

CORRESPONDENCE EDUCATION

The most striking feature to emerge from any study of correspondence education is 'the vigour of this branch of adult education in spite of official neglect and scholarly disapproval'. Although correspondence education has attracted comparatively little attention in a large number of countries, from educationalists, official governmental bodies, a number of countries has made full use of its advantages for a long time. Australia and New Zealand have had correspondence education systems for more than fifty years. A study of Part One of this Report along with information from other sources makes it apparent that there is a large and growing interest in the use of correspondence education. This interest ranges from using correspondence education at early levels in the education system up through secondary, tertiary and into adult education. There are millions of people who do not have access to formal or conventional educational institutions. There are those who live in isolated areas; those in countries where educational establishments cannot cope with the numbers who wish to enrol; those who are physically or otherwise handicapped; those who have dropped out of the educational system but who wish to return to it; those whose education was interrupted and shift workers in urban areas who cannot attend an institution at regular hours.

By the very flexibility with which correspondence education can be adapted to the needs of the individual, it is possible for it to serve a wide variety of purposes. It has been shown that correspondence teaching is effective in all subjects which can be taught by the lecture method alone; indeed even in subjects in which practical demonstration or laboratory work are important, there has been a measure of success, particularly when the correspondence tuition has been reinforced by other techniques.

One of the many reasons for studying by correspondence is to gain professional or vocational qualifications which enable the student to increase his earning capacity. Here correspondence education for in-service teacher training is of considerable significance; there is a long history of its use for this purpose. This is perhaps one of the most effective areas in which correspondence education has been used.

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CORRESPONDENCE COURSE UNIT OF THE UNIVERSITY OF NAIROBI, KENYA

Introduction

In 1964 the Kenya Education Commission (led by Professor Ominde of the University of Nairobi) recommended inter alia a 'combination of lessons by radio with an approved correspondence course', and suggested that if the required facilities could not be provided by the already established commercial correspondence colleges 'it may...be necessary for the Ministry itself to enter the field of education by correspondence...'.
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Private commercial correspondence colleges had already begun to exploit the large market of adults for whom no other opportunity of secondary education existed. Clearly, it was appropriate for government to offer a non-profit-making correspondence course to meet this requirement. Additional powerful reasons arose through the imbalance of educational opportunity, created by scattered populations, poor communications and lack of trained teachers, and the need to create a sense of national unity amongst disparate ethnic groups. Statistics indicated that about 64% of the children aged between 7 and 11 were getting into primary schools. However, given a number who repeated their years, and others who dropped out, it could be that roughly 45% of this age group did not get into the formal school system. In wealthier areas, with high population densities and where the influence of Christian missions had been well established, the rate of attendance could have been as high as 80 - 85% but in other districts the rate was perhaps as low as 35% - which means that 65% of the young people did not get into the primary school system at all, and at the secondary level an even more serious problem emerged since this is the sector which provides most of the 'middle management' leadership in a newly independent country.

It was argued that an effective radio correspondence instruction system would help to increase access to schooling in less favoured areas and by making further education more widely available, it would enable citizens to advance themselves within the structure of society.

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Two years after the publication of the Commission's Report, the Government of Kenya sought technical assistance from USAID for the establishment of the Correspondence Course Unit (CCU) in the Institute of Adult Studies of the University of Nairobi. In 1969 the team from the University of Wisconsin, who had helped establish the unit, completed their work and withdrew, and responsibility for the work of the CCU was handed over to the University of Nairobi in March 1971. The CCU is now an integral part of the Institute of Adult Studies.

The primary objective is the in-service up-grading of primary school teachers. Unqualified teachers, who have had only seven years of elementary schooling, can obtain a recognized trained teacher's grading (P.3), if, after completing a correspondence course, including attendance at short residential courses, they successfully pass an end of course examination. Trained (P.3) teachers, who would normally have had seven years of primary education followed by two years of teacher training, can themselves be upgraded by passing a national examination (Kenya Junior Secondary Examination, KJSE). The Correspondence Course Unit offers a KJSE Preparatory Course for this.

As a subsidiary objective, the Unit also enrolls other adults for courses leading to the KJSE Certificate. This is popular with staff of both government and private organizations who seek promotion.

In the future the Unit intends to develop courses leading to higher certificates including first degrees.

User Profile

By April 1973 7,185 unqualified teachers and a further 2,464 other adult students had enrolled for courses.

An analysis indicates that school teachers comprised the majority (90%) with other students coming mainly from the armed forces, the police and prisons department and from the Kenya co-operatives. A 'typical student' is between 21 and 40 years old, male, married, and has more than four dependants, including members of his extended family. His house has no electricity and he owns very few books. He may have access to a very small library, but it is probably miles away and impossible for him to use regularly. He does not regularly buy a newspaper, but he does own a radio which is his principal source of news and information about the world outside his own small community. It is mainly for this reason that radio pro-

grammes prepared by the CCU and broadcast over Voice of Kenya are used to supplement the correspondence instruction. It has been established that a large proportion of the enrolled students make a point of listening to the radio programmes regularly, although many of them may be working through their lessons well ahead of, or behind, the radio schedules.

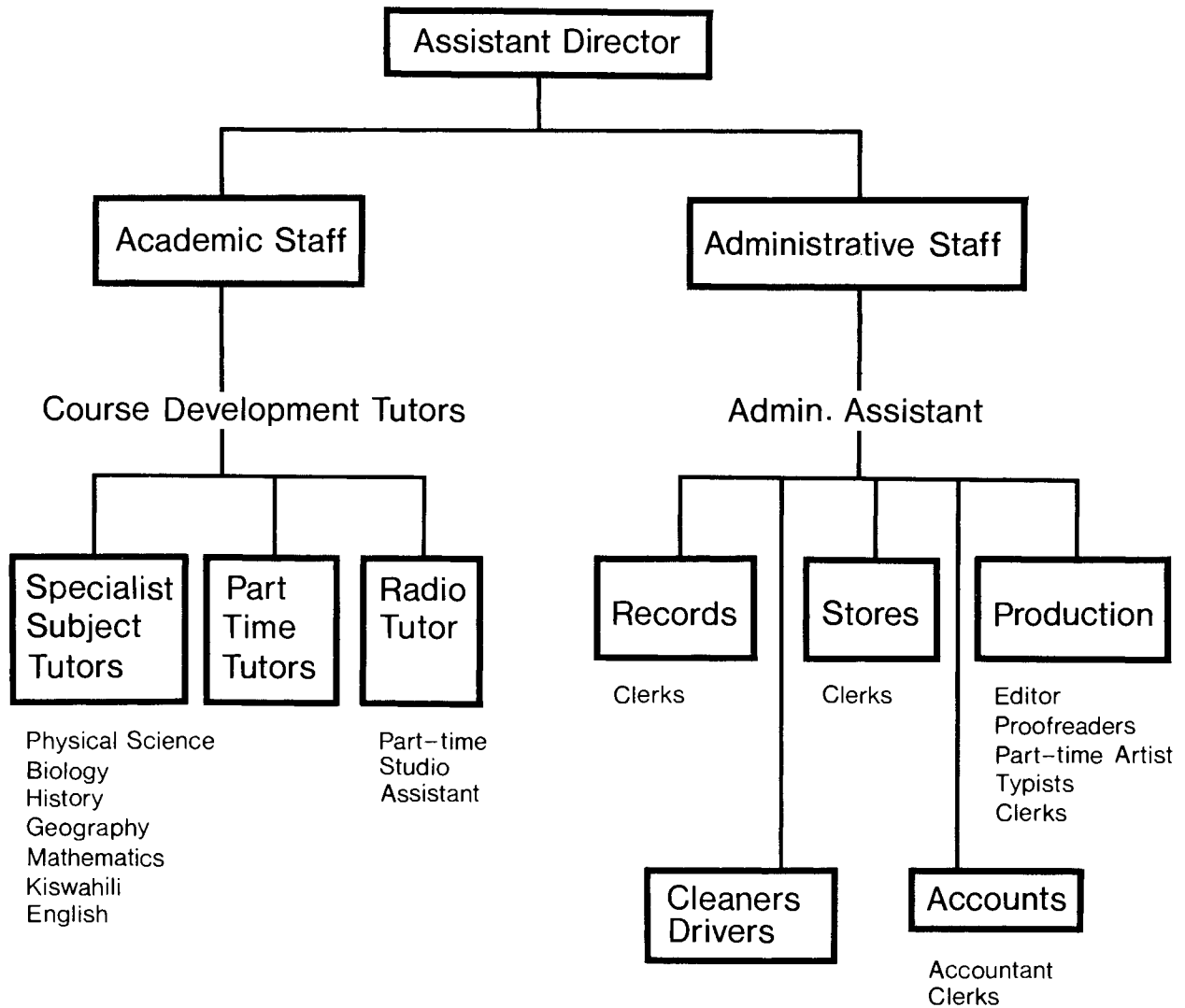
The Unit has long realized that, in addition to the enrolled students, many others have been using its study material in less formal ways. It is difficult to estimate the number, but there is evidence to suggest that about 20% of students pass on their material to other people. Further evidence of wider public benefit can be gleaned from surveys conducted in 1969 and 1970 by the Voice of Kenya, which claims that when CCU broadcasts are 'on the air' roughly 400,000 adult listeners have their radios on. The CCU treats these figures with considerable reserve. It has, nevertheless, considered it worth while to modify the radio programmes slightly and introduce a more flexible format to cater for those listeners who are not studying for examinations, but find the programmes interesting and informative.

Administrative Structure

The Unit is considered to be an important instrument for national development and its areas of activity are determined by the Ministry of Education and co-ordinated into the national development plans by the Government. The Assistant Director, who is in charge of the CCU (he is assistant to the Director of the Institute of Adult Studies of the University, who has overall responsibility to the University for the administration of the Unit and the maintenance of high academic standards), is the Ministry's principal adviser on all matters relating to correspondence education.

The following organogram indicates the division of responsibility between the academic and administrative staff. The executive head of the Unit is a qualified graduate teacher with practical experience of problems of adult education at university level. He is a keen broadcaster and also needs to draw heavily upon his very considerable managerial ability.

He is aided, on the academic side by the course development tutor, who is also a well qualified teacher, experienced in adult education and the correspondence field. He is responsible for course planning, development and programme evaluation. He organizes residential courses, is in overall charge of the counselling of



students and is also responsible for the work of the specialist subject tutors who are qualified and experienced teachers with training in correspondence education. Each, in turn, is responsible for his own course writing and revision, and the specialist professional aspects of implementing the course, including the organization of residential teaching opportunities, the supervision and training of part-time tutors and the co-ordination of activities with the radio tutor.

The radio tutor, specially selected and recruited for his broadcasting experience and skills, has to work with subject tutors and is then responsible for the production of each radio lesson. Transmission facilities are provided by the national broadcasting organization (Voice of Kenya), and this radio tutor is responsible for liaison between the two organizations. The radio tutor is also responsible for all mass media implications in forward planning of projects.

Part-time tutors, of whom fifty are currently employed, are expected to mark and comment on students' written assignments and return them within forty-eight hours. Marking standards are supervised by each subject tutor who is also responsible for general supervision and training of the part-time tutors. Part-time tutors are responsible also for their students' course evaluation and participate fully in residential teaching.

On the administrative side an administrative assistant, an editor assisted by proofreaders and part-time artists, and an accountant, with supporting secretaries and ancillary staff are needed to keep the Unit going.

Subject tutors and all other full-time staff are appointed by the University Appointments Board. Part-time tutors are appointed by the Head of the Unit, with the approval of the Board. This is an internal

arrangement made to speed up the appointments of the part-time tutors, script writers and proofreaders.

Training in course writing and in radio scripting and presenting is carried out on the job by the staff of the CCU. Assistance is also given by the Voice of Kenya and the Kenya Institute of Mass Communication (which specializes in television, radio and film production training). Specialist training has also been undertaken by the University of Wisconsin (USA) and by CEDO in London. Training needs are identified by the Head of the Unit in consultation with section heads and study leave is granted regularly by the University to the academic staff.

Programme and Courses

The one-year programme offered to unqualified teachers is their only means of upgrading. The candidates are carefully selected from among those who have been teaching for over three years and have given evidence of ability and motivation. Enrolment is open throughout the year. The programme is controlled by a separate institution - the Kenya Institute of Education - through their field officers and the courses proceed in stages which together form an integrated and complete training course. Four subjects are given, each with a total of 72 lessons. The residential sessions held during the school vacations are compulsory and the final examination is conducted at the end of the year. It is a rigidly controlled single-purpose and 'closed' in-service programme and quantitatively has proved to be highly successful in terms of completion rates of assignments, which must be within the year, and pass rates in the final examination. The total number of courses offered since 1969 (five years) is 21,355 (an average of three subjects per student).

In 1973 the CCU offered the following subjects at KJSE, (both Form I and Form II) level: biology, English, geography, history, Kiswahili, mathematics and physical science, each with a total of 72 lessons. These courses cover the entire range of academic work normally done in two full years of study in secondary school. A total of 12,853 courses has been offered to date, with an average of five per student. The CCU emphasizes that its courses are not examination crammers and that its programme involves a much wider field through the planned and systematic selection, preparation and presentation of teaching materials, as well as reinforcing and assessing what the student has learnt. The following elements are used: (a) correspondence

study guides, textbooks and other teaching materials such as maps, mathematical instruments, science experiment kits, etc; (b) supplementary radio broadcasts covering the material in one or more lessons of the study guide; (c) marking of students' lessons; (d) occasional face-to-face teaching during residential courses.

All lessons in the study guide contain selective (rather than exhaustive) self-test exercises with which the student checks his understanding of the study material. Alternate lessons require written assignments to be submitted to the CCU for marking, although there is no time limit on an assignment. The student can work at his own pace, although the basic KJSE programme has been designed to cover two years.

The supervisory staff emphasize that the instructional process functions effectively through carefully establishing and maintaining contact between the student, the teacher and the Unit. Particular attention must be paid to recruitment and enrolment of students, and to the distribution of study materials, the handling of lessons and the conduct of end of course examinations.

The Unit is equipped with its own printing, duplicating and binding facilities. Other sections deal with registration, mailing, records and accounts. It has its own radio production studio where completed programmes are recorded on tape, and later handed over to the broadcasting authority for transmission. The Unit also has a small science laboratory where work is in progress to develop a capability to teach 'relevant science' through correspondence methods. A science experiment kit has been developed which accompanies the correspondence materials. The Adult Study Centre, adjacent to the CCU provides all facilities for residential courses for up to sixty students.

A study of the work of the CCU (by Klaus-Peter Treydte sponsored by the Friedrich Ebert Stiftung and completed in April 1973) indicates, however, that of the serious and enrolled correspondence course students, only 15.19% listen to the radio lessons regularly, 37.41% occasionally, 22.59% seldom and 17.78% never. The researcher drew the conclusion that 'it is right not to emphasize the radio part of instruction too much. At the present stage it can only be regarded as an enrichment programme and the study guides and textbooks combined with the correspondence (i.e. correspondence in the narrow sense) have to be self-supporting.'

However, the researcher also found that for 29.63% of students the broadcasting time (5 - 6 p.m.) was not suitable, also that 16.66% had no radio set and 5.19% found that reception was too poor.

Of those students who found the radio programmes useful, 68.52% listened at home and 8.15% listened on radio sets in schools. Again, 51% used the radio lessons intensively (listened and made notes), 20% listened and read respective passages in textbooks and study guides, whilst 28% just listened.

61.48% of the students considered the radio lessons to be very helpful, and 25.93% thought them of little help.

In the researcher's view, the evidence suggested that 'the radio lessons are a valuable instrument for enrichment of the correspondence instruction and of increasing motivation and probably establishing a verbal feedback for the student'. He stated also that the main criticism of the programmes was that they were too fast (too difficult).

Certainly there is a feeling that the broadcast programmes are monotonous in their presentation and that much can be done to change the format to produce livelier and more interesting radio programmes for the students.

The survey also revealed that at that time only 10% of students had participated in the one residential course that had then been held by the CCU. It is therefore probably too early to draw conclusions from this part of the enquiry, but it is probably important to note that many students said they could not attend because they did not have time and an equal number because they had no money. Shorter (two- or three-day over weekends) courses are now being held up-country with the assistance of the extra-mural staff of the Institute. These are designed for the students.

Problems have arisen with the postal delivery of materials. For example, assignments are supposed to be marked and returned within forty-eight hours, but in practice this often takes longer. In the survey just under half the students complained of delays in getting materials. Again, the rate of submitting written assignments was very high in the case of the unqualified teacher students. (Those submitting no written assignments were below 1% and over 36% submitted all written assignments). However, with the higher course - those studying for the KJSE - the figures were reversed and roughly one-third submitted no written

assignments at all. It is compulsory for unqualified teachers to submit at least two-thirds of the total number of assignments whereas KJSE students are not bound to submit any assignments.

Evaluation

Programme evaluation is built into the work of the Unit and is the specific responsibility of the course development tutor.

In addition to this on-going evaluation the Unit has arranged for specific enquiries to be held from time to time (Kinyanjui 1968, Nturibi 1970, and Thiede 1971 and Treydte 1973). The first three evaluations were internal and the last test was conducted by an external research fellow through the generosity of the Friedrich Ebert Stiftung. Its survey was conducted on the basis of a detailed questionnaire. Some of the findings of this enquiry have already been mentioned, but perhaps the most interesting observation of all was his estimate that the drop-out rate of CCU students was somewhere between 15% and 25%. This is a low figure when considered against the experience of others (working in Europe) who found that only about a quarter of those initially enrolling complete their course. However, the CCU students are mainly teachers, mature in outlook, and are presumably highly motivated by the immediate benefits to be derived in terms of promotions and increased salaries once they have passed their examinations. Moreover, failure may bring the possibility of their being phased out of jobs as more qualified teachers enter the profession and posts become more competitive.

Other analyses of students' performances have revealed that CCU candidates compare favourably with other candidates sitting the same examinations. For example, the average pass rates for CCU candidates were 42% in 1968, 46% in 1969 and 51% in 1970 as compared with school candidates who received 16% - 30% in the various provinces, while private candidates achieved 8% - 15% pass rates. In 1970 when the CCU achieved 51%, the highly selective government-aided schools averaged 47%, the unaided schools 20% and the private candidates 13%. In the various subjects offered by the CCU the average pass rates have gone as high as 76% in Kiswahili, 57% in English and 55% in history.

At the other end of the scale, in an analysis of reasons for failure derived from the students' own appraisal, 50% said they did not work hard enough in their study, 17% said they did not submit enough written assignments and 11% quoted lack of

sufficient radio listening. However, it is undoubtedly a fact that very many teachers tend to register for examination every year in more subjects than they could reasonably pass, in the hope that they might just collect the required number of passes to qualify for higher grading in the shortest time possible.

Given that the primary objective of the CCU is to help improve the quality of teaching at primary level, it is clearly proving to be remarkably successful in helping teachers to achieve acceptable qualifications or to improve their grading. However, realistically, the Director of the Unit reports 'encouraging as the results for the CCU candidates are, it is too early to conclude that they can indicate success. It has yet to be demonstrated that a P.3. teacher, for example, improved his performance in a classroom after being upgraded to the P.3. grade. Nevertheless for most CCU students this was the first time that they had been engaged in an organized and systematic form of study since they left formal institutions. This has been confirmed by many letters from successful students who felt that they had benefited from the correspondence courses and that they received individual and personal tutoring through the post and through the radio from teachers they probably had never met.'

It is perhaps in the programmes designed to assist unqualified teachers achieve acceptable qualifications that the effectiveness of the operation is easier to study. Since the inception of this programme an overall 82% of those who enrolled have completed their courses successfully and were awarded P.3. teachers' certificates. But, perhaps the most important current 'evaluation' is to be found in the external assessment of the Kenya Institute of Education (quoted in the 1969 Annual Report of the Ministry of Education) 'the unqualified teachers who have successfully completed the course and were issued with teaching certificates compared very well academically and professionally with those qualifying from the teachers' colleges'.

One particular advantage of the correspondence course is that the teachers can continue to be productive while upgrading themselves. Also the situation in which they learn is very much like that which they will be applying their new skills.

Certainly in the course of a series of visits to a cross-section of Kenya's primary schools, in June 1973, the teachers, and indeed headmasters, who had

obtained their basic qualifications through the courses offered in conjunction with the CCU were notable for their enthusiasm and dedication. This was in one sense not surprising, since they were of the few chosen from the many for the initial courses. But it still seemed very reasonable to assume that this additional opportunity for professional advancement had helped to give further purpose and direction to their work and lives, in the face of difficulties which many would regard as overwhelming. Consequently they were better teachers.

An observable characteristic of the CCU which seems to stem as much from the attitudes of its original designers as its present leaders, is an awareness of its pioneering role in an important sector of Kenya's development programme. The staff accept that their routine evaluations inevitably reveal weaknesses in some areas, as well as strengths in others. But, they also accept their responsibility to try to eliminate the weaknesses in a continuing search for ways of making the units work more effectively. This is particularly evident in their forward planning. The last section of this report gives an indication of the ways in which this is happening.

From 1968 when the first enrolments were accepted in the Unqualified Teachers' Programme to 1970, 82% had completed their courses satisfactorily and were awarded the P.3. Teachers' Certificate. In one year (1969), (total enrolment of 5,839 courses) the percentages of passes in the final examinations in academic subjects were English 95%, geography 96%, history 86% and mathematics 90%.

Costing

A rough calculation, based on total capital expenditure (assume amortization over five years) and total recurrent expenditure for the total number of students accepted since the Unit began in 1969, shows that the costs, for a five-year period, have worked out at slightly over Kf45 per student, or Kf13 per course. Approximately Kf100,000 has been spent on capital equipment and the annual recurrent expenditure has risen to just Kf100,000 of which Kf75,000 represents salaries and Kf25,000 materials. Against this students themselves have to pay a fee based on the number of subjects taken. This is about 50 Kenyan shillings per subject (Kf1 = 20 Kenyan shillings). There are reductions to encourage students to take a number of subjects at the same time, and students may pay their course fees by

instalments of twenty shillings a month, on top of an initial deposit). Thus it will be seen that students are in fact contributing a substantial proportion of the cost of their courses - a factor which could become increasingly advantageous to government as the inaugural work of developing new courses diminishes, and especially if there is an increase in use of the course materials.

It is interesting to compare these costs with those of full-time formal education. For example, published figures show that the recurrent government expenditure on secondary education in Kenya during 1970/73 was about Kf4.7 million. This sum was dispersed amongst about 310 government and government-aided secondary schools with a total enrolment of around 75,000 students. From this it will be seen that the per capita costs of this sector of secondary education are slightly over half as much again (roughly £63 per student) as those of the correspondence courses. (It will be recalled that in Kenya there are also about 500 'self-help' unaided secondary schools which cater for about 53,000 students, and the possibility exists of CCU materials being used to enrich the educational experiences of these pupils). The rate of success in passing the KJSE examinations is considerably higher with the CCU.

However, it is clearly dangerous to compare the formal educational schooling with the correspondence course too closely. Both, in fact, have separate and complementary roles to play.

Future Plans

Proposals have been put forward and accepted in principle for an expansion of the programmes offered by the CCU. In part this acknowledges the pressure resulting from there being too few places in secondary schools. Private and commercial correspondence colleges have exploited this large market (it is estimated that one commercial correspondence college, based outside Kenya, has over 100,000 Kenyan students paying fees approximately five times higher than those for the CCU courses), and it is therefore completely logical for the government to plan to expand the work of its own Correspondence Course Unit and particularly to include courses of a vocational and technical nature for adults already employed in business and industry.

The development of business courses dealing with office practice, principles of

accounting, statistics and typing began in 1972/73. Planning also commenced on a series of technical courses dealing with technical drawing, building, civil, electrical and mechanical engineering. The feasibility study has indicated the necessity to combine these with the use of facilities in technical schools during the evenings and vacations for the intensive practical instruction which is an essential ingredient in technical courses. This phase of the development will probably have to wait until more facilities become available throughout the country. Meanwhile it is envisaged that small business and farm management courses will be developed to meet local needs.

A special group of blind students has followed the CCU programmes. The students have listened to the radio and have had the written materials read to them by relatives or friends. The CCU forward planning includes a service to make recordings of their broadcasts available to blind students.

Apart from increasing the number of students (and considerable thought is here being given to the possibility of incorporating the course materials as learning resources in the 'self-help' secondary schools) the CCU is investigating the potential of other educational media and technologies that could improve its overall effectiveness.

In the long term it is possible that the Unit may move into the realm of degree courses for external students, and this is accepted in principle by the University of Nairobi. Initially, it is thought that the faculties of education, law and commerce will be involved and a close watch is being kept on the work and progress of the Open University in Britain, since it is clear that the experience of that organization could be of value to those who are guiding the destinies of the Kenya Correspondence Course Unit.

An alternative set of plans being examined by the Institute of Adult Studies is to provide rural education programmes through the mass media to the large captive audience of the correspondence course radio programme. Developments might integrate the use of film, radio and newspapers with organized discussion groups in various rural areas. Several institutions are cooperating in examining these possibilities.

THE NEW ZEALAND CORRESPONDENCE SCHOOLIntroduction

Although the New Zealand Education Act of 1877 stated that all children must of right receive free education, there were until the early 1920s, many children living in very isolated communities who were receiving no education whatsoever. Groups of parents of those children began to exert pressure on the Government to provide an education service. Arising from a decision by the Minister of Education, a Correspondence School was set up in the Department of Education in 1922 to cater both for the needs of those children and also for those suffering from physical disabilities which prevented them from attending normal schools. From a modest beginning with one teacher and an initial roll of eighty-three pupils, the School has developed until it has now reached its present roll of around 8,700 students (both children and adults) and a staff of around 250.

The Correspondence School, which is a State school directly under the Department of Education, is now an important and integral part of the New Zealand national system of education. In general it provides schooling for those children who for some reason or another are unable to attend a school in their own local district. Besides providing a full education for pupils of school age, the Correspondence School also provides tuition for special 'part-time' groups, including young people who because of the nature or place of their employment are unable to attend evening classes. In addition courses are provided for teachers to enable them to improve their professional qualifications. The basic means of providing tuition is through the normal postal delivery service. The School offers a wide choice of courses and subjects. However, the Correspondence School of New Zealand has always attempted to be much more than a marking or tuition service. It aims to provide the children enrolled with all the facilities of a good school and to give them a sense of belonging to, and sharing in, the ideals and traditions of a school.

Over the years this tradition has been established. The School has its own badge and uniform. It has its own motto and school song. It broadcasts to its pupils every day of the school year and holds school assemblies by radio every fortnight as well as its own breaking-up ceremony at the end of the year. There is also a school magazine, The Postman, containing pupils' poems, essays and stories, very similar to

publications produced in ordinary schools. Arrangements have been made with the appropriate authorities to provide medical inspections and dental treatment as required by pupils of the School. The teachers are subject to the same conditions of employment as other teachers in primary and secondary schools. They work to the same syllabuses and as far as possible prepare children for the same examinations and vocational ends.

User Profile

Not everyone may enrol with the Correspondence School. Pupils are expected to attend their local schools if at all possible. Before a pupil is accepted he must first satisfy the Education Board in his district that he is unable to attend his local school. There can be two major reasons for this. The pupil may live over three miles from a school or school bus route, or there may be health reasons. Enrolments on the grounds of ill health or physical disability have to be supported by medical certificates.

Children who are temporarily prevented from attending their own schools because of accident or protracted illness or any other cause may be enrolled with the Correspondence School. These enrolments are normally approved for periods of not less than six weeks and each application again requires the provision of a medical certificate. Another important and growing area of enrolment is that of pupils who are already attending secondary schools but, whose schools may be unable to supply a satisfactory course because of staff shortages or other reasons. Small schools may not have the full range of specialist teachers. Pupils have wider aspirations than in the past and wish to study a broader range of subjects. These enrolments have to be approved by the Department of Education. During the course of this study some 150 girls from an up-country girls' school were enrolled in mid-term for social studies courses. This had been caused by the unforeseen departure of two teachers from the school. Strong centralization of the New Zealand educational system enabled these girls to be accurately placed and rapidly provided with correspondence material.

The numbers of part-time students in the School are increasing and now they form a very significant part of the total enrolment. There are around 3,200 pupils in secondary schools who are attending day school full-time but taking some subjects from the Correspondence School.

In addition, adults who are unable to obtain tuition at their local night schools or who are restricted by family commitments may apply for any of the courses offered by the School. They are enrolling in greater numbers than before, largely because of an easing of the regulations for both School Certificate and university entrance examinations. In the past a minimum of four subjects was required to be taken at one examination sitting; subjects can now be taken individually.

Figures show that part-time students in the School have an average enrolment of two subjects whereas full-time students of the School have an average enrolment of six subjects. A part-time student is regarded on the basis of a complex mathematical procedure - as being equivalent to two-fifths of a full-time pupil. Therefore each teacher in this section of the school copes with fifty part-time pupils.

Administrative Structure

Almost all 250 members of staff of the School hold positions equivalent to those of full-time members of the teaching profession. Work in the Correspondence School can, and does, form part of normal teaching career development and transfer and promotion into the Correspondence School from traditional schools and from the specialist services such as the Curriculum and Development Unit, are features of the system. The secondary department has the largest number of teachers - 135 - with each teacher being responsible for twenty full-time pupils or fifty part-time pupils. Fifty members of staff are employed in the administration of the School and thirty-five in the primary department. There are twenty-five part-time tutors, mostly in the teacher education department and there is also a small number of visiting teachers. Recruitment to the School is normally conducted by advertisement in the Department of Education's official 'gazette' and almost without exception all the teachers who are appointed are trained and certificated - with a very large percentage being university graduates.

Although new recruits to the School do not need to be trained as teachers, all new members of staff receive in-service training in correspondence education during the first year of their appointment. Senior teachers and heads of departments are responsible for the work of their groups and for the continued counselling and training of their teachers.

The teacher education department also makes use of the services of senior and

experienced educationists who have recently retired. Appointments for this section are normally by invitation.

It is a strongly held belief within the School that without an efficient administration a correspondence school is unlikely ever to be successful. It has been estimated that just to enrol one pupil in this School something like twenty-five address labels must be printed and used. A system able to cope reliably and swiftly with the mechanics of enrolment, processing of material through the system and distribution, is of paramount importance. It is only now, at a comparatively late stage in the development of the Correspondence School, that the very labour-intensive system which had been in use has been replaced with the installation of a new NZ\$ 10,000 mechanized addressing system.

The integration of the Correspondence School into the fabric of the educational system means that the salaries of the staff, the costs of the buildings and materials are all inseparable parts of the larger expenses incurred by the Department of Education.

The Infant School

Courses are provided for children from five years of age and cover the first three years up to Standard I. Most assignments of work are planned to last the pupil for two weeks: ten working school days. One of the biggest problems for this section of the School is reassuring the mothers of very young children that they can cope with the task of administering the lessons, i.e. 'act' as a teacher. The experience of the School is that, in general, mothers can cope very well. Each teacher in this section has responsibility for some forty pupils. The results achieved by the School are at least equivalent to those in ordinary schools in all aspects except that of the social development of the children. Even at this level the assignment material is rewritten entirely every five years or so, but is modified annually at every reprinting. The present materials and formats were newly devised some ten years ago in response to a major curricular change.

Primary Department

The primary sections covers five years. Here the average number of pupils under the care of each teacher is about thirty-two. Each teacher is expected to 'teach' or work through two-and-a-half units per day, i.e. meeting the needs of two-and-a-half pupils. At this level radio is used mainly for

stimulation and cross-fertilization of children's ideas. The main problem encountered at this level is that caused by the children of itinerant workers and others who are only enrolled for short periods of time. There is also a special section within the Primary Department, the Individual Programme Section (IPS), dealing with children with learning difficulties due to physical, mental or emotional factors. These include:

- (a) those homebound for physical reasons, e.g. epilepsy, muscular dystrophy, etc. and who are thus late starters;
- (b) borderline cases who are just able to benefit from courses of this type, e.g. fifteen-year olds with ability levels of five;
- (c) emotionally disturbed children - particularly those in need of a one-to-one relationship with a tutor;
- (d) exceptional children, i.e. those with an IQ of 170+;
- (e) pregnant schoolgirls of below secondary age;
- (f) young offenders.

At present there is a roll of 294 in the IPS with a staff of nine together with the Head of Department, giving a staffing ratio of around 1:29. This section has a pupil turnover of around 94% a year. Teachers in the IPS have been selected for their experience and understanding of children who are either physically handicapped or emotionally disturbed.

The Home Training Department

The Home Training Department provides developmental activities for children with special needs. This specialized section of the Correspondence School essentially deals with parents of children rather than the children themselves. The children suffer from intellectual handicaps, multiple physical handicaps which make them very frail, or with special problems such as hyper-activity or language delay. The Home Training Department of the Correspondence School acts as a resource centre for the provision of educational materials. No assignments as such are sent out, only kits and materials. The parents then respond with comments on their usefulness. Based on these comments, the flow of materials is controlled by the teacher. The materials include books, games, toys, resource materials and so on. This section is regarded as a rather specialized and somewhat separate branch of the Correspondence School making use only of the administrative mechanism of the School. The professional content of the work is very much under the personal control of the staff of the department.

The Secondary Department

Secondary pupils are given a choice of courses as wide and as liberal as those offered in a large secondary school.

There are three main groups of courses.

- (a) Academic Course: this course offers a wide range of academic subjects for pupils intending to go on to university.
- (b) Commercial Course: this course is for pupils intending to take up office work and accountancy.
- (c) General Course: there are two practical courses which cater for girls who wish to take such courses as home-craft and needlework and for boys who wish to take metalwork, technical drawing, farm practice or woodwork.

Each of the above courses leads to School Certificate in the subjects being taken by the pupil. Promotion to higher classes is at the discretion of the Principal and normally promotions are made only when the work in the lower classes has been satisfactorily completed. Pupils are also prepared for university entrance, the higher leaving certificate and Bursaries examinations.

The changes in the nature of the School from its founding in the 1920s when it only catered for primary schoolchildren has led to the stage where the secondary section has become more important. These changes have led to more attention and emphasis being given to disadvantaged children. Children enrolled at the secondary level now include:

- (a) relatively small numbers from the far outback;
- (b) those attending for reasons of illness (physical, mental and emotional including an ever increasing number suffering from school phobia);
- (c) pregnant schoolgirls;
- (d) those enrolling for social reasons - domestic problems, expulsion from school, involvement with the police, and so on;
- (e) children who are overseas.

In terms of ability most of the children in the categories listed above tend to be below average, although their level of achievement in examinations is higher than would be expected.

At the secondary level there is one teacher to twenty full-time pupils. Teachers, in addition to marking assignments, have responsibilities in organizing the numerous clubs. They are also expected to write considerable numbers of letters to their pupils. These letters are given very great importance by the School since

it is felt that they can influence pupil response. At secondary level visiting teachers are not expected to do much teaching as such, but to help students in their study and to advise them on how to use the School. 'To urge and encourage' is their role.

At this level discipline problems only arise in the non-return of assignments. The ultimate sanction is court action 'for non-attendance of school', but this is only rarely invoked. In fact, evidence shows that at least 50% of those students who have been expelled from normal schools for anti-social behaviour do very good work in comparison with their own past achievement standards. It is felt, but this has not been proved, that this is due to the personal attention which they receive, even from a distance.

In general, the results at secondary level compare very favourably with other schools and are better than those achieved in conventional evening classes.

Teacher Education Department

This section was opened in 1962 and has a roll of around 1,000 with some ten full-time tutors and fifteen part-time tutors. This section was created to provide opportunities for serving teachers to obtain a Diploma in Teaching entitling them to qualify for a higher scale of salary. In addition to the Diploma in Teaching, courses are also given for uncertificated teachers in both ordinary schools and in schools for the intellectually handicapped. In the case of uncertificated teachers they must be experienced, be willing to continue to teach and show a reason why they cannot attend a normal teacher training college.

This course lasts three years while the Diploma in Teaching course runs for one year. Students pay a course fee on first enrolment only. This fee, however, is very heavily subsidized.

The courses given in this section differ from most of the others in that they are very tightly structured, with fixed deadlines and have enrolment and examinations at fixed times. They also make use of face-to-face seminars and courses during vacations which are run by staff from teacher training colleges rather than from the Correspondence School. Students taking the Diploma in Teaching are expected to work some nine hours a week on their assignments. The courses are based on existing textbooks and the study guides for assignments are written around these. This technique differs from that used in the secondary school level courses where the textbooks are supplemen-

tary to the courses. The assignment or study guides for the Diploma in Teaching were commissioned and written by experts chosen by the Department of Education on a nationwide basis. This work is then vetted and edited by Correspondence School staff. These drafts are then pre-tested before printing. Amendment, both major and minor, is continuous. The staff for this section of the School are recruited by invitation - mainly from senior, experienced and retired educationists. It is found that students at this level are especially sensitive to criticism and liable to discouragement caused by any written appraisals of their work which are not 'encouraging'. This, again, demonstrates the absolute importance of the personal element in written communication from the School.

It is felt that this section could develop as curricular change proceeds in New Zealand. In terms of speed, efficiency and cost of implementing curricular change, correspondence education has been shown to be very effective. The staff of the Department feel that it has a value in its own right and is not a second best. In-service teacher education lends itself particularly well to the techniques of correspondence education. The New Zealand Educational Institute - the primary teachers' association or union - gives full support to the Correspondence School. This is felt to be a major factor contributing to its effectiveness.

Provision of Materials and Marking

Assignments: assignments are posted to pupils in special two-way envelopes made of green canvas. Postage on these two-way envelopes is paid both ways by the School. Books and stationery, textbooks and readers are lent free of charge to both primary and secondary pupils - although in the latter case it is only recently that a deposit has ceased to be levied. Textbooks remain the property of the School and have to be returned when the pupil leaves the School or moves to another class. There is a charge for writing materials, geometrical instruments and materials for clothing and handwork.

Materials for practical work: the School provides a range of materials probably unique in scope.

Boxes of equipment and materials are sent to pupils taking biology, chemistry, general science and physics. Experiments carried out with these can enable examination candidates to obtain the necessary practical certificates. Needlework subjects and art subjects are supplied with materials in specially designed envelopes and packages.

For woodwork and metalwork a very large range of tools is provided. Work kits containing wood, drawings, screws and other necessities are also sent out. Experience has shown that the woodworking tools travel best if wrapped up in newspaper and then put in a cardboard box rather than in a heavy, elaborate and expensive 'toolkit' type of box. These materials are despatched to pupils throughout the country by rail.

In the Languages Department of the School use is being made in a rather modest way of sound tapes. This only began some three years ago and the entire responsibility for the organizing, recording, production and technical maintenance of the facilities is the responsibility of one man. Two-thirds of all the tapes used are now in cassette form and this proportion is rapidly increasing.

It is felt there has been a tendency within the School for the marking of the scripts - or more correctly correcting and commenting on scripts - to have been much more intensive than it needed to be. This is costly both in terms of time and money. 'Overmarking' is felt to be especially wasteful where adult students are concerned, since they are capable of a measure of self-marking. There is too, of course, the basic problem common to all correspondence education of the time-lag between the work being done and its correction and return. This time-lag weakens motivation and motivation is the all-important factor in effective correspondence education. A move towards the use of a greater degree of self-marking would be invaluable. It is felt that the present period of one week between receipt of a unit of completed work into the School, its marking and subsequent despatch could not be further reduced.

Library

The Correspondence School Library has a bookstock of over 23,000 titles and, through interloan, can call upon the resources of many other libraries. All full-time secondary pupils are automatically enrolled in the Library. Part-time secondary pupils are enrolled only if they do not have the service of a local public library. To enable the best use to be made of the Library, a folder is sent to each library member in which specific requests may be made and subjects of interest noted. Books may be changed as often as wished during the term and also during the school holidays. The Librarian and his staff use their initiative in selecting and providing books. The books in the library are supplementary reading materials and are not textbooks. At any one time up to 20% of the stock is out on loan.

The Use of Radio

The Correspondence School presents a special radio programme from 9.25 a.m. every morning of the school year on the national network. These programmes answer several purposes - they serve as school assembly and school notice board. They provide the quickest and most direct contact possible between the School and pupils and are becoming increasingly important. The programmes also provide instruction in subjects such as music appreciation, French, German and Maori. Indeed in those subjects the broadcast lessons are an integral part of the instruction.

The Visiting Teacher Scheme

Since it is the policy of the School to maintain a close personal relationship with parents and pupils, in the first term of each year a team of teachers spends about six weeks or so visiting pupils in their homes. Visiting teachers make a point of visiting every pupil at least once a year. They encourage pupils to write to their teachers, not only about their work, but also about their family and other interests. In this way teachers gain an understanding of a pupil's capabilities and needs and they are often able to give that pupil more attention than he would get in a large school.

The Resident Teacher Scheme

An extension of the visiting teacher scheme is given by five resident teachers spread strategically throughout the country. The resident teacher spends most of his time visiting pupils and giving help and encouragement where needed. In addition to their visiting activities, these teachers arrange regular 'school days' and other gatherings of pupils at convenient centres. Financial assistance for pupils towards the cost of travelling to these school gatherings is provided where necessary.

The Residential School

Every November a residential school for full-time pupils in the secondary and upper primary departments is held. These schools are held for girls and boys in alternate years. The course, which is not so much to give extra teaching as to give pupils a chance to mix with others of their own age, lays special stress on those parts of the daily curriculum which correspondence education cannot supply - organized games, physical education, instruction in swimming and athletics, debates and drama.

School Clubs and Associations

Except for those in the junior school, all full-time pupils, primary and secondary, are expected to be members of the large number of clubs and associations which the School sponsors. Pupils are advised to join two clubs at most. Membership is, however, voluntary and the club activities are intended to be purely of a sparetime nature. Each club is organized by a group of teachers who share the tasks of writing to pupils, sending them books and materials and producing and circulating club magazines. The clubs and associations which the School sponsors include a Junior Red Cross, an International Relations Club, Lone Guides and Brownies, Lone Scouts and Cubs, an Animal Welfare Club, a Camera Club, a Stamp Exchange Club, a Naturalist Club, a Garden Club, a Writers' Club, a Modelmakers' Club and a Student Christian Movement.

Evaluation and Research

Although the Correspondence School had always kept records, personal files of students, enrolment figures, examination results and so on, it was only comparatively recently that a full statistically-based investigation of the School - or at least part of the School - was undertaken. From November 1971 until November 1972 the statistics of the secondary department - the largest department - were recorded and analysed. This analysis pointed up some of the major problem areas faced by the School as well as helping to identify trends and developments. It also helped to confirm a number of accepted principles and beliefs.

Without doubt one of the biggest problems faced by the Correspondence School is the rapid turnover of pupils. For the period in question only 43% of the total roll remained throughout the year and some 57% had been withdrawn by the end of the year. In some streams the numbers of students withdrawn during the year exceeded the number on the roll at the end of the year, i.e. the turnover in these groups was more than 100%. The turnover of the complete school roll was 135%: when a count was made on November 30th, 1972, there were 3,033 pupils on the roll, but since November 30th, 1971, 4,333 pupils had been withdrawn. Further examination of the statistics show that a very large percentage of pupils remain on the School roll for less than two months. These students involve the clerical staff in a considerable amount of work in their enrolment and subsequent withdrawal and they contribute to and gain virtually nothing from the School. Over 60% of students remain at the School for less than twelve months. Only some 36% of the students are

on the roll for one year or more and 27% for less than six months.

65% of the students were 17 years or over with the largest percentages being in the 31 plus and the 16 year old groups.

7,703 pupils - 85% - in the Secondary Division were part-time.

The table below shows how the major functions of the School have been extended with the proportion of students enrolled from overseas, the large pregnancy group, the rehabilitation group from the Department of Justice, and housewives seeking enrichment.

Table 1
Reasons for Enrolment

<u>Category of Reasons</u>	<u>Number</u>	<u>%</u>
Overseas	113	1
Isolation	320	4
Secondary Schools	3214	36
Pregnancy	322	4
Other medical	369	4
Expulsion	69	1
Enrichment	955	11
Vocational	2929	32
Rehabilitation	671	7
	<u>8962</u>	<u>100</u>

Because of the special nature of the function of the Correspondence School it was necessary to consider not only the number of students enrolled, but also the number of sets of work completed by those students in various class levels at the time of their withdrawal. In all groups a very large number of students complete less than three sets of their course of fifteen sets. Although there is a degree of variation between various groups it has been shown that in most cases more than half the students complete less than half their courses. The greater perseverance of the older students is, however, worthy of note.

Table 2
Number of sets completed by students
on the School roll

	<u>0 - 1</u>	<u>3.1- 7.0</u>	<u>7.1- 9.0</u>	<u>9.1- 15</u>	<u>Total</u>
Number	3060	2286	1126	2642	9114
%	34	25	12	29	100

One further element in the Statistical Survey was an analysis of examination performance of School Certificate and university entrance candidates in the Correspondence School. Students who were classified as full-time students, i.e. taking all their subjects in the Correspondence School,

and having been enrolled mainly because of distance from an ordinary school or for medical reasons, achieved a pass rate of 47.3% in their subjects. The remainder of the group who were enrolled for a variety of other reasons gained only 32.7% pass rate. The large group of part-time students who had other activities or occupations, largely composed of adults and hence with greater increased maturity and higher motivation had a pass rate of 71.3%.

In subjects which were examined both internally by the School and externally there was a high degree of agreement between the results gained in both examinations - particularly where the numbers were large.

Future Developments

Although the value of the Correspondence School is very considerable by virtue of tradition and its well earned reputation, nevertheless the word 'School' is now something of a misnomer since the emphasis of the institution is moving towards adults, teacher and special education. The original target of primary children in the out-back has largely disappeared. With the change in the original objectives, there has come a series of changes of home for the School and at present it is housed in somewhat scattered premises - nine or so separate buildings throughout Wellington. However, it is planned that a custom-designed building will be built in Wellington to house the Correspondence School. This unique building will contain the distillation of some fifty years' experience of the Correspondence School. It will also incorporate a number of developments which, it is felt, would have taken place, and indeed should have taken place, had not this move been imminent.

There is likely to be a restructuring of a number of the courses. The School will probably make much more use of the multi-media approach. The tape recordings which at present are used extensively could well have an even wider scope if students could borrow a tape recorder from the School. Television is likely to become a component in the teaching/learning process. It is hoped that assignments will be printed in colour to make them more attractive.

It is likely that the Correspondence School will have a role in the projected series of 'community colleges' designed to replace the conventional 'night schools'. It is hoped that a combination of correspondence for individualized study at home combined with occasional face-to-face contact will make for effective learning.

CORRESPONDENCE COURSE UNIT, MINISTRY OF EDUCATION, ZAMBIA

Introduction

A major problem in Zambia has been the paucity of educational opportunity at the secondary level. Until the last year of federation (1962) less than 2% of Zambian primary school children were given the chance of secondary education. Since independence the structure of the educational system has been significantly changed and emphasis has been placed on quantitative growth, at all levels and in all sectors.

At the same time important changes have been introduced to make the educational system more relevant to existing employment opportunities and this has involved great emphasis on curriculum development at both primary and secondary levels, fresh initiatives in the field of post-primary school training and the encouragement of the use of school facilities to train those who are out of school. A massive increase in adult education has been needed to help those already in employment to improve their grasp of the basic educational concepts. Much of Zambia is sparsely populated, especially outside the Copper Belt and away from the line of rail. In such a situation correspondence-based education can obviously reach many for whom the more orthodox adult educational programmes cannot be provided.

Thus the Correspondence Course Unit was established in May 1964, based on the College of Further Education in Lusaka. In 1966 it moved to its own premises in Luanshya, which is about 200 miles north of Lusaka in the Copper Belt, and more central geographically, although both are well served with road, rail and postal communication services. However, Lusaka has a far larger reservoir of skilled teachers who can be employed in a part-time capacity and these are an important element in the effective working of any large correspondence unit. Plans are now under consideration for the Unit to move back to Lusaka and to be integrated into an education services complex - a major educational development being undertaken with World Bank finance.

An advisory board has now been established, with representation from ministries, educational institutions and teachers' associations, which will maintain a continuing advisory role in the establishment of objectives and the evaluation of the performance of the Correspondence Course Unit.

The Correspondence Course Unit runs two projects. The first provides a complete extra-mural secondary education for adult learners who have completed primary education, but have missed the opportunity to attend normal secondary schools. The second, and more recent project, provides secondary education at the junior level for Zambians who have left primary school and for whom there are no secondary school places available.

Traditional methods of correspondence education are used with a number of interesting developments, particularly in the second project where 'aided study groups' have been established. Radio programmes have been broadcast to support some of the courses, and a postal library is also provided to assist students.

User Profile

The first project was developed to meet a real need, particularly among those employed as clerks, primary school teachers, police officers, etc. Between 1968 and 1970, 72% of the GCE students were government employees, of whom the majority (34%) were school teachers, with 23% from the junior and technical grades of the civil service; 11% were serving police officers and 5% were from the executive and higher grades of the civil service. Of the 26% who were non-government employees, 11% were engaged in clerical work and 6% were artisans. 2% of the total were unemployed.

An analysis of the junior secondary students carried out between 1971 and 1972 showed that 36% were government employees (teachers, police officers and clerks in roughly equal proportions), over 43% were employed in the non-government sector (4% as domestic servants) and 21% were unemployed. Of the whole group 45% were between twenty and twenty-nine years of age, 25% were younger than twenty and another 25% were in their thirties.

An analysis of the geographical distribution of students shows that in both projects roughly 75% come from urban areas, 20% from remote rural areas and the remainder (under 10%) from rural areas in the immediate neighbourhood of the regional centres.

Enrolments at the junior secondary level began at 625 in 1966 and have since averaged about a thousand a year - in 1973, 1,345 students were enrolled - with a drop-out of 45% by the end of twelve months. Full GCE courses began in 1968 and enrolments have increased significantly from 169 in 1968 to 1,313 in 1972 and 1,045 in 1973. For GCE

students the drop-out after twelve months has been about 35%.

Apart from those students who are enrolled for correspondence courses and whose activities and progress are closely supervised, the course materials have been used for various special schemes. For example, lessons have been supplied to evening classes for adult learners where they were used as supplementary material and proved useful where textbook supply was unsatisfactory. Courses in history and civics were useful for newly arrived expatriate teachers who were not familiar with the Zambian situation. In 1972 15,000 students were helped to varying degrees in this way but once the materials are made available the Correspondence Course Unit assumes no further responsibility for these students.

The tremendous response to the earlier courses, led to the concept of the more systematic type of extra-mural teaching being developed in the second project where the activities of less mature students need to be closely supervised.

The aided study groups project for primary school leavers at present works through twenty-nine centres which are distributed through the nine administrative regions of Zambia. In each region there is an officer responsible for adult education who has established such groups and acts as the local adviser. The primary school leavers for whom this service is intended are aged fifteen or sixteen on enrolment, having completed seven years of schooling with, by and large, only subsistence agriculture available as an employment opportunity. The aided study groups are still in the developmental phase with 1,430 students enrolled in 1972 and 2,000 in 1973. The drop-out rate at the end of the first twelve months was between 10% and 15%.

Administrative Structure

The Correspondence Course Unit is directly controlled by the Adult Education Section of the Ministry of Education, which decides the general policy of the Unit, following the Second National Development Plan. Its employees are appointed by the Teaching Service Commission or the Public Service Commission, its policy and administrative techniques follow Ministry of Education practice and the educational materials used are prepared in accordance with the Ministry's curriculum and the work of the Curriculum Development Unit. The Correspondence Course Unit is headed by a Principal, assisted by a Vice-Principal, both of whom have administrative and academic responsibilities and are aided by two Administrative Assistants.

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On the academic side there are thirteen full-time lecturers with editorial, sub-editorial, tutorial and course writing responsibilities. They are assisted by 115 part-time tutors who are responsible for assignment marking and tutorial guidance. Each tutor is responsible for a total enrolment of between 300 and 600 students, depending on experience.

Academic staff are recruited from the teaching profession and appointed by the Teaching Service Commission. Training is given on the job by induction from senior staff. Many of the academic staff are serving teachers working for schools in the town of Luanshya and about 84% are expatriates. Serving teachers are only permitted by Ministry regulations to undertake ten hours' additional work per fortnight. However, the Unit has been able to recruit many married women with teaching qualifications who are not otherwise employed.

On the technical side there are two printing assistants, twenty-four clerical staff and a further twenty 'orderlies' employed as duplicating assistants, collators, packers, dispatchers, etc.

Clerical staff are recruited by the Public Service Commission Open Competitive Examination. On-the-job instruction is given according to job description prepared by the Principal. Technical training is arranged as appropriate. For example, the printing staff receive specialist training by the machine and equipment manufacturers and the radio broadcasting lecturer is being sent overseas for training.

Undoubtedly problems of recruitment and staffing have played a part in inhibiting the growth and development of the Unit. The plans to move the Unit back to Lusaka will make it easier to recruit part-time Zambian staff.

Project 1

Students enrol directly with the Unit to study either a composite junior secondary course in six subjects or up to three GCE subjects. They are supplied with lesson material, textbooks and assignments which they submit to the tutors for marking. Individual guidance notes are prepared by tutors who, through correspondence, maintain a close advisory relationship with their pupils throughout the course of their studies.

The development of new curriculum materials for secondary schools is the responsibility of the Inspectorate for Secondary Schools. These materials are modified by the staff of the Unit to suit the needs of adult edu-

cation. In turn senior staff of the Unit are co-opted onto the advisory panels for curriculum development and serve as examination committee members. The language of instruction for all courses is English, although consideration has been given to courses teaching four of the major Zambian languages. Subjects offered at the junior secondary stage are civics, English language, geography, health science, history and mathematics. All these courses have been designed to increase the student's capability to contribute to Zambian society.

At the GCE level all courses follow the London Board GCE syllabus and offer commerce, economics, English language, geography, history, human biology and mathematics.

The turn-round time for the return of assignments is usually ten to fourteen days in the Copper Belt. However, it appears that students in the more remote areas may have to wait up to five weeks before their work schedules are returned.

The importance of face-to-face contact has been appreciated from the beginning of the project. Various attempts have been made to introduce this element but they have been, so far, unsuccessful. This is attributed to shortage of staff and lack of funds. The original plans called for seminars and visits by tutors to groups of students. Residential courses were also planned to be part of the Unit's activities. However, during the pilot period these were found to be very expensive and a disappointingly low proportion of the students were able to attend. In 1968 an attempt was made to enable 4,000 primary school leavers to gain secondary school education through correspondence. A ten-hour per week timetable was established with seven hours of live teaching and three hours of supervised study. The experiment was considered to be a failure and the Unit analysed the reasons as follows:

- (a) the problems of printing the extra 240,000 lessons needed per annum;
- (b) distributing this material through a poor communications system;
- (c) the hurried recruitment of 500 part-time teachers who were inadequately prepared;
- (d) the immaturity of the student body.

Whilst the final results showed little measurable success, the lessons learnt from this experiment have been taken into account in the aided study groups project, which is described later. In another attempt to introduce the face-to-face element in a practical and feasible way, the Unit currently plans to introduce a touring correspondence officer who would 'open shop'

for a few days at a time at isolated rural centres to operate a counselling service on study method. The Canadian University Services Overseas have provided an officer to initiate this work and also to carry on with the systematic evaluation of the work of the Unit.

Initially students were expected to complete a junior secondary programme in two years, but this gave rise to problems as they attempted to cope with more work than they could deal with in the time available to them. As a result 'free pacing' was introduced and an unlimited time allowed for the whole course, at the end of which students take a composite examination and may carry forward credits for subjects passed.

All students follow a graduated reading programme which is run through a postal library system. Junior secondary students are given a reading list from which they may choose books. After they have completed ten assignments, a second list is supplied from which they may choose books of greater difficulty, and a third list is supplied after twenty assignments have been completed. The books are simplified or structured readers and include such linguistically suitable biographies, scientific, historical and other socially significant texts as can be obtained. A 'faster reading' course is built into this system but there has been no feedback to indicate how successful it has been. GCE students are given a list of eighty titles divided into three levels of difficulty and they can choose as they wish from these lists.

From the early days the Unit has been aware of the potential of radio broadcasts to bridge the communications gap between the student and the Unit and has co-operated with the Educational Broadcasting Service of the Ministry of Education in producing broadcast lessons that have wide general interest and also reinforce the course materials. In the past, weakness of transmissions and the physical distance separating the Unit from the EBS in Lusaka have been the main factors inhibiting the more purposeful integration of broadcast material into the correspondence courses. However, new, more powerful and efficient transmitters have been installed by the Zambian Broadcasting Service and, with the proposed move of the Unit back to Lusaka, the future prospects are sufficiently encouraging for a lecturer grade I to have been given sole responsibility for this aspect of the work and to receive special training in educational broadcasting techniques in the United Kingdom.

Project 2 (Aided Study Groups)

This project caters for primary school leavers as opposed to the predominantly adult body in the normal correspondence courses. Adult education officers in the nine administrative regions have established study group and act as local advisers and liaison officers, after first making a preliminary survey to determine the need and the availability of classroom facilities and other matters affecting such a scheme. Up to four groups in each of the nine regions with fifty students in each group and a regional maximum of two hundred students were established under the supervision of the adult education officers in the first year of the scheme. The groups meet in the late afternoon or early evening in churches, community halls, schools or any other suitable place. Students are enrolled in classes and pay an enrolment fee of 10 kwacha. Supervisors appointed are mature and each is provided with a guidance kit. This has been designed as an introduction to the scheme and to enable the better educated supervisors (these include qualified teachers, priests of rural area missions and sometimes married women with educational qualifications) to become involved in the programme and develop their own approach to it, and the less well prepared supervisors to follow, to the letter if need be, very detailed guidelines. The kits include registers, notes on speaking to the class and hints on aspects of classroom management and a timetable which outlines in detail the programme to be followed (divided into twelve weeks of five days, each with three or four sessions for a total daily involvement of three hours). Notes on various difficulties that might be encountered are also included.

The timetable allows for two hours of study in each of five subjects each week, with extra time for further work in English and mathematics and revision. The supervisors are asked to follow the timetable exactly, although in practice it has been observed that many introduce a degree of flexibility.

The students follow a three-year course of study leading to the Zambian Junior Secondary Certificate, which is a recognized qualification for entry into many forms of vocational training, including agricultural training schemes, primary school teacher training and most artisan training courses. In the first year a total of 1,430 students was enrolled, where possible in groups of about fifty, although in some of the rural areas the population would not support such large groups.

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Evaluation

Within the limits imposed by periodical shortages of staff, the Unit has attempted to monitor its progress in terms of enrolments, drop-outs and, as far as has been possible, examination results. At the same time, an attempt has been made to keep track of the categories of persons who enrol. (See User Profile.)

The Unit has now prepared students for the Zambian junior secondary examination for five years. It has no control over the examination entry and no certain knowledge of the total number of entrants. However, an attempt has been made to assess the examination success rate from known results, and it would appear that the pass rate, over the period 1966 to 1970 during which 4,344 students were enrolled, was 17.6%. If allowance is made for non-starters and early drop-outs (and these totalled about 30%) the pass rate was just over 30%. It is interesting to note that the national average pass rate over the past few years, for all students, has been approximately 10%.

At the GCE level the Unit is only aware of results when notified by the students themselves. These figures are inadequate to enable any kind of percentage pass rate to be established. However, they do indicate that the Unit has been reasonably successful in preparing students for this London examination.

With the aided correspondence study groups it is still too early to be able to assess progress in terms of examination results. However, the quality of the work has been studied carefully by the experienced tutors in the Unit and their comments indicate that the system has been reasonably successful in administrative terms. In the year a total of forty-six lessons had to be studied, and forty-six assignments submitted to the Unit for assessment. This programme was completed by fourteen centres and virtually completed by eleven more. Twenty-five of the twenty-nine groups completed more than 80% of the material and only four centres failed to submit a significant number of the assignments. Other comments indicate that students from the groups appear to have difficulties with both the language and the concepts in the lessons. Two factors appear to be of significance:

- (a) Group and parental pressure tend to encourage the less able juvenile attending the aided study group to continue his involvement; whereas the less able adult unaided correspondence student drops out;

- (b) The lessons themselves were designed for adults and frequently include examples that assume a maturity of outlook which primary school leavers may not possess.

Another aspect of evaluation has arisen through an active programme for the tuition of tutors. The growth in the work of the Unit has created a sudden demand for more tutors. The tutor tuition programme also involves a quality-control system of checking their work frequently during the apprenticeship period. The marked assignments are closely examined in the early stages and if the tutor is working satisfactorily, a system of occasional sample checks is used. The tutor is also expected to write (in duplicate) an advisory report to the group supervisor on each batch of assignments, containing comments on the group's performance, suggesting revision work and highlighting significant features of the group's work. It also draws attention to the work of individual students, both very good and very poor. The other copy of the report is reviewed by the Correspondence Course Unit staff both as part of the training process and as an aid to pinpoint priorities in course re-writing and material adaptation. Samples of groups' performances are examined at least once a month.

As a result of this intensive testing it has been found necessary to make significant amendments to fifteen of the forty-six lessons that were issued in the year and a further ten are considered to be in need of revision as soon as time allows. Apart from this, a systematic revision of courses has been undertaken from 1969 to 1972. The earlier courses (1966-69) were regarded as prototypes which had to be produced in a hurry to get the scheme off the ground. It was hoped that the revision would produce polished courses which could stay in the Unit for some years. However, a change has been detected in the target population with a greater use being made of the material by younger students. This has been supported by the findings of the quality control system.

It has also become clear that some of the supervisors have not been satisfactory. This is perhaps understandable since the job involves an extra fifteen hours of work a week, which, in the case of primary or secondary school teachers with full-time jobs, is too much. The Principal of the Unit reports that the critical issue has been the establishment of a good rapport, with the individual supervisor encouraging him to follow the Unit's advice. However it will be appreciated that in a land as sparsely populated as Zambia problems of

communication are immense and where a supervisor is not able and willing to overcome the handicaps of his remoteness, the system will break down.

Generally the Unit has shown itself anxious to fulfil a role in the Zambian educational system and has sensitively monitored its work to operate efficiently. However, it has had to compete with many other parts of the Zambian civil service and para-statal organizations for a share of the money and skills which are in short supply.

Costing

The same buildings, staff and equipment are used for both projects. Thus, 70,000 kwacha per year is spent on salaries for full-time staff, and a further 50,000 kwacha on part-time teachers who act as tutors. The printing bill comes to 60,000 kwacha and a further 15,000 kwacha is spent on books. The Unit enjoys free use of the postal services for despatching and returning materials. It has further recurrent charges of about 10,000 kwacha per year and a total capital investment has been made of 27,000 kwacha. Against this there is a revenue from fees. Junior secondary students pay 25 kwacha for a six-subject, three-year composite course. GCE students pay 6 kwacha for each subject course. Junior secondary fees are accepted in instalments, but 10 kwacha has to be paid before textbooks and lessons are issued. It is recognized that the fee is not economic, but an analysis of costs over the years shows that the recurrent cost per junior secondary student who completes the whole course will be about 70 kwacha and for GCE students it will be between 9 kwacha and 23 kwacha per subject.

Against this the cost of secondary education in Zambia averages out at something just over 2,000 kwacha per child per year. Indeed opportunities exist for transfer of students, where considered desirable, from the aided correspondence study groups course to other parallel educational institutions.

Clearly the Ministry of Education regards the resources deployed in the Correspondence Course Unit as beneficial and, indeed, plans to reinforce the early successes gained. Nevertheless the staff of the Unit are far from complacent, and realize that their work needs to be constantly scrutinized for ways of improving the overall efficiency. At the same time it must be recognized that valuable pioneering work has been done to open up further educational opportunities to a very wide range of Zambian citizens.

Future Plans

Already expansion is taking place in the work of the aided study correspondence groups. During the second year of operation a further thirty-eight new groups were formed with a total enrolment of about 2,000 students. Unsatisfactory lessons are being revised in the light of the experience of the first year's operation, although mathematics remains a subject of poor attainment. (The Principal speculates that many students may have failed to gain secondary school entry because of poor number concepts rather than linguistic inadequacy and states, for example, that in the Bemba culture there is a natural number base of four and that, in his experience, the concept of a base of ten has never been firmly established in the minds of most elementary school children). However, the aided correspondence study groups are still part of a limited scheme which is going through a trial period. It is certainly proving to be popular, and places in groups formed in urban and regional centres have been filled immediately with hundreds more wanting places. In the remoter rural communities, however, it has often proved difficult to get the desired enrolment of fifty and large areas of rural Zambia have still not been given the opportunity to form groups. It is the opinion of the Principal that a potential student enrolment exists to support a scheme at least four times the size of the present one. Indeed, reference to the statistics for primary and secondary education in Zambia shows that only approximately one child in five attending primary school is successful in gaining entry to the secondary school system. Whether financial provision will be forthcoming from the government to support this is not yet known, and indeed raises the question of whether the national economy requires this type of development and will offer the successful students suitable job opportunities. At the moment little is known about the potential of correspondence education for technical and skills training.

However another aim of the Unit is to establish links, where possible, between the study groups and other locally active organizations, particularly in agriculture. Thus it is hoped to stimulate interest in crop growing and animal husbandry. A further area in which the Correspondence Unit may play a useful part is with voluntary agencies, such as those mission centres where manual skills are taught, and volunteer nutrition group teachers.

Radio broadcasts are already being transmitted to support some of the course material. There are obvious opportunities

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for the development of radio as a means of communication especially in creating a sense of corporate being in remote groups, as is already being done in the case of rural broadcasts for farmers. Mention has already been made of the plans to develop this component of the correspondence courses.

The adult courses have already benefited thousands of Zambians who have felt a real need for improvement in their basic education. Consideration has been given to the possibility of training civil servants in conjunction with in-service training colleges. For example, the National Institute of Public Administration would cooperate in providing a course in financial regulations and public administration for civil servants. Again, the Department of Technical Education has agreed in principle to cooperate in providing courses in elementary accounts, and commercial and office practices. The possibility of more purposeful links with the Ministry of Rural Development, and with the Ministry of National Guidance have been considered and are to be explored.

Meanwhile further developments of the existing academic courses are being planned to include courses in accounting principles, biology, general science, science of particular value in the rural environment and world history. Non-examination subjects, of general and social significance such as home management and nutrition are also being planned.

Plans also exist to develop new techniques for face-to-face contact with students, through seminars.

Of outstanding importance is the planned development of an Educational Services Centre in Lusaka, in which will be housed five of the important services through which the Ministry of Education is currently supporting the development and improvement of the country's education system. These include the Curriculum Development Centre, the Audio Visual Services Library of the Educational Broadcasting and Television Service, the Zambian Library Service and various support services for the Department of Technical Education, together with the Correspondence Course Unit. Clearly the improved co-ordination, together with the closer professional contacts which such an amalgamation will bring about, is bound to increase the effectiveness of these services and increase their working efficiency.

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The reasons for establishing the correspondence institutions described in the case studies, varied widely - giving equal opportunities of education, raising the quality of teachers and providing 'second-chance' secondary education for adults. The responsibility for meeting these needs was accepted by the governments concerned. (Because there has not always been an official response to this desire for learning by people outside the conventional framework of education, commercial organizations have able to flourish.) Correspondence education has been shown to operate effectively within national educational systems. It would appear that the more closely integrated a correspondence institution is within the educational system in terms of courses, qualifications, salaries and conditions of service of the staff, the more likely is it to be successful. Where it is a 'back-up' service to remedy one or more deficiencies in the system, ease of transferability in and out of the correspondence courses is essential. Here the sharply centralized system of education in New Zealand allows this kind of rapid and efficient servicing of students' needs by the Correspondence School.

It is difficult to arrive at internationally valid conclusions about the degree of success of correspondence students since opportunities to compare their performance with that of students of precisely similar ability, aptitude and, more important, motivation, being taught the same material by the same teachers and by more conventional methods are extremely rare. The case studies, however, would seem to indicate that correspondence students do achieve a degree of success at least equal to that of others. The drop-out rate in correspondence courses seems much higher than would be expected in full-time face-to-face courses, particularly in the early stages of a course. However, there is a similar wastage pattern in part-time evening study courses - even when undertaken by adults with a high degree of motivation. It has not yet been ascertained what part of the wastage in correspondence methods is due to factors implicit in any form of part-time studies. Probably most who give up or fall behind do so for reasons which have more to do with environment or motivation than specifically with studying by correspondence. If correspondence education is to be used effectively there should be a careful study during the early phases of any project into the factors which affect the performance of students, particularly the wastage or drop-out rate.

Motivation is considered to be the key element in success in 'distance-learning'.

Motivation is generally related to maturity; adult students and especially those working for qualifications with associated salary benefits can be expected to have the highest pass-rates. This is borne out by the studies. New Zealand part-time adult students have a pass-rate of 71%, pupils of school age enrolled for medical or distance reasons have a pass-rate of 47%, while those enrolled for other reasons only 32%. The drop-out rate in Kenya is less than 25% and there is a pass-rate of about 57% - more than three times the rate for school candidates.

Although more and more attention is being given to the potential of other media, such as radio broadcasts and tapes, the three institutions still place very heavy reliance on the traditional correspondence 'assignments'. In Kenya research has shown that the correspondence courses have to be self-supporting and radio is used largely as an enriching element. In Zambia the presence of an adult education officer to supervise the aided correspondence study groups, appears to add significantly to the impact of the courses, while the radio programming in New Zealand has an important

administrative and attitudinal function rather than an instructional one. The printed word is fundamental to correspondence education, although the media may enhance, enrich and pace the learning which takes place.

The experience of the three institutions shows that it is essential to pay particular attention to the mechanics of organization and administration. It is dangerously easy to plan expansion and make projections without making the necessary provision for producing and processing the materials. The main contact the learner has is through the marking of his assignments. The importance of this contact cannot be minimized. In both Zambia and Kenya part-time tutors are used, whereas at the school level in New Zealand full-time teachers are employed. The ratios of number of learners to tutors is much higher in Zambia and Kenya than it is in New Zealand and it may be that adult students are less dependent on the careful, almost personal, marking that the children receive. People who already have some measure of formal education attainments are most likely to become successful correspondence students.
