1	0	1	1	0	1	1	0	1
531 ELEC. ELECTRONIC ENG. OC	1	3	2	1	0	1	1	0	0	3	3	2	1	1	3	1	2	0	2	1	0	2	3	3	2	2	2	0	2	0	0	0	0	3	3	1	2	3	0	3	1	0	2
532 ELEC. ENG. OC2	1	3	2	0	0	0	0	0	0	3	3	1	0	0	3	3	3	1	3	3	3	3	2	2	2	1	1	1	1	0	0	0	0	3	3	2	2	1	1	1	2	0	3
533 ELEC. ENG. OC	3	2	-	1	1	1	2	2	1	3	3	3	2	2	2	1	3	3	3	3	3	3	2	2	1	1	1	1	0	1	0	1	2	3	3	2	2	3	1	3	1	1	2
534 ELEC. & ELECTRONIC ENG. OC	3	2	2	2	0	1	2	1	0	3	3	2	1	1	3	2	3	3	3	2	3	2	1	1	1	0	0	0	0	0	0	0	0	3	3	0	2	3	0	3	2	1	2
535 ELEC. OC	2	3	2	1	0	1	1	1	0	3	3	2	1	1	2	2	2	2	2	2	1	0	3	3	2	3	2	3	0	0	0	0	0	3	3	3	1	-	1	3	1	0	2
536 ELEC. OC2	-	3	-	0	0	2	-	-	-	3	3	-	-	-	3	-	2	-	2	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	3	-	-	-
537 ELEC. OC2 A&B	2	3	2	2	2	3	2	3	1	3	3	2	2	2	1	3	3	2	2	2	1	3	2	3	2	2	2	1	2	1	0	0	0	2	3	0	3	3	0	3	2	2	2
538 MECH. ENG. OC1 C&D	3	2	1	2	1	3	2	3	2	3	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3	1	2	0	1	2	2	2	2	2	2	2	2	1	1	1	1	1	1
539 ELEC. ENG. OC1 E&D	1	3	1	1	1	2	1	1	0	3	3	2	2	1	3	1	2	1	1	1	0	2	3	3	3	3	3	0	2	0	0	0	0	3	3	0	1	1	0	1	1	0	1
540 CONST. CTE OC1A	3	2	-	2	2	1	2	3	1	2	2	1	1	1	1	3	3	2	3	2	2	2	1	1	1	1	1	1	1	2	1	1	3	1	1	1	1	1	2	3	2	2	2
541 ELEC. OC1 EEP	2	3	1	2	1	2	1	1	1	3	3	2	1	1	2	2	3	2	1	3	2	3	2	2	1	1	1	1	1	1	1	1	1	3	2	2	1	3	1	2	1	1	1
542 MECH. ENG. OC1 B	1	3	1	1	0	0	0	0	0	2	1	1	0	0	3	1	1	1	1	1	1	2	3	3	3	2	2	2	2	0	0	0	0	3	3	3	3	1	0	1	1	0	2
543 ELEC. ENG. OC1 D.E.F	3	2	0	1	0	1	1	1	1	2	3	0	0	0	2	2	2	1	2	2	3	3	2	2	0	2	0	0	0	0	0	0	0	3	3	1	0	2	0	2	0	0	0
TOTALS																																											
No.(3)s	8	11	-	-	-	2	1	3	1	14	16	2	1	-	12	5	9	5	8	6	7	11	6	7	4	2	1	1	1	-	-	-	2	13	9	3	3	5	-	7	-	-	2
No.(2)s	6	7	5	7	2	6	8	5	3	5	2	10	8	5	5	8	8	7	7	9	5	7	9	8	7	7	7	2	7	4	3	2	2	4	6	6	7	4	1	4	6	4	10
No.(1)s	4	1	7	9	5	8	6	5	6	-	1	5	5	8	2	5	2	5	4	3	4	-	2	3	6	7	8	7	5	3	2	5	3	1	2	5	6	7	7	8	10	5	5
No.(0)s	-	-	4	3	12	3	3	5	9	-	-	1	4	5	-	-	-	1	-	-	2	1	-	-	1	2	2	8	5	11	13	11	11	-	1	5	2	1	10	-	2	9	1
No.(-)s	1	-	3	-	-	-	1	1	1	-	-	1	1	1	-	1	-	1	-	1	1	-	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	-	1	1	1
	1a	1b	1c	2a	2b	2c	2d	2e	2f	2g	2h	2i	2j	2k	2l	3a	3b	3c	3d	3e	3f	3g	3h	3ı	3j	3k	3l	3m	3n	4a	4b	4c	4d	4e	4f	4g	4h	4ı	4j	4k	4l	4m	4n

RAW DATA SHEET IV

Hong Kong Polytechnic

Course \ Item	1a	1b	1c	2a	2b	2c	2d	2e	2f	2g	2h	2i	2j	2k	2l	3a	3b	3c	3d	3e	3f	3g	3h	3i	3j	3k	3l	3m	3n	4a	4b	4c	4d	4e	4f	4g	4h	4i	4j	4k	4l	4m	4n
300 NAUTICAL HC	1	3	2	0	0	0	0	1	0	3	3	2	2	1	3	1	1	0	0	1	0	3	2	3	0	1	2	1	1	0	0	0	0	3	2	0	0	0	0	0	1	0	1
301 NAUTICAL OC	1	3	0	0	0	0	0	0	0	2	3	1	1	0	3	2	2	0	1	1	0	3	2	2	0	0	1	0	1	0	0	0	0	3	2	0	0	1	1	1	1	1	1
302 COMP. SCI. CP	0	3	3	0	0	0	0	0	0	2	3	2	2	1	2	0	0	0	0	0	0	0	3	3	3	3	3	2	3	0	0	0	0	3	2	1	0	0	0	1	2	0	2
303 COMP. SCI. SA1A	1	3	3	0	0	0	1	2	0	3	3	3	2	2	3	1	1	1	1	1	2	2	-	2	2	2	2	2	2	0	0	2	2	3	3	2	3	3	0	3	2	1	2
304 COMP. SCI. SA2	0	3	3	0	0	0	0	1	0	3	3	3	3	3	3	0	0	1	0	1	1	2	3	3	3	3	3	3	3	0	0	0	1	3	3	3	3	3	2	3	3	0	3
305 COMP. SCI. SA1B	1	3	3	0	0	0	0	0	0	3	3	3	3	2	3	1	1	1	1	1	2	2	2	2	2	2	2	2	2	0	0	0	0	3	3	2	2	3	1	3	3	0	3
306 P.I.E. DIPLOMA	2	3	3	0	0	1	1	0	0	3	3	2	2	1	3	2	1	1	1	1	1	3	3	3	1	1	1	0	3	0	0	0	1	3	3	2	2	3	1	1	1	0	1
307 P.I.E. H. DIP.	1	3	3	1	0	1	1	1	0	3	3	3	3	3	3	0	0	0	0	0	1	3	3	3	3	3	3	3	3	0	0	0	0	3	3	3	3	2	1	2	2	1	2
308 P.I.E. OC	1	3	3	1	1	1	1	1	1	3	3	2	2	1	3	1	1	1	1	1	1	2	3	3	2	2	2	2	3	0	0	1	1	3	3	2	3	2	0	3	2	0	3
309 NAUTICAL H.D. MARINE ELECTRON CS	0	3	2	0	0	0	0	0	0	3	3	2	1	0	3	0	0	0	0	0	0	3	3	3	2	2	2	3	2	0	0	0	0	3	3	3	0	3	0	3	3	0	3
310 ELECTRONIC ENG. H.D.	0	3	3	0	0	1	2	1	0	3	3	3	3	3	3	0	0	1	2	2	2	3	3	3	3	3	3	3	3	0	0	0	0	3	3	3	3	3	0	3	3	2	3
311 ELECTRONIC ENG. TECH. DIP.	0	3	3	1	0	1	0	0	0	3	3	3	1	2	3	2	2	1	1	1	1	1	3	3	3	3	3	3	3	0	0	1	1	3	3	3	2	3	3	3	3	0	2
312 ELECTRONIC ENG. OC/HC EVENING OC/HC PTDR	2	3	3	1	0	2	1	1	0	3	3	3	3	3	3	2	2	1	2	1	1	2	3	3	3	3	3	3	3	1	1	1	1	3	3	3	2	-	-	-	-	-	-
313 NAUTICAL DIP. MARITME SCIENCE	0	2	3	0	0	0	0	0	0	1	2	0	0	0	3	0	0	0	0	0	0	1	3	3	1	1	2	2	3	0	0	0	0	3	2	1	0	0	0	2	0	0	0
314 MATH. STUDIES HD IN MATH. SC	0	3	2	0	0	0	1	0	0	3	3	2	1	1	3	0	1	0	1	1	1	3	3	3	2	2	2	2	2	0	2	2	2	3	3	2	2	3	0	3	2	1	2
315 MATH. STUDIES C IN MATH. STUDIES HC IN STAT. APP.	0	3	0	0	0	0	1	0	0	3	3	2	1	0	3	0	1	0	0	0	0	3	3	3	2	2	2	2	0	0	0	0	0	2	2	2	2	3	0	3	2	0	2
316 BUS. & MGT. HD BS (TRANSPORT)	1	3	3	1	1	1	1	1	1	3	3	3	3	3	3	1	1	1	1	1	1	1	3	3	3	3	3	3	3	1	1	1	1	3	3	3	3	3	1	3	3	1	3
317 CIVIL & STR. HD S.E.	2	3	3	1	1	3	2	3	0	3	3	3	3	2	3	0	2	0	3	3	3	0	3	2	0	0	0	0	0	0	0	0	0	3	3	3	2	0	0	2	3	0	0
318 CIVIL & STR. PRS. HD(B) (STRUCT)	1	3	3	0	0	0	1	0	0	2	3	1	1	1	3	0	0	0	1	1	0	2	3	3	2	2	2	1	3	0	0	0	0	3	3	2	1	2	0	2	2	0	2
319 CIVIL & STR. T.D. CE	1	3	2	0	0	0	2	3	0	3	3	3	3	2	3	0	2	0	2	2	3	3	3	3	2	2	2	2	2	0	0	3	3	3	3	2	2	3	0	3	3	2	3
320 CIVIL & STR. FT/PTDR	1	3	3	0	0	1	2	1	0	3	3	3	3	3	3	1	1	1	1	1	1	2	3	3	2	3	3	3	3	0	0	0	0	3	0	0	3	-	0	3	-	0	3
321 CIVIL & STR. ASSOC^{P} IN SE	1	3	3	0	0	0	0	1	0	3	3	3	3	2	2	1	1	1	2	2	2	2	3	3	3	2	2	2	2	0	0	0	0	3	3	3	1	1	1	2	1	1	2
322 BUS. & MGT. HD/OD SECRETARIAL	2	3	2	1	1	2	2	1	2	3	3	3	3	2	3	1	0	1	1	1	0	1	3	3	3	3	3	3	2	2	2	1	2	3	3	3	3	3	2	3	3	2	3
323 BUS. & MGT. OD	2	3	2	0	0	0	1	0	0	3	3	2	2	1	2	2	2	1	2	1	1	3	3	3	3	3	3	2	2	1	0	1	2	3	3	2	2	3	1	2	1	0	1
324 MECH. ENG. ASSOC^{P} IN ME.	1	3	3	0	0	1	0	0	0	3	3	3	3	2	3	1	1	1	1	1	1	2	3	3	3	3	3	3	3	0	0	0	1	3	3	3	3	0	0	3	3	1	3
TOTALS																																											
No.(3)s	-	24	17	-	-	1	-	2	-	21	24	14	12	6	22	-	-	-	1	1	2	10	21	21	11	11	11	10	13	-	-	1	1	24	19	11	9	13	1	14	10	-	10
No.(2)s	5	1	6	-	-	2	5	1	1	3	1	8	6	8	3	5	6	-	5	3	4	9	3	4	9	9	11	10	8	1	2	2	4	1	5	9	9	3	2	6	7	3	8
No.(1)s	12	-	-	7	4	8	10	10	2	1	-	2	6	7	-	9	11	14	12	16	11	4	-	-	2	3	2	2	2	3	2	6	7	-	-	2	2	2	7	3	5	7	4
No.(0)s	8	-	2	18	21	14	10	12	22	-	-	1	1	4	-	11	8	11	7	5	8	2	-	-	3	2	1	3	2	21	21	16	13	-	1	3	5	5	14	1	1	14	2
No.(-)s	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	1	2	1	1
	1a	1b	1c	2a	2b	2c	2d	2e	2f	2g	2h	2i	2j	2k	2l	3a	3b	3c	3d	3e	3f	3g	3h	3i	3j	3k	3l	3m	3n	4a	4b	4c	4d	4e	4f	4g	4h	4i	4j	4k	4l	4m	4n

RAW DATA SHEET V

Hong Kong Polytechnic

Course \ Item	1a	1b	1c	2a	2b	2c	2d	2e	2f	2g	2h	2i	2j	2k	2l	3a	3b	3c	3d	3e	3f	3g	3h	3i	3j	3k	3l	3m	3n	4a	4b	4c	4d	4e	4f	4g	4h	4i	4j	4k	4l	4m	4n
325 APP.SC. DENTAL MECH.S PTE	3	3	0	1	0	0	0	1	3	3	3	0	0	0	3	2	3	1	2	2	2	2	3	3	1	1	1	1	0	3	1	1	2	3	2	1	2	3	1	3	2	1	2
326 APP.SC. CHEM.TECH.INDUST.CHEM.PTE	2	3	3	0	0	0	0	0	0	3	3	1	1	1	3	0	2	0	1	0	1	1	3	3	3	3	3	3	3	0	0	0	1	3	3	3	3	3	0	3	1	1	1
327 APP.SC. DENTAL TECHNICIAN PTDR	2	3	0	0	0	0	0	1	0	3	3	1	1	1	3	0	2	0	1	1	1	2	3	3	2	2	2	2	0	0	0	1	1	3	2	1	3	3	0	3	2	0	3
328 APP.SC. MET.SURF. FINISHG PTDR	3	1	0	3	3	0	0	0	3	3	3	1	0	0	3	3	3	1	2	2	2	2	1	1	0	1	0	1	0	3	3	3	1	2	1	1	1	3	3	2	2	2	2
329 APP.SC. LAB. TECH. PTDR	2	3	3	0	0	0	0	0	0	3	3	1	1	1	3	0	2	0	1	0	1	1	3	3	3	3	3	3	3	0	0	0	1	3	3	3	3	3	0	3	1	1	1
330 APP.SC. CHEM. LAB. TECH. PTDR	2	3	3	0	0	0	0	0	0	3	3	2	1	2	3	0	1	0	0	0	0	1	3	3	3	3	3	3	3	0	0	0	1	3	3	3	3	3	0	3	2	1	2
331 APP.SC. SCI. LAB. TECH. PTDR	2	3	3	0	0	0	0	0	0	3	3	2	1	2	3	0	1	0	0	0	0	1	3	3	3	3	3	3	3	0	0	0	1	3	3	3	3	3	0	3	2	1	2
332 APP.SC. CHEM.L TECH.Y FT	-	-	-	0	0	0	0	0	0	-	-	-	-	-	-	0	0	0	0	0	0	0	3	3	3	3	3	3	3	0	0	0	0	-	-	-	-	-	0	-	2	2	2
333 DESIGN HC 2D/3D	3	-	3	2	0	1	1	1	0	-	3	2	2	1	-	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	1	1	0	2	2	2	0	2	2	2	2	2	2
334 DESIGN FOUNDATION DESIGN	3	0	-	2	0	1	1	1	0	-	3	2	2	1	-	3	3	3	3	3	3	3	0	0	0	0	0	0	-	1	1	1	0	2	2	2	0	2	2	2	2	2	2
335 DESIGN OD/HD	3	3	3	2	0	0	0	1	-	2	2	2	2	3	-	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0	0	0	0	2	2	2	2	0	0	2	2	0	2
336 BMS H/D BANKING	2	3	3	2	2	1	2	1	1	3	3	3	3	3	3	1	1	1	1	1	2	1	3	3	3	3	3	3	3	1	0	0	1	3	3	3	3	1	1	3	3	3	3
337 ACCOUNTANCY C.DIP. IN ACC. & FIN.	0	3	3	0	0	0	0	0	0	3	3	3	3	3	3	0	0	0	0	0	0	3	3	3	3	3	3	1	3	0	0	0	0	3	3	3	3	2	0	3	1	0	1
338 ACC· CHINESE FACTORY ACCOUNTS	3	0	0	3	3	2	2	2	3	0	0	0	0	0	0	3	3	3	2	2	3	3	1	0	0	0	0	0	0	3	3	3	3	0	0	0	0	3	3	0	2	2	0
339 ACC· OD ACC.	1	3	3	1	1	1	1	1	1	3	3	3	3	2	3	1	1	1	1	1	1	3	3	3	2	2	2	2	3	1	1	1	1	3	3	2	2	3	1	3	2	1	2
340 ACC: HD CO. SEC.	0	3	3	0	0	0	0	0	0	3	3	3	3	2	3	0	0	0	0	0	0	3	3	3	3	3	3	1	3	0	0	0	0	3	3	2	3	3	0	3	3	0	3
341 ACC: MAC.	0	3	3	0	0	0	1	0	0	3	3	2	2	0	3	0	0	0	0	0	0	2	3	3	2	3	2	1	3	0	0	0	0	3	2	1	0	3	0	2	2	0	2
342 ACC: HKSA/ACCA	0	3	3	0	0	0	0	0	0	3	3	3	3	3	3	0	0	0	0	0	0	0	2	3	1	2	1	2	2	0	0	0	0	1	1	3	1	2	0	2	2	0	2
343 ELEC. ENG. HD EE	1	3	3	0	0	1	0	0	0	3	3	3	2	2	3	1	1	0	1	1	1	3	3	3	2	2	2	1	3	0	0	0	0	3	3	2	1	3	0	3	2	1	3
344 ELEC. ENG. T/DIP	1	3	3	1	0	2	2	2	0	3	3	3	2	2	3	0	1	0	1	1	1	2	3	3	2	2	2	1	2	0	0	0	0	3	3	1	1	2	1	1	2	1	2
345 ELEC. ENG. HC	1	3	3	2	0	2	2	2	0	3	3	2	2	2	3	0	0	0	1	0	0	3	3	3	2	2	2	1	3	0	0	1	1	3	3	1	2	3	1	3	3	1	3
346 ELEC. ENG. OC	2	3	1	2	0	2	2	2	0	3	3	2	1	1	3	1	1	0	1	1	0	3	3	3	2	2	2	1	1	0	0	1	1	3	3	1	1	3	1	3	3	1	3
347 ELEC. ENG. ASSOCIATESHIP	0	3	3	1	0	1	1	2	0	3	3	3	2	2	3	0	0	0	1	0	0	3	3	3	2	2	2	2	3	0	0	1	1	3	3	3	2	3	1	3	3	1	3
348 ELEC. ENG. CE I/II	0	3	3	1	0	1	1	2	0	3	3	3	2	2	3	0	0	0	1	0	0	3	3	3	2	2	2	2	3	0	0	1	1	3	3	3	2	3	1	3	3	1	3
349 ELEC. ENG. ENDORSEMENT CERT.	1	3	3	2	0	2	2	2	0	3	3	2	2	2	3	0	0	0	1	0	0	3	3	3	2	2	2	1	3	0	0	1	1	3	3	1	2	3	1	3	3	1	3
TOTALS																																											
No.(3)s	6	20	18	2	2	-	-	-	3	20	22	9	5	4	20	5	6	4	3	3	4	13	21	22	10	11	10	8	17	3	2	2	1	18	15	9	8	17	2	16	7	1	9
No.(2)s	7	-	-	7	1	5	6	7	-	1	1	9	10	10	-	1	3	-	3	3	3	5	1	-	10	10	10	5	2	-	-	-	1	4	6	6	7	5	2	6	15	5	12
No.(1)s	5	1	1	5	1	7	6	7	2	-	-	4	6	6	-	4	7	4	12	6	6	5	2	1	2	2	2	10	1	4	4	10	13	1	2	8	5	1	9	1	3	13	3
No.(0)s	6	2	4	11	21	13	13	11	19	1	1	2	3	4	1	15	9	17	7	13	12	2	1	2	3	2	3	2	4	18	19	13	10	1	1	1	4	1	12	1	-	6	1
No.(-)s	1	2	2	-	-	-	-	-	1	3	1	1	1	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	1	1	1	1	-	1	-	-	-
	1a	1b	1c	2a	2b	2c	2d	2e	2f	2g	2h	2i	2j	2k	2l	3a	3b	3c	3d	3e	3f	3g	3h	3i	3j	3k	3l	3m	3n	4a	4b	4c	4d	4e	4f	4g	4h	4i	4j	4k	4l	4m	4n

RAW DATA SHEET VI

Hong Kong Polytechnic (Contd.)

Course / Item	1a	1b	1c	2a	2b	2c	2d	2e	2f	2g	2h	2i	2j	2k	2l	3a	3b	3c	3d	3e	3f	3g	3h	3i	3j	3k	3l	3m	3n	4a	4b	4c	4d	4e	4f	4g	4h	4i	4j	4k	4l	4m	4n
350 ELEC. ENG. OC PTDR	1	3	3	2	1	2	2	2	0	3	3	3	2	2	3	1	2	1	1	1	1	2	3	3	2	1	1	1	2	0	0	0	1	3	3	2	1	2	1	2	2	2	2
351 ELEC. ENG. HC PTDR	1	3	3	2	1	2	2	2	0	3	3	3	2	2	3	1	2	1	1	1	1	2	3	3	2	1	1	1	2	0	0	0	1	3	3	2	1	2	1	2	2	2	2
352 MFCH. & MAR. TECH. DIP. MAR.2	3	3	3	1	1	2	2	2	0	3	3	3	2	2	3	0	0	2	1	2	3	2	3	3	3	3	3	2	3	0	0	2	2	3	3	2	3	3	1	3	2	1	3
353 MECH. & MAR. PRE. HD	2	3	3	1	2	1	1	3	1	3	3	2	2	2	3	2	2	2	2	2	3	3	3	3	2	2	2	2	3	2	2	1	1	3	2	1	1	3	2	3	3	3	2
354 MECH. & MAR. HD	1	3	3	2	0	3	2	3	0	3	3	2	2	1	3	1	1	1	2	2	2	3	3	3	3	2	3	2	3	1	1	1	3	3	3	3	2	2	1	1	2	2	3
355 MECH. & MAR. DIP.1	0	3	3	0	0	2	2	2	0	3	3	1	1	1	3	1	2	0	2	1	0	3	2	2	1	2	2	2	2	0	0	0	3	3	3	2	1	3	0	3	2	1	2
356 TEXT. IND. CERT. FASHION & CLOTHING	1	3	2	0	0	1	1	1	0	3	3	2	2	1	3	2	2	2	2	1	1	2	2	2	1	1	1	1	2	0	0	0	0	3	2	1	0	2	1	2	2	1	2
357 TEXT. IND. HC D.P.F.	3	3	3	0	0	0	0	0	0	3	3	3	0	0	3	3	3	2	3	3	3	3	1	2	1	0	0	0	0	1	1	1	1	3	3	1	1	2	1	2	3	0	3
358 TEXT. IND. HC FASHION & CLOTHING	0	3	2	0	0	0	2	2	0	3	3	2	1	1	3	1	2	2	2	2	1	3	2	1	1	1	2	1	2	0	0	0	0	2	2	1	0	2	1	3	2	0	2
359 TEXT. IND. T. DIP. F. & C.	1	3	3	1	0	0	0	1	0	3	3	3	2	1	3	0	1	0	1	0	1	3	3	3	2	3	3	2	3	0	0	0	1	3	2	1	1	2	0	3	3	1	3
360 TEXT. IND. H. DIP. F. & C.	1	3	3	1	0	1	1	1	0	3	3	3	3	2	3	1	1	0	1	0	0	3	3	3	3	3	3	2	3	0	0	0	1	3	3	1	2	2	1	3	3	1	3
361 TEXT. IND. H. DIP. TEXT. CHEM.	3	3	3	1	1	1	0	0	0	3	3	3	1	0	3	3	2	1	3	3	3	-	1	1	0	0	0	0	0	0	0	0	0	3	3	1	0	2	2	3	2	1	3
362 TEXT. IND. OC/HC TEXT. TECH.	1	3	2	1	0	0	1	0	0	3	3	2	1	0	3	2	2	1	1	2	0	3	3	3	1	2	2	0	2	0	0	0	1	3	2	0	2	0	0	3	2	0	1
363 TEXT. IND. H. DIP. TEXT. TECH.	2	2	3	0	0	0	1	1	0	3	3	3	3	3	3	1	2	0	2	0	0	3	3	3	0	3	3	2	3	0	0	0	1	3	3	2	2	1	1	3	3	0	3
364 TEXT. IND. T. DIP. YARN	3	2	3	2	0	2	1	3	0	2	3	2	1	1	3	2	2	2	1	1	2	3	1	1	1	1	1	2	2	0	0	1	1	3	3	3	2	3	1	3	2	1	3
365 TEXT. IND. T. DIP. FABRIC M.	3	2	3	2	1	1	1	3	0	3	3	2	1	1	3	2	3	2	3	3	3	2	3	2	1	1	1	0	3	0	0	0	1	3	3	0	3	3	0	3	2	1	1
TOTALS																																											
No.(3)s	5	13	13	-	-	1	-	4	-	15	16	8	2	1	16	2	2	-	3	3	5	10	10	9	3	4	5	-	7	-	-	-	2	15	11	2	2	5	-	11	5	1	8
No.(2)s	2	3	3	5	1	5	6	5	-	1	-	7	7	5	-	5	10	7	6	5	2	5	3	4	4	4	4	8	7	1	1	1	1	1	5	5	5	9	2	4	11	3	6
No.(1)s	7	-	-	6	5	5	7	4	1	-	-	1	6	7	-	7	3	5	7	5	5	-	3	3	7	6	5	4	-	2	2	4	10	-	-	7	6	1	10	1	-	8	2
No.(0)s	2	-	-	5	10	5	3	3	15	-	-	-	1	3	-	2	1	4	-	3	4	-	-	-	2	2	2	4	2	13	13	11	3	-	-	2	3	1	4	-	-	4	-
No.(-)s	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1a	1b	1c	2a	2b	2c	2d	2e	2f	2g	2h	2i	2j	2k	2l	3a	3b	3c	3d	3e	3f	3g	3h	3i	3j	3k	3l	3m	3n	4a	4b	4c	4d	4e	4f	4g	4h	4i	4j	4k	4l	4m	4n

MASTER ANALYSIS SHEET 1

Coding : (3) = frequently (2) = occasionally
(1) = very rarely (0) = never

		Technical Institutes (56 returns) Returns per item/variable	Hong Kong Polytechnic (66 returns) Returns per item/variable	All Questionnaires (122 returns) Returns per item/variable
Listening to lectures/talks				
1a	(3)	20 37.7%	11 16.9%	31 26.3%
given in	(2)	23 43.4%	14 21.5%	37 31.4%
Cantonese	(1)	9 17.0%	24 36.9%	33 28.0%
	(0)	1 2.0%	16 24.6%	17 14.4%
	(-)	53 = 100%	65 = 100%	118 = 100%
1b	(3)	36 65.4%	57 89.0%	93 78.1%
given in	(2)	17 30.9%	4 6.2%	21 17.6%
English by	(1)	2 3.7%	1 1.6%	3 2.5%
Chinese	(0)	- -	2 3.2%	2 1.7%
lecturers	(-)	55 = 100%	64 = 100%	119 = 100%
1c	(3)	1 2.1%	48 75.0%	49 44.5%
given in	(2)	14 30.4%	9 14.1%	23 20.9%
English by	(1)	20 43.5%	1 1.6%	21 19.1%
non-Chinese	(0)	11 24.0%	6 9.3%	17 15.5%
lecturers	(-)	46 = 100%	64 = 100%	110 = 100%
Reading				
2a	(3)	- -	2 3.0%	2 1.6%
text-books	(2)	20 35.7%	12 18.2%	32 26.2%
published in	(1)	23 41.4%	18 27.3%	41 33.6%
Chinese	(0)	13 23.2%	34 51.5%	47 38.6%
	(-)	56 = 100%	66 = 100%	122 = 100%
2b	(3)	- -	2 3.0%	2 1.7%
notes/handouts	(2)	3 5.6%	2 3.0%	5 4.2%
written in	(1)	14 25.9%	10 15.1%	24 20.0%
Chinese	(0)	37 68.5%	52 78.8%	89 74.2%
	(-)	54 = 100%	66 = 100%	120 = 100%
2c	(3)	6 11.1%	2 3.0%	8 6.7%
articles from	(2)	10 18.5%	12 18.2%	22 18.3%
Chinese	(1)	23 42.6%	20 30.3%	43 35.8%
technical	(0)	15 27.8%	32 48.5%	47 39.2%
publications	(-)	54 = 100%	66 = 100%	120 = 100%
2d	(3)	2 3.8%	- -	2 1.7%
technical	(2)	14 26.4%	17 25.8%	31 26.0%
articles from	(1)	25 47.2%	23 34.8%	48 40.3%
Chinese	(0)	12 22.6%	26 39.4%	38 31.9%
newspapers	(-)	53 = 100%	66 = 100%	119 = 100%

MASTER ANALYSIS SHEET 2

		Technical Institutes (56 returns) Returns per item/variable	Hong Kong Polytechnic (66 returns) Returns per item/variable	All Questionnaires (122 returns) returns per item/variable
Reading (Contd.)				
2e non-technical material from Chinese publication	(3)	14 26.4%	6 9.1%	20 16.8%
	(2)	10 18.9%	13 19.7%	23 19.3%
	(1)	13 24.5%	21 31.8%	34 28.6%
	(0)	16 30.2%	26 39.4%	42 35.3%
	(-)	53 = 100%	66 = 100%	119 = 100%
2f test/exam. papers produced in Chinese	(3)	- -	3 4.6%	3 2.5%
	(2)	5 9.4%	1 1.5%	6 5.1%
	(1)	10 18.9%	5 7.7%	15 12.7%
	(0)	38 71.7%	56 86.1%	94 79.7%
	(-)	53 = 100%	65 = 100%	118 = 100%
2g text-books published in English	(3)	42 77.8%	56 88.9%	98 83.8%
	(2)	11 20.4%	6 7.9%	16 13.7%
	(1)	1 1.8%	1 1.6%	2 1.7%
	(0)	- -	1 1.6%	1 0.8%
	(-)	54 = 100%	63 = 100%	117 = 100%
2h notes/handouts written in English	(3)	47 87.0%	62 95.4%	109 91.6%
	(2)	5 9.3%	2 3.0%	7 5.9%
	(1)	2 3.7%	- -	2 1.7%
	(0)	- -	1 1.5%	1 0.8%
	(-)	54 = 100%	65 = 100%	119 = 100%
2i articles from English technical publications	(3)	16 30.2%	31 47.7%	47 39.8%
	(2)	19 35.8%	24 36.9%	43 36.4%
	(1)	11 20.7%	7 10.8%	18 15.2%
	(0)	7 13.2%	3 4.6%	10 8.5%
	(-)	53 = 100%	65 = 100%	118 = 100%
2j technical articles from English newspapers	(3)	9 17.0%	19 29.2%	28 23.7%
	(2)	17 32.1%	23 35.4%	40 33.9%
	(1)	15 28.3%	18 27.7%	33 28.0%
	(0)	12 22.6%	5 7.7%	17 14.4%
	(-)	53 = 100%	65 = 100%	118 = 100%
2k non-technical material from English publications	(3)	3 5.7%	11 16.9%	14 11.9%
	(2)	13 24.5%	23 35.4%	36 30.5%
	(1)	23 43.4%	20 30.8%	43 36.5%
	(0)	14 26.4%	11 16.9%	25 21.2%
	(-)	53 = 100%	65 = 100%	118 = 100%
2l test/exam. papers produced in English	(3)	39 73.6%	58 93.5%	97 84.3%
	(2)	10 18.9%	3 4.8%	13 11.3%
	(1)	4 7.5%	- -	4 3.5%
	(0)	- -	1 1.6%	1 0.9%
	(-)	53 = 100%	62 = 100%	115 = 100%

MASTER ANALYSIS SHEET 3

		Technical Institutes (56 returns) Returns per item/variable	Hong Kong Polytechnic (66 returns) Returns per item/variable	All Questionnaires (122 returns) Returns per item/variable
Speaking				
3a answering questions in Cantonese	(3)	10 18.2%	7 10.6%	17 14.0%
	(2)	28 50.9%	11 16.7%	39 32.3%
	(1)	13 23.6%	20 30.3%	33 27.3%
	(0)	4 7.3%	28 42.4%	32 26.4%
	(-)	55 = 100%	66 = 100%	121 = 100%
3b asking questions in Cantonese	(3)	17 31.5%	8 12.1%	25 20.8%
	(2)	26 48.1%	19 28.8%	45 37.5%
	(1)	10 18.5%	21 31.8%	31 25.8%
	(0)	1 1.8%	18 27.3%	19 15.8%
	(-)	54 = 100%	66 = 100%	120 = 100%
3c giving technical talks in Cantonese	(3)	5 9.4%	4 6.0%	9 7.6%
	(2)	25 47.2%	7 10.6%	32 26.9%
	(1)	19 35.8%	23 34.8%	42 35.3%
	(0)	4 7.5%	32 48.5%	36 30.2%
	(-)	53 = 100%	66 = 100%	119 = 100%
3d joining class room disscussions in Cantonese	(3)	15 28.3%	7 10.6%	22 18.5%
	(2)	19 35.8%	14 21.2%	33 27.7%
	(1)	14 26.4%	31 47.0%	45 37.8%
	(0)	5 9.4%	14 21.2%	19 16.0%
	(-)	53 = 100%	66 = 100%	119 = 100%
3e engaging in technical conversations in Cantonese	(3)	11 20.7%	7 10.6%	18 15.1%
	(2)	26 49.1%	11 16.7%	37 31.1%
	(1)	13 24.5%	27 40.9%	40 33.6%
	(0)	3 5.7%	21 31.8%	24 20.2%
	(-)	53 = 100%	66 = 100%	119 = 100%
3f speaking on non-technical matters in Cantonese	(3)	14 26.4%	11 16.7%	25 21.0%
	(2)	12 22.6%	9 13.6%	21 17.6%
	(1)	22 41.5%	22 33.3%	44 37.0%
	(0)	5 9.4%	24 36.4%	29 24.4%
	(-)	53 = 100%	66 = 100%	119 = 100%
3g discussing course-work in Cantonese	(3)	28 51.8%	33 50.8%	61 51.3%
	(2)	19 35.2%	19 29.2%	38 31.9%
	(1)	3 5.6%	9 13.8%	12 10.1%
	(0)	4 7.4%	4 6.1%	8 6.7%
	(-)	54 = 100%	65 = 100%	119 = 100%
3h answering questions in English	(3)	21 40.4%	52 80.0%	73 62.4%
	(2)	25 48.1%	7 10.8%	32 27.3%
	(1)	5 9.6%	5 7.7%	10 8.5%
	(0)	1 1.9%	1 1.5%	2 1.7%
	(-)	52 = 100%	65 = 100%	117 = 100%

MASTER ANALYSIS SHEET 4

		Technical Institutes (56 returns) Returns per item/variable	Hong Kong Polytechnic (66 returns) Returns per item/variable	All Questionnaires (122 returns) Returns per item/variable
Speaking (Contd.)				
3i asking questions in English	(3)	23 43.4%	52 78.8%	75 63.0%
	(2)	20 37.7%	8 12.1%	28 23.5%
	(1)	9 17.0%	4 6.1%	13 10.9%
	(0)	1 1.9%	2 3.0%	3 2.5%
	(-)	53 = 100%	66 = 100%	119 = 100%
3j giving technical talks in English	(3)	16 30.2%	24 36.4%	40 33.6%
	(2)	18 34.0%	23 34.8%	41 34.4%
	(1)	14 26.4%	11 16.7%	25 21.0%
	(0)	5 9.4%	8 12.1%	13 10.9%
	(-)	53 = 100%	66 = 100%	119 = 100%
3k joining classroom discussions in English	(3)	11 20.7%	26 39.4%	37 31.1%
	(2)	18 34.0%	23 34.8%	41 34.4%
	(1)	16 30.2%	11 16.7%	27 22.7%
	(0)	8 15.1%	6 9.1%	14 11.8%
	(-)	53 = 100%	66 = 100%	119 = 100%
3l engaging in technical conversations in English	(3)	10 18.9%	26 39.4%	36 30.2%
	(2)	18 34.0%	25 37.9%	43 36.1%
	(1)	18 34.0%	9 13.6%	27 22.7%
	(0)	7 13.0%	6 9.1%	13 10.9%
	(-)	53 = 100%	66 = 100%	119 = 100%
3m speaking on non-technical matters in English	(3)	4 7.5%	18 27.3%	22 18.5%
	(2)	8 15.1%	23 34.8%	31 26.0%
	(1)	23 43.4%	16 24.2%	39 32.8%
	(0)	18 34.0%	9 13.6%	27 22.7%
	(-)	53 = 100%	66 = 100%	119 = 100%
3n discussing course-work in English	(3)	1 2.0%	37 56.9%	38 32.8%
	(2)	12 23.5%	17 26.1%	29 25.0%
	(1)	16 31.4%	3 4.6%	19 16.4%
	(0)	22 43.1%	8 12.3%	30 25.9%
	(-)	51 = 100%	65 = 100%	116 = 100%

MASTER ANALYSIS SHEET 5

		Technical Institutes (56 returns) Returns per item/variable	Hong Kong Polytechnic (66 returns) Returns per item/variable	All Questionnaires (122 returns) Returns per item/variable
Writing				
4a answers to technical questions in Chinese	(3)	- -	3 4.5%	3 2.5%
	(2)	5 9.4%	2 3.0%	7 5.9%
	(1)	12 22.6%	9 13.6%	21 17.6%
	(0)	36 67.9%	52 78.8%	88 73.9%
	(-)	53 = 100%	66 = 100%	119 = 100%
4b at length on technical subjects in Chinese	(3)	- -	2 3.0%	2 1.7%
	(2)	5 9.4%	3 4.5%	8 6.7%
	(1)	12 22.6%	8 12.1%	20 16.8%
	(0)	36 67.9%	53 80.3%	89 74.8%
	(-)	53 = 100%	66 = 100%	119 = 100%
4c at length on non-technical subjects in Chinese	(3)	1 1.9%	3 4.5%	4 3.4%
	(2)	5 9.4%	3 4.5%	8 6.7%
	(1)	15 28.3%	20 30.3%	35 29.4%
	(0)	32 60.4%	40 60.6%	72 60.5%
	(-)	53 = 100%	66 = 100%	119 = 100%
4d letters in Chinese	(3)	5 9.6%	4 6.1%	9 7.6%
	(2)	6 11.5%	6 9.1%	12 10.2%
	(1)	12 23.1%	30 45.4%	42 35.6%
	(0)	29 55.8%	26 39.4%	55 46.6%
	(-)	52 = 100%	66 = 100%	118 = 100%
4e answers to technical questions in English	(3)	41 74.5%	57 87.7%	98 81.7%
	(2)	11 20.2%	6 9.2%	17 14.2%
	(1)	2 3.6%	1 1.5%	3 2.5%
	(0)	1 1.8%	1 1.5%	2 1.7%
	(-)	55 = 100%	65 = 100%	120 = 100%
4f at length on technical subjects in English	(3)	30 56.6%	45 69.2%	75 63.6%
	(2)	11 20.7%	16 24.6%	27 22.9%
	(1)	8 15.1%	2 3.1%	10 8.5%
	(0)	4 7.5%	2 3.1%	6 5.1%
	(-)	53 = 100%	65 = 100%	118 = 100%
4g at length on non-technical subjects in English	(3)	8 15.1%	22 33.8%	30 25.4%
	(2)	18 34.0%	20 30.8%	38 32.2%
	(1)	10 18.9%	17 26.1%	27 22.9%
	(0)	17 32.1%	6 9.2%	23 19.5%
	(-)	53 = 100%	65 = 100%	118 = 100%
4h letters in English	(3)	6 11.8%	19 29.2%	25 21.5%
	(2)	19 37.2%	21 32.3%	40 34.5%
	(1)	12 23.5%	13 20.2%	25 21.5%
	(0)	14 27.4%	12 18.5%	26 22.4%
	(-)	51 = 100%	65 = 100%	116 = 100%

MASTER ANALYSIS SHEET 6

		Technical Institutes (56 returns) Returns per item/variable	Hong Kong Polytechnic (66 returns) Returns per item/variable	All Questionnaires (122 returns) Returns per item/variable
Writing (Contd.)				
4i notes from oral sources in Chinese or English	(3)	12 23.5%	35 55.6%	47 41.2%
	(2)	15 29.4%	17 27.0%	32 28.1%
	(1)	16 31.4%	4 6.3%	20 17.5%
	(0)	8 15.7%	7 11.0%	15 13.2%
	(-)	51 = 100%	63 = 100%	114 = 100%
4j notes from oral sources in Chinese only	(3)	1 1.9%	3 4.6%	4 3.4%
	(2)	3 5.7%	6 9.2%	9 7.6%
	(1)	22 41.5%	26 40.0%	48 40.7%
	(0)	27 50.9%	30 46.1%	57 48.3%
	(-)	53 = 100%	65 = 100%	118 = 100%
4k notes from oral sources in English only	(3)	20 37.0%	41 64.1%	61 51.7%
	(2)	13 24.1%	16 25.0%	29 24.6%
	(1)	17 31.5%	5 7.8%	22 18.6%
	(0)	4 7.4%	2 3.1%	6 5.1%
	(-)	54 = 100%	64 = 100%	118 = 100%
4l notes in Chinese or English from published sources	(3)	4 7.5%	22 34.4%	26 22.2%
	(2)	20 37.7%	33 51.6%	53 45.3%
	(1)	19 35.8%	8 12.5%	27 23.1%
	(0)	10 18.9%	1 1.6%	11 9.4%
	(-)	53 = 100%	64 = 100%	117 = 100%
4m notes in Chinese only from published sources	(3)	- -	2 3.1%	2 1.7%
	(2)	9 17.0%	11 16.9%	20 16.9%
	(1)	21 39.6%	28 43.1%	49 41.5%
	(0)	23 43.4%	24 36.9%	47 39.8%
	(-)	53 = 100%	65 = 100%	118 = 100%
4n notes in English only from published sources	(3)	7 12.7%	27 41.5%	34 28.3%
	(2)	25 45.4%	26 40.4%	51 42.5%
	(1)	15 27.3%	9 13.8%	24 20.0%
	(0)	8 14.5%	3 4.6%	11 9.2%
	(-)	55 = 100%	65 = 100%	120 = 100%

REVIEWS

NUCLEUS (ENGLISH FOR SCIENCE AND TECHNOLOGY) ENGINEERING
Tony Dudley-Evans, Tim Smart and John Wall (Longman, 1978.)

That *Nucleus: Engineering* (henceforth NE for short) forms part of a series designed originally for first year science students at the University of Tabriz, in Iran, is presumably by now well-known to all who are ever likely to read this review. My intention is to review the book in isolation, which is to say that I shall not consider its links with the 'core' book of the series *Nucleus: General Science*, as I do not envisage both books being taught consecutively to many students in the same institution, and it is claimed on the cover that NE may be used by itself. Since there is a useful and easily available article by Bates (1977) which describes the background to, and structure of, the whole Nucleus series, it seems only sensible to evaluate NE partly with reference to this.

NE is, in a sense, a 'state of the art' ESP course, as it reflects in published form several of the ideas that many of us have been using for some time in internally produced courses for Engineering students. There are, it seems to me, at least seven ways in which NE is, or claims to be, up-to-date, and so some discussion of these can usefully form the first part of the article. What follows is really a preliminary review. I leave to someone else the definitive review after having tried to use the course with several classes.

1. *NE integrates English with Engineering.*

This statement is not quite so trite as it sounds. NE shows all the marks of careful collaboration with a professional engineer: for example, the careful distinction between stress and strain (in Revision Unit C) and the plethora of excellent engineering examples. I have seen few courses which have married English language teaching and scientific content so well. It is a pity that what ought to be the standard procedure when writing any ESP course is so rare as to be worth commenting on when it does occur! This said and done, two questions need to be asked in this connection:

(A) *Are the contents accurate?*

The answer seems to be yes. And again, it is all too seldom that one can say this. I have only two small quibbles to make. The first is on page 93, where English usage would consider  as a trapezium and  as a parallelogram, and not the other way round. The second is on page 76. Ohms Law is expressed verbally as an illustration of how ratios may be described in English. It is important to realise that the Law would not normally be taught in exactly these terms; it is being used simply to illustrate a precise point in the English language. 'Given that the circuit resistance remains constant, the current increases as the potential difference increases... In other words the current is directly proportional to the potential difference.' The adverb 'as' simply states that both increase. It does not, strictly, imply linearity (*ie* that the ratio between the two is constant).

(B) *Are the contents relevant?*

What is 'relevant' will clearly vary from institution to institution, depending on the course structure and the educational

background of the students. Bates offers a profile of Tabriz students as having typically a 'patchy knowledge of their subject'(95) and 'little experience, if any, of laboratory or workshop'(80). Assuming these views are reflected in the design of the published version, it is a little surprising to find that report writing (of experiements and procedures) is not introduced until the eleventh of twelve units. These views also presumably account for the exploitation of several very elementary concepts and the avoidance of teaching verbal realisations of all but the simplest mathematics. I find this last point particularly odd considering the emphasis put on Maths. in the Persian educational system. In terms of Hong Kong students at least, I would highlight the following as far too elementary to motivate bright 18-to 19-year-olds:

(i) *The difference between a vector and a scalar (Unit 4).*

I would like to register a plea to ESP course writers to avoid simplistic descriptions of things that are second nature to science students.

(ii) *Fleming's Right-Hand Rule (Unit 12).*

Even a non-specialist in science like myself did this at O Level!

(iii) *The description of EMF (Revision Unit B).*

It would not be unfair, I think, to say that no student who does not know how to use a voltmeter should be allowed near an engineering degree course.

(iv) *The examples of probability (Unit 10).*

Although I agree it is necessary to teach that the adjectives 'high' and 'low' tend to be used vaguely when describing probability, I think some reflection of the fact that students can recognise a normal curve when they see one might have been built in to heighten motivation somewhat. It is unfortunate that the particular sentence forms used to drill the adjectives involve end-focus and as such tend to be used more for the expression of quantitative measures of probability:

> The probability of this machine producing a component greater than 49.995 *mm* in diameter is considerable (versus, for example, 'is 0.87'). (89)

Bates points out that each book in the series tries to achieve 'reasonable coverage of the different aspects of the subject' (93). I would like to take issue with this. Given the shortness of time available on service courses, and the need to be as effective as possible, I think it is pedagogically preferable to teach a few points well, rather than many in insufficient breadth and/or depth. For this reason I am unhappy about the way in which students are taught to describe the layout and assembly of parts of a machine. These seem to me extremely important topics, and no less important than describing processes, which are dealt with in depth. Secondly, I would question the need to take *all* examples from engineering course

books (or from school science books). Apart from the fact that the course becomes rather boring, there is the problem of balancing the examples to cover Mechanical, Civil, Electrical, and Electronic Engineering, not to mention smaller subjects like Industrial and Production Engineering. The result is that no single student who specialises in his first year will find the book useful in its entirety. In this particular case, the book seems aimed at Mechanical and Civil Engineering students. I think it would have been better to have overtly limited the scope of the book, say, to Mechanical and Industrial Engineering. Failing this, two techniques which I have used, without howls of student protests, spring to mind. They are:

(a) Using examples which have nothing to do with engineering, particularly ones which are purely humorous.

(b) Exploiting a 'neutral' topic. I have found that hi-fi and audio-visual equipment is excellent for this purpose, as numerous concepts and principles are involved; and, as the devices are usually generously endowed with controls of all shapes and sizes, students tend to be extremely interested in it. The teacher tends to understand a microphone better than, say, the power-traverse shaft of a lathe. And lastly, the equipment can easily be brought into the language classroom.

2. *NE employs a conceptual syllabus.*

Each of the 12 units of the course takes a particular scientific concept as theme (not to be confused with 'semantico-grammatical concepts' in the sense of Wilkins 1976, or Leech and Svartvik 1975). The list is as follows:

1 Properties.
2 Location.
3 Structure.

(Revision Unit A.)

4 Measurement 1.
5 Process 1. Function and Ability.
6 Process 2. Actions in Sequence.

(Revision Unit B.)

7 Measurement 2. Quantity.
8 Process 3. Cause and Effect.
9 Measurement 3. Ratio and Proportion.

(Revision Unit C.)

10 Measurement 4. Frequency, Tendency, Probability.
11 Process 4. Method.
12 Consolidation.

Bates claims that the advantages of a conceptual syllabus include:

(i) Concepts form a bridge between the student's knowledge of his subject and the expression of that knowledge in the target language. Thus you are building on what the student already knows, and doing it in a way he can understand.

(ii) Any given concept lets you bring together different levels of linguistic and rhetorical description and choice. Hence it is easy to include remedial elements (for examples as regards syntax) without losing sight of the whole field. This means that a conceptual approach is particularly suited to post-intermediate level courses, where one is filling gaps in the learner's knowledge.

(iii) It is just as important to understand the concept that a text is expressing at a given moment as it is to understand the rhetorical or logical structure of the text. Indeed, understanding the concept expressed would seem logically prior to understanding niceties of cohesion. It is also true that one does not need to use a 'metalanguage' that the student does not understand to express 'measurement', whereas one does to explain 'induction'. To this one might add that many working scientists have little active knowledge of (or interest in, for that matter) the linguistic expression of aspects of 'the philosophy of science', which seems to hold a peculiar fascination for many non-scientists.

I find these arguments highly convincing, and I have found conceptual syllabuses excellent for courses where the emphasis is on writing. This is particularly true in the case of very short courses, where one can rapidly obtain a marked improvement in a limited area. However, NE claims to be more concerned with reading and listening (Bates, p.78). It is therefore a little worrying that so little effort is devoted to teaching the skills involved in either. Comprehension questions involving aspects of cohesion are testing not teaching the subject (*eg,* p.108). The above is not to imply that the syllabus should be based around the rhetorical structure of texts, but it does imply that some skills be isolated and actually taught. Lastly, I am not personally convinced that a short course should concentrate on reading rather than writing. What surveying I have done suggests that first year engineering students, in England and Hong Kong at least, are not required to read very much, whereas they are asked to write. What I am perhaps saying is that a clear distinction really needs to be made by both course writers and publishers between courses aimed at students whose medium of instruction is English, as is the case at Hong Kong University, for example, and those aimed at students who simply need access to English journals and textbooks. Again, we need to ask two questions about the particular syllabus used for NE:

(A) *Is the result acceptable?*

Given that the course was not researched in any depth (Bates, p.86), the result is remarkably good. Minor complaints, apart from the above, include the desire, already mentioned, to see a more comprehensive approach to 'layouts' and 'assembly'. It is perhaps justifiable to omit describing 'complexes of shapes' and 'patterns', and I think it was a sensible decision to play down 'classification' and 'definition', neither of which first year students are ever asked to actually produce, other than by verbatim reproduction. As regards Hong Kong students at least, too much time is spent in Unit 1 presenting basic technical lexis like 'tensile'. Out of an ESP class of 17 Civil and Electrical engineering students at the University of Hong Kong, all but two knew about 95% of the terms by their second week.

(B) *Can the syllabus be ordered?*

It is possible to sequence this type of syllabus in various ways. The two adopted for NE are precisely the ones we have used at Hong Kong University. First, one may assume that in most cases it is pedagogically desirable to describe 'static' concepts before 'dynamic' ones; hence 'structure' precedes 'actions in sequence'. Secondly, one may use the relationship 'We need X in order to be able to discuss Y'; hence 'location' is needed for a discussion of 'assembly' or 'structure', and this is needed before one can look at how that assembly actually works. Measure is involved at all levels, and so the decision to have aspects of measurement occurring at various points throughout the course seems a highly sensible one.

3. *NE employs problem-solving.*

Problem-solving exercises have by now become an uncontroversial feature of 'communicative' or 'cognitive' language courses. Problem-solving tends to be emphasised in science-based courses, since science students spend much of their time solving mathematical problems. Hence NE asks students to label diagrams, do simple calculations, decide whether statements are true or false, draw conclusions from passages and tables, and complete gapped passages which rework some of the information. This is fine, though it should be noted in passing that the moment a student gets a wrong answer, say, to a calculation, or objects to the fact that X not Y is being calculated, the teacher of English becomes, to a minimal degree, a teacher of Maths., Statistics, or Engineering. It is not possible to teach an ESP course without some understanding of the concepts and mathematics behind the particular academic subject, nor is it possible completely to avoid 'teaching the subject' unless the course writer entirely avoids (in this case) engineering examples. I am disappointed that the authors have not gone somewhat further in the design of activities that are both purposeful and imaginative. None of the exercises seem to involve students moving around the classroom or finding creative solutions to problems. It is only a partial justification to say that a number of the exercises are mechanistic because students like and are used to this type of exercise (Bates, p.83). I might perhaps highlight two activities from the University of Hong Kong course:

(i) Students are first shown a set of stripped-down typewriters at each end of the room. They are then divided into small groups. Each group has to examine, trace and diagram one sub-mechanism of one of the typewriters, for example the 'back-space' key. They must then put this into words — one agreed version per group — and record their version on tape, so that someone who cannot see the typewriters can draw a diagram of the mechanism.

(ii) Students are given one hour to solve a problem and write up their solution. One problem was to design a portable noise reduction unit for air conditioning ceiling vents that is lightweight, of simple construction, and cheap to produce. The write-up was to consist of a labelled diagram plus a paragraph describing (a) the construction, and (b) how it works.

4. *There is considerable use of graphics.*

The graphics are mostly line drawings and are of a good standard, being clear to both eye and brain. Diagrams offer the course designer an excellent way to avoid lengthy instructions. They really come into their own where writing is involved, as they offer precise control over student output without appearing mechanistic. I realise that NE is not primarily a writing course, but I still feel that more could have been made of diagrams. My instinctive feeling is that NE is an example of a course which presents the student with too many words.

5. *The exercises do not derive from an initial reading passage.*

Each unit begins with Presentation material in the form of diagrams and short sentences, continues with Exploitation material (called Development) which involves sets of exercises and activities, and finishes with a reading passage and then a listening passage (available separately on tape). The structure of the unit is made quite clear to the student. Far too few course designers, it seems to me, really examine the structure of their units. NE is good in that it avoids the standard pitfalls, like ending the unit with the only 'free' writing exercise, for which no model is provided, so that writing becomes simply a test of the extent to which the unit has been assimilated. I also like the decision to prepare for the 'receptive' reading and listening passages *via* a series of 'productive' exercises, reversing the all-too-common progression from receptive to productive skills, which many designers simply assume to be the best solution without really thinking out why they are doing it.

6. *The exercises (almost) feed into each other.*

By 'feeding' I mean that the output from one exercise serves as input to the next (either by itself or in combination with material fed in at this point). This technique has many applications, one of which is notetaking, where the student listens to a passage and takes notes. He then uses part of this information to fill in, say, a diagram. The diagram then combines with a piece of writing and the student is asked to make a comparison of two methods. This can be continued as far as the designer wants. NE does not quite get this far, apart from a small example on Unit 11. One reason would seem to be the decision to always *end* the unit with the listening passage. However, certain groups of exercises come near to having this feeding relationship. For example, in Unit 8 the student looks at a table illustrating the effects of alloying elements on alloy steels. He then goes on to describe these effects verbally, and then has to use that verbal ability and the chart to decide which alloy he would use in making certain items. He then moves to a reading passage examining the effects of carbon on steel and, finally, must draw three graphs based on some of the information in the passage.

7. *NE involves humour.*

The claim is made by Bates (p.85). To this my reaction is 'excellent', except that I cannot find the slightest trace of humour anywhere in the book. It is, I feel strongly, an important omission. It seems to be a common side effect of publishing material written originally for restricted use that zany humour, particularly, is considered to be unmarketable and is therefore removed.

The second part of my review consists of a detailed look at one Unit, chosen more or less at random.

Unit 11. Process 4. Method.

The title may seem a little confusing, since the unit includes not only sets of instructions for doing something but also write-ups of experiments and descriptions of standard procedures. It seems to me that the term 'process' is not normally used to describe an experiment, and write-ups of both procedures and experiments involve more than a statement of how the experimenter performed his task, or the tester got the process to work, which is what I understand 'method' to mean. So, I find the use of 'method' inappropriate, and I do not consider that 'process' is related closely either to 'method' or to the contents of Unit 11.

Presentation

The unit begins by taking a series of simple plane figures (like a rectangle) and a cylinder, and getting the student to (i) define them informally, on the model 'An X may be defined as...', then (ii) describe how their area and perimeter may be calculated. The student is asked to use passives, and possibly some auxiliary verbs to indicate possibility: '(if it is so desired,) X may be calculated by...'. The definition sentences are not particularly emphasized, and seem to be included simply to provide another context for using passives. It does seem to me, however, that the description of the calculations is what one might call 'lecturer language' rather than 'student language'. Since this particular unit involves much more extended writing than the others, I think that something which approximates more to what students actually do when they write reports could have easily been substituted.

We now move from expressing what 'may be done' to what 'normally is done'. Beyond this point the Presentation stops and the student is left to work out for himself the fact that experiments relate to what actually was done. The student is presented with diagrams of four types of gauge and a table listing their typical applications. The size of the drawings appears, for some unknown reason, to be in inverse proportion to the size of the actual objects represented. Nevertheless, the drawings are highly detailed and take up approximately a whole page. It is unfortunate that the student does nothing with them, except look at them; something could easily have been devised to exploit what must have taken the artist some time to draw. Anyway, having read the table, the student is asked to compose his own question-and-answer sequences (in reality this would be done as pair practice) of the form:

Q : If we want to measure the internal diameter of a component, which instrument should we use?

A : We should use a vernier caliper. (95)

The intention is, I assume, to turn a comprehension test into a productive interactive drill. Despite this, several points do need to be raised about this Q:A sequence:

1. *Linguistic points*

(a) The use of 'we' as subject seems rather improbable in the question, and I would regard it as almost unacceptable in

the answer, at least with the meaning of '*one* would use an X'. It would not have been difficult to have substituted 'you'.

(b) The repetition of 'we should use' in the response is most improbable. I suppose 'You'd use an X' is in fact possible, though I am sure the most probable answer would be simply 'An X'. If the writers want to show how informal language would tend to use actives rather than passives, a better example should be found. I have long believed that one guide to evaluating a course book is to see how successful the writer has been in cueing non-deleted forms in a natural way.

2. *Pedagogic points*

The exercise is not entirely mechanical, since for the hearer there is an element of unpredictability about what he will be asked. The main objection is that there is no purpose at all to the dialogue; there is not the slightest reason for the communication to take place and, since the answers are given, it does not even simulate a *viva*. This all suggests, to me at any rate, that the drill should be rethought.

At this point in the book there is a second series of four diagrams of discrete items, this time drawing or scribing instruments, and this time with their functions given as captions beneath the relevant drawings. The language becomes formal again and passives are used. Formality is taken as implying monologue, not dialogue, and the drill for these items is simply a sequence of two substitution boxes, from which the student must (i) produce two sets of grammatical clauses and (ii) coherently match the sets. This may be done orally round the class, but nevertheless still remains somewhat purposeless.

Development

We now move on to two simulated experiments. The first acts as a linguistic model for the second, where the student is expected to write his own report.

Experiment 1. Tensile strength test

The student is introduced to all parts of a report at the same time. Experiment 1 involves going directly from a set of single-sentence illustrated instructions ('Insert X into Y') to a complete report. There are several aspects of this that are questionable. If the course designer definitely decides to include experimental reports in the main part of the course, rather than as a separate Appendix, which the teacher may exploit as and when he pleases; which means not being forced to leave it to the end of the course. It should be recognised that a report is a complex product involving numerous skills, most of which require overt teaching. Since this is true for native speakers of English, it is even more true of non-native speakers. There is no reason at all why the various sections of a report cannot be split up and treated to some degree separately. A few remarks will hopefully illustrate what I mean.

1. The *Method* section relates to what may, versus what may not, be copied verbatim from a laboratory card or handout. There is no point in wasting time composing this section from scratch. What is important, therefore, is to show the student how and when to diverge from the card. Now Experiment 1 makes little or no attempt to do this overtly, though several highly sensible points/strategies do find their way, unannounced, into the model report: for example, adding the reason for an action ('X was done in order for...'), or again, adding precise points/values where limits were reached, rather than simply copying the intentionally vague statements on the card ('Do X until limit Y is reached'). However, no attempt is made to isolate and *teach* these skills, and several are more or less omitted anyway. To name but three of the eight or so which spring to mind:

Removing choice.	'Do X or Y.'
Removing uncertainty.	'You may find that Z happens.'
Translating warnings of various kinds.	'Make quite sure you do not set fire to X.' 'Try not to set fire to X.'

2. The *Conclusion* section will relate to the results and the initial survey of the literature (which often seems to be demanded, but is totally ignored in this course). It will involve a degree of summarising, comparing one's own results with the expected ones, assessing the significance of the results obtained and the accuracy of the method employed to obtain them, and drawing information from the graph or chart *etc* used to display the results (as against translating the chart into words — a distinction that seems to need teaching in many cases, as the language used will be quite different), which itself involves numerous 'concepts' and skills.

There is then some relevance in looking at what precise help NE gives the student. He is told simply two things. First, he is told to rewrite the instructions given for the tensile test ('Insert X...') more formally and impersonally as 'X should be inserted...' This does not seem particularly helpful when it comes to writing reports, though it might be claimed that it is a useful use of the passive. Secondly, he is told to delete the auxiliary and 'be' in conjoined sentences with identical subjects; 'X should be removed and weighed'. This is extremely useful when it comes to linking together different instructions in the Method section. So, all in all, not much help is forthcoming.

Whereas the Method section is provided as a complete model answer, the student must perform a small mathematical calculation to complete the Results section, and then use this information to complete a gapped Conclusion paragraph (a small example of one exercise feeding into another). The latter is acceptable, I suppose, given the 'inductive' approach of this whole unit. There is some irony in the fact that the student is asked to do a percentage increase calculation, which is quite elementary, while the verbalisation of percentages, which is extremely difficult, is omitted entirely from the course.

Experiment 2. Izod Test, to indicate toughness

This time the 'cue' is rather more realistic. There is a paragraph describing the test — from which the student must produce an 'object of

the Experiment' section — a diagram of the equipment to be used and a set of instructions in the form of a second connected paragraph. Some results are given and the Conclusion is presented as a guided composition. Although the table of values for the different materials do cue a conclusion using 'comparisons' fairly well, there seem to me to be two obvious design faults in this exercise:

1. The results are presented as 'typical values', yet the student must write up the experiment using the particular values he has obtained, which may well vary from the 'typical' values. Experience has shown that extremely careful presentation is almost always necessary in order to get the student to write the report as if he had personally performed the experiment, and not as a description of a standard procedure. 'Typical' should be replaced by 'obtained'.

2. I feel that the Izod Test (as presented) is a poor context, since there is next to nothing to conclude that cannot be expressed equally well or more clearly by simply rank ordering the 'obtained values' according to degree of toughness. That is to say, there is no real need for the conclusion and its (verbal) comparisons.

Reading and listening passages

The reading passage is a description of a procedure known as the Slump Test (as it is a procedure, we would expect to find a number of Present Passive verb forms and a lack of the 'specificity' markers that are added into the Method section of an experimental write-up; none of this is pointed out to the student, however) for determining the consistency of concrete. We have here an encouraging, though unfortunately all too rare, example of split presentation involving: 1st part of text → questions → 2nd part of text → exercise on second part → activity involving both parts (and including extra information fed in at this point). The questions on the first part of the text are a standard set of random comprehension questions, but the second exercise is much more purposeful. The student is asked to rewrite Procedure 2 (a second, more accurate, means of determining the consistency of concrete, known as the 'Compacting Factor' Test) as a set of 'instructions for a building worker' (p.102). Despite this welcome appearance of a purpose, it seems to me, firstly, that such rewriting would be rather more appropriate to Procedure 1, 'which is often used on building sites' (p.101) than to Procedure 2, which 'is more often used in the laboratory than on site' (p.102); and secondly, that it is rather a waste of about half an hour of class time, since first-year students are unlikely ever to have to write lists of instructions, and particularly since, almost anywhere apart from Britain itself, the average building worker is highly unlikely to have a good working knowledge of English, and almost certainly would not use English for this sort of purpose.

At this point in the book the student is introduced to two new things:

1. *Text organisation.* This is then exploited, rather neatly, as a checklist of headings for notetaking when listening to the taped passage at the end (which describes the Crushing Test).

2. *Comparisons.* The student's attention is drawn to the relevant lexis, like *the former* and *whereas* (italics are used in the text), though it seems to me that the unemphasised syntax is equally, if not more, important: 'X differs from Y *in that* (Sentence)'. One might wonder why Comparisons are introduced *after* the only experimental write-up that the student has to do in the book.

Lastly, the student listens to the taped passage, and, having made his notes, answers a few traditional, and somewhat purposeless, comprehension questions. He is then asked to write out the procedure as a set of instructions (his third in the unit), only this time no purpose whatsoever is specified, no level of formality is suggested (bearing in mind that the student has just been introduced to three levels of formality) with regard to writing instructions (neutral: 'Do X', highly formal: 'X should be done', and what would in reality probably be quite informal: 'the instructions for the building worker') and no idea is given as to the intended reader.

Conclusions About Unit 11

My overall conclusions are that there is too much in the unit, with the inevitable result that nothing is taught adequately. The student is left to work out all the difficult problems for himself. Part of the problem would seem to derive from trying to fit everything that one would wish to teach into a monolithic conceptual syllabus. I think it is clear that experimental write-ups do not fit happily into this schema, requiring an approach based more on strategies and skills than on concepts. I do not see that it would in any way destroy the value of the course to employ different frameworks serving different purposes within the same covers. Indeed, I would like to see it more generally accepted that the designer of ESP courses has a range of syllabus design methods available to him, and that he should use as wide a range of selection and grouping criteria as he feels is appropriate to the subject matter and the characteristics of his intended learners (not forgetting the teacher).

General Concluding Remarks

Firstly, I should point out that this review has been written without my having access to the teacher's book (for which reason, again, it should be considered as a preliminary review), but I would justify this by noting that the publishers have seen fit to publish the one but not the other at the time of writing, presumably intending the book to be actually used with classes.

Secondary, I would like to say that this should be seen more as a course writer's than a consumer's (to the extent that they are different people) review. Many of the ideas and reservations expressed are subjective (and necessarily so, since we do not have any totally objective course evaluation metric) in that they are based on my own experience of designing ESP courses for Engineering students. Any 'attacking' is done in the belief that it is only by close scrutiny of our products that we develop the subject. Despite the many reservations expressed in the main body of the review, I consider NE no worse, and indeed in many respects considerably better, than most science-based ESP courses that have been published to date.

Graham Low
Language Centre
University of Hong Kong

References

Bates, M. 1977. Writing Nucleus. In (ed.) R. Mackay and A. Mountford English for Special Purposes. Longman.

Bates, M. and Dudley-Evans, T. 1976. Nucleus: General Science. Longman.

Leech, G. and Svartvik, J. 1975. A Communicative Grammar of English. Longman.

Wilkins, D. 1976. Notional Syllabuses. Oxford.

ACOUSTICAL STUDIES OF MANDARIN VOWELS AND TONES
John Marshall Howie. (Cambridge University Press 1976. 280 pages. Tables, appendices, selected bibliography.)

One of the most important modern developments in the study of language has been the application of concepts and procedures from the physical sciences to the analysis of vocal sound. Dr. Howie, in the present study, has systematically applied experimental techniques to Mandarin, and for the first time obtained for us a clear and detailed description of each Mandarin vowel and tone in citation form. The description is based on the analysis of a set of Mandarin syllables, which include all representative allophones of every vowel phoneme in the occurrence of the four tones. Average formant frequencies and pitch patterns were obtained and consequently used as bases to produce a series of synthetic stimuli in perceptual tests. These tests were then presented to 14 native speakers for identification. The success rate in naming each syllable was high, thus making it possible to conclude that the acoustic parameters used in constructing the synthetic vowels and tones are in fact a valid general description of Mandarin vowels and tones.

In accepting this experimentally proven acoustic description, however, care must be directed to the fact that they are only acceptable average properties, and not actual properties, as the formant frequencies of each vowel are the result of the average behaviour of that vowel in its different environments. Whereas it may be useful to have the series of charts mapping out the acoustic domain of each vowel, attention should be drawn to the fact that they are not actual descriptions, and care should be taken to bridge this gap if they are to be used for teaching purposes. As for tonal descriptions, only the parameter pitch is considered. This may explain the high failure rate of identification in tests 15 and 16 where level pitch and whispered speech are used. While maintaining pitch as the most important cue for tonal perception as in many other tonal languages, Peking Mandarin also utilizes the parameter of length and loudness concurrently.(1)

The value of this book lies in its systematic approach to the analysis of Mandarin vowels and tones and the backing up of its acoustic description by perceptual experiments using synthetic materials. The data it offers helps to solve many problems in Mandarin phonology which would otherwise remain debatable and this is an asset to students and research workers examining the Chinese language. The methodology used in unfolding the acoustic properties of vowels and tones through perception is both refreshing and convincing, at a time when Chinese linguistics is mainly preoccupied with descriptive and historical phonology. I hope this work will stimulate a more vigorous survey of the prosodic features of other Chinese dialects and tonal languages.

A. Fok
Language Centre
University of Hong Kong

References

1 Kratochvil, P. 1970. The Chinese Language Today. London.