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PROJECT REPORT KENYA

RADIO/CORRESPONDENCE EDUCATION PROJECT NO. 615-11-650-129, USAID/UWEX

Administration

Arthur S. Krival, Chief of Party

A.I.D.
Reference Center
Room 1656 NS

OCT 1970

PROJECT REPORT - FINAL

RADIO/CORRESPONDENCE EDUCATION PROJECT NO. 615-11-650-129, USAID/UWEX

BACKGROUND

The USAID/Wisconsin Radio/Correspondence Education Project in Kenya had its origins in the recommendations of the Kenya Education Commission and a USAID study, both published in 1964.

The Kenya Education Commission recommended that radio be used as a medium of adult education in Kenya and urged consideration of a "combination of lessons by radio with an approved correspondence course." Furthermore, the commission suggested that if the required facilities could not be provided by the established colleges, i.e., the commercial correspondence schools, "it may . . . be necessary for the Ministry itself to enter the field of education by correspondence. . . ." (Kenya Education Commission Report, 1964, Part I, pars. 378-379.)

In June and July 1964, a USAID team headed by Professor Wilbur Schramm of Stanford University investigated the feasibility of using modern technological methods to help expand educational opportunities in the three East African countries. The Schramm report ("Modern Technological Approaches to Education in East Africa: Report of a Mission to Kenya, Uganda, and Tanganyika") recommended that a start be made in this direction by combining correspondence courses with radio broadcasts for in-service teacher training and upgrading programs.

In August and September 1965, at the request of USAID and the Government of Tanzania, a University of Wisconsin Extension Team visited Tanzania to study "the best means of achieving an effective program of in-service teacher training . . . which combines radio programming and correspondence course materials." The Wisconsin Team's recommendation "that Tanzania use the radio/correspondence method in an experimental project . . . to facilitate the upgrading of a

large number of Grade C primary teachers" was not implemented by the Ministry of Education, which was unable to meet the financial requirements of the project.

However, before departing from East Africa, the Wisconsin Team made brief visits to the Ministries of Education in Kenya and Uganda, and to University College Nairobi and Makerere University College, and found a good deal of interest in radio/correspondence education in both Nairobi and Kampala. In a supplementary document appended to their report on Tanzania, the Wisconsin Team wrote: "It seems to us . . . that there is considerable justification for an intensive study of radio/correspondence requirements and possibilities in Kenya, and that a study similar to that already completed in Tanzania would produce more fruitful results in Kenya. . . . It is evident that educators and government officials in both Kenya and Uganda view radio/correspondence education as a possible solution to a number of problems facing their countries today."

Requests for more thorough studies of program feasibility came to USAID from Kampala and Nairobi shortly after the Wisconsin Team's return to Madison, and in February and March 1966, a second Wisconsin Team, headed by Chancellor L. H. Adolfson, visited East Africa to assist the Government of Uganda in preparing a formal request for American aid in establishing an extensive radio/television/correspondence instruction center. Following its tour in Uganda, the Adolfson team was asked by University College Nairobi to extend its stay in East Africa to give advice on that institution's more modest proposal for establishing a radio/correspondence instruction unit in the Institute of Adult Studies at the College.

While political difficulties in Uganda interrupted that country's preparations for the proposed project, University College Nairobi and the Kenya Ministry of Education, in the words of a Technical Assistance Paper drafted by the USAID Africa Bureau, "presented the most practical proposal in their request for technical assistance from USAID."

Contract negotiations between USAID and University Extension, The University of Wisconsin, began in July 1966, with USAID's request that University Extension provide four specialists (or "technicians") to assist the Government of Kenya in establishing a radio/correspondence course program in the Institute of Adult Studies. Apparently because of USAID's financial constraints, the number of specialists was reduced to three, despite University Extension's objections.

The University received a draft copy of the proposed contract from USAID on April 3, 1967, and on April 15, 1967, the Wisconsin Team took up its duties with the Institute of Adult Studies.

PROJECT GOALS

The First Operational Plan.

The degree of success of the USAID/Wisconsin project in Kenya must, of course, be measured against the project's goals as they are stated originally in Contract AID/afr-482 and modified in later documents.

The objectives of the project are stated in Appendix B, the Operational Plan: "Contractor, in cooperation with officials of the Ministry of Education of the Co-operating Government . . . and the (USAID) Mission, shall provide technical advice and assistance in the establishment of a Radio/Correspondence Instruction Unit in the Institute of Adult Studies of the University College, Nairobi."

The Operational Plan requires that "the Contractor . . . perform but not be limited to the following services:

"A. Prepare correspondence courses in several secondary and adult education courses.

Prepare lectures supplementing the correspondence course lessons to be used in radio education programs.

Assist the Institute staff in developing publicity to bring these courses to the attention of potential students.

"D. Train Institute staff members in radio education techniques and course presentation.

"E. Train Institute staff members in techniques of correspondence education, including registration of students, handling course materials, receiving, grading, recording and mailing examinations, etc.

"F. Train headmasters and teachers of schools in techniques of using radio and correspondence materials to improve classroom instruction.

"G. The first secondary school correspondence courses to be developed will be English, Mathematics, Science, History, and Geography.

Swahili and Biology will be added later. Form II courses in these subjects will be developed during the second and third years of operation to conform to the Junior Secondary Examination. Form III and IV courses may be designed later to enable students to qualify for the Cambridge School Certificate or its equivalent.

"H. Secondary level courses will be organized and presented in successive phases as follows:

"1. In supervised groups for radio/correspondence instruction, which will provide an upgrading medium for P3 Teachers. The initial and primary emphasis of this project will be directed toward this group.

"2. In supervised radio/correspondence instruction in secondary schools (Harambee and other schools which might want to use it).

"3. In supervised and semi-supervised radio/correspondence instruction for out-of-school youth and adults who passed the Kenya Primary Examination in earlier years but for whom no future educational opportunities were available.

"I. Certificate of Adult Studies courses in English and two other subjects selected from Economics, Sociology, African History, and African Geography may also be developed. A beginning should be made during the first two years to present some of the Certificate of Adult Studies courses by television. This medium may also be used on a trial basis in secondary schools having appropriate receivers.

"J. In order to accomplish the work outlined above, it is planned that the Cooperating Government will make approximately five hours of radio time available each week to broadcast secondary level and Certificate of Adult Studies courses during or shortly after normal school hours. These programs may be repeated at other times to take care of out-of-school participants. Materials developed under this project probably could be used by other East African and nearby countries using essentially the same curricula. It is expected that the team will have the support of an advisory committee made up of representatives from the Ministry, University College faculty, the Institute of Education, the training colleges, and the Voice of Kenya."

Neither the USAID/Wisconsin contract, USAID's PIO/T (Project Implementation Order/Technical), nor the Project Agreement between USAID and Kenya specifies the number of P3 Teachers or other adults to be enrolled as students in the programs mentioned above. However, it was understood by the Ministry and USAID that enrollment during the first two years of the program would be limited to 2000. (The Wisconsin Team had requested the Ministry to set this limit at 1000.)

Project Goals Modified

This report covers the activities and accomplishments of the Wisconsin Team from April 15, 1967, to June 30, 1970. During the first two years of the project, several modifications of the project objectives and the Operational Plan were made in response to changes in local conditions and the shifting of priorities by the Ministry and the Institute of Adult Studies (I.A.S.). Following discussions between representatives of USAID/Kenya and University Extension, The University of Wisconsin, in April 1969, the Wisconsin Chief of Party and the USAID/K Education Advisor began work on a new Work Plan which would take into account the following changes:

1. Operational Plan, pars. F. and H. It became apparent early in the project that the Operational Plan's emphasis on supervised group study was misdirected. Supervised group study of correspondence courses is particularly applicable to students who are already in a classroom or who can be expected to meet in a central location easily and regularly. However, local conditions make it unreasonable to expect P3 Teachers who work in isolated up-country schools to be able to attend group-study sessions with any regularity. A survey completed six months after the first group of students began their studies showed that only nine per cent studied in groups. It was obvious that our geographically scattered students were unable to walk several miles from their schools to a central location to participate in either supervised or voluntary group study. (Kinyanjui, "C.C.U. Student Survey," August 1968.)

In June and July 1968, an effort was made to establish radio listening/study groups at the Institute's Extra-Mural Centres and some up-country schools. The Wisconsin Extension consultant who led this effort, David Stewart, reported to the Project Team and USAID/K that most P3 Teachers must remain in their schools until 4:30 p.m. (radio broadcasts begin at 5 p.m.); their schools are miles apart from each other; and they have no means of transportation even when the roads are good. (During the heavy rains, even ordinary motor transportation is frequently undependable.) Mr. Stewart's report refers to the advice of many County Education Officers that further efforts to organize either supervised or voluntary listening/study groups would be wasted. (Stewart, Reports of Field Trips to Mombasa and the Coast; Embu and Eastern Province; Machakos; and Kisumu, Kakamega, Eldoret, and Nakuru, June 1968.)

In 1968, and again in 1969 and 1970, proposals to use the project's courses (or course materials) for supervised study in Harambee secondary schools were rejected by the Inspectorate of the Ministry of Education on the grounds that, having been prepared for B Teachers and adults in general, the courses were not suitable for study by adolescent secondary school pupils. Thus, the development of programs for training headmasters and teachers in techniques of using radio/correspondence materials to improve classroom instruction was discouraged by the Ministry.

2. Operational Plan, par. G. Before the arrival in Kenya of the Wisconsin Team, Science was dropped from the group of five secondary school subjects to be developed initially, and replaced by Kiswahili. The Ministry and the I. A. S. agreed that since the Kenya Junior Secondary Examination (K. J. S. E.) curriculum for Science would soon be revised extensively, development of radio/correspondence course materials in that subject should be deferred until a new Science syllabus had been drafted by the Kenya Institute of Education and approved by the Inspectorate.

Following this decision, the Ministry and the Kenya Teachers Commission seconded four secondary school teachers to the Correspondence Course Unit (C. C. U.) to serve as course writers in History, Geography, Kiswahili, and Mathematics. A course writer in English was recruited by the C. C. U. and appointed directly to the Unit by the Teachers Service Commission.

3. Operational Plan, par. I. Planning for a Certificate of Adult Studies (C. A. S.) program and preliminary work on the development of C. A. S. courses in English, African History, and Economics received a high priority during the first year of the project. The C. A. S. course was formerly taught in residence by the faculty of the Institute's Adult Study Centre, who were also assigned by the Director of the Institute to develop study guides for correspondence courses in their subjects. However, the C. A. S. radio/correspondence program was delayed by recurring debates among the Adult Study Centre staff as to the merits of teaching C. A. S. by this new method. Since April 1967, the Institute has had two different expatriate Directors and one long-term Acting Director, each of whom has taken a somewhat different view of the proposed C. A. S. radio/correspondence course. Some decisions made during one administration were modified during another. As a result, work on the C. A. S. correspondence course

development begun under the Institute's first expatriate Director proceeded only discontinuously after his departure from Kenya in March 1968.

In an effort to persuade their colleagues that there was a large potential clientele for C. A. S. by radio/correspondence, the Unit in mid-1969 surveyed 4000 P1 and P2 teachers to determine their interest in the proposed course. Despite faulty distribution of questionnaires in the Rift Valley Province (geographically the largest in the country), 1105 replies were received--1101 indicating keen interest in the proposed course. (Appendix A.)

Unfortunately, the response from the Ministry of Education was less favorable. In 1965, the Ministry had supported the residential C. A. S. program by recognizing it as "equivalent to A levels" for purposes of promotion of P1 and P2 Teachers to the higher S1 grade.* In 1969, however, the Ministry indicated its reluctance to support an expansion of the C. A. S. program, and early in 1970 it withdrew Government support entirely, having decided that even the one-year residential C. A. S. was not an appropriate qualifying course for S1 teachers.

Thus, the C. A. S. course was eliminated from the revised project Work Plan.

Paragraph I also recommends the use of television "on a trial basis" in secondary schools. This recommendation did not take into consideration the fact that normal television broadcasting in Kenya begins after school hours and is limited to a small area of the country. Because of these restrictions and the relatively high cost of television broadcasting, plus the fact that--as far as could be determined--no schools in Kenya had TV sets in 1967, the Wisconsin Team, VOK, the Ministry, and USAID/K agreed that the project should concentrate its media programming on radio.

4. Operational Plan, par. J. Representatives of VOK, the Wisconsin Team, USAID/K, and the Institute agreed that during the first year of broadcasting two and one-half hours of radio time, rather than five, would be required and that additional time would be made available as it was needed. The contract's stipulation of five hours assumed the development of a Certificate of Adult Studies course, which had since been set aside by the Ministry.

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*See notes on pages 18 and 19.

The Revised Work Plan

A Work Plan required by USAID/Kenya, based on the Contract Operational Plan was designed in the early stages of project development. A revision of the Work Plan, taking into account the conditions and modifications noted above, was completed in 1969. The Revised Work Plan divides the scope of work into two mutually supportive components:

1. Institutional Development--the establishment of a radio/correspondence course unit as an institutional facility of the Institute of Adult Studies and University College Nairobi.

2. Program Development--the design, development, production, and utilization of secondary course materials for P3 Teachers who wish to study toward the Kenya Junior Secondary Examination.

THE WORK PLAN IMPLEMENTED

Institutional Development

The Correspondence Course Unit is today an integral department of the Institute of Adult Studies. The Unit functions effectively, its professional and administrative activities are conducted by a permanent and growing staff, and it is prepared to develop additional "programs of relevance" to the educational needs of a broad range of adults in Kenya.

1. Organization. The Unit functions as a permanent department of the Institute and University College. Since July 1969, all members of its professional staff have been full members of the Institute and College faculties, with the same terms of service as are given other Institute faculty members. Within the administrative structure of University College, the Senior Lecturer of the Correspondence Course Unit serves also as the Assistant Director of the Institute. Activities of the Unit are reviewed periodically by the College's Board of Adult Studies, which includes representation from other College Faculties (i.e., the Faculty of Arts, the Faculty of Engineering, etc.), the Kenya Institute of Education, the Kenya Institute of Administration, the Voice of Kenya (Ministry of Information), the Kenya Board of Adult Education (Ministry of Cooperatives and Social Services), and selected members of the Institute itself.

2. Funding. Except for the salaries, allowances, and related expenses of the Wisconsin Team covered by the USAID contract, all operating costs of the Unit are met from Government of Kenya appropriations and student fees. In the Kenya Development Plan, 1970-1974, the Institute of Adult Studies is discussed separately from the other Faculties of University College Nairobi "because of the importance which Government places on activities in this area." (Par. 17.115, p. 482.) The Development Plan also provides a separate projected recurrent expenditure for the Correspondence Course Unit, totalling K£ 297,000

(approximately $832,000) for the fiscal years 1970-1974. (Par. 17.116, p. 483.) This commitment of support from the Kenya Government may be taken as a measure of the project's success thus far and of the permanence and continued development of the Unit.

3. Programs. The Unit now operates two related upgrading courses for P3 Teachers and Unqualified Teachers and has been asked to develop two new programs, an undergraduate degree course in University College and a Mathematics and English course for the Kenya Cooperative College. It has also been asked to assist the Kenya Institute of Administration in developing a series of correspondence courses for Government officers. Thus, continuity and growth of the Unit seem assured at this point.

4. Physical Plant. The impressive outward evidence of the Unit's permanent status is its new physical plant, completed in April 1970 under a grant of K£ 85,000 from the Government of Denmark. Erected on the grounds of the Institute's Adult Study Center near the town of Kikuyu, about 13 miles from Nairobi, the new Correspondence Course Unit Center comprises two office blocks totalling more than 10,000 square feet of floor space, and six staff houses reserved for senior members of staff. The Institute's development plans call for future construction of three additional staff houses.

5. Staff. The competition for trained professional and skilled personnel (and for those qualified for training) in a developing country like Kenya is so great and the process of recruitment at University College is so protracted, that one cannot confidently predict unchallenged stability of staff in many AID-supported projects in Kenya. Recruitment and retention of staff has been a major difficulty for the Unit, and it is to be expected that it will remain a troublesome problem for some time to come. At any given time during the next few years, some key positions will probably be vacant. Nevertheless, the table of organization of the C.C.U. is in a generally healthy condition and can be expected to remain so.

On June 30, 1970, the C.C.U. staff* consisted of:

Senior Lecturer in Charge, C.C.U., and
Assistant Director, I.A.S. (from May 1, 1970) . . . Peter E. Kinyanjui

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*For a detailed description of the staff training program, see Appendix B.

Visiting Senior Lecturer (Chief of Party, Wisconsin Team to July 1, 1970; in Charge, C.C.U., and Asst. Director, I.A.S. to April 30, 1970; departed Kenya July 6, 1970)	Arthur S. Krival
Visiting Lecturer in Charge of Course Development and Instruction (Chief of Party, Wisconsin Team, from July 1, 1970)	Carl J. Vanderlin
Lecturer, Counterpart to Wisconsin Lecturer in Charge of Course Development and Instruction . . .	To be filled in 1970
Visiting Lecturer, Radio Education Specialist (Wisconsin Team)	Norman D. Michie
Lecturer, Counterpart to Wisconsin Radio Education Specialist	Dalail Mzee Ahmad
Editorial Assistant	Kutub Kassam
Administrative Officer (Wisconsin Team)	Jeremiah E. Parson
Administrative Assistant, Counterpart to Wisconsin Administrative Officer	Mrs. Wangui Mwihia
Correspondence Tutors: Biology	Edward Joell
English	Mrs. Barbara Skeath
Geography	John C. Kamawira
History	To be filled 1970*
Kiswahili	Kalfan Mazrui
Mathematics	To be filled 1970*
Physical Science	To be filled 1970*

Subordinate staff authorized in the 1970/71 budget:

- Section Head, Accounts
- Secretary
- Clerk/Typist Grade VII
- Clerk/Typists Grade III (3)
- Correspondence/Filing Clerk
- Lesson Clerk
- Mail Clerk
- Stores Clerk
- Duplicating Operator
- Driver/Messenger
- Part-time casual labor (janitors, manual labor, clerical assistants, etc.)

Part-time instructional staff: 45 lesson markers, all of whom are qualified secondary school teachers.

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*Mathematics Tutor Joseph K. arap Chumo resigned November 1969 to stand for Parliament. He is now the Member for the Constituency of Bomet. Oliver Ob'bayi resigned December 1969 to accept a managerial position with East African Airways. Physical Science Tutor Mrs. Celia Kamau resigned May 1970 for personal reasons and is now living in England.

Functionally, this staff comprises the following sections:

a. Senior administrative staff, responsible for program planning, development, production and coordination; public information services and field activities; relationships with other units of the Institute (Adult Study Centre and Extra-Mural Department), with the College administration and Faculties, and with cooperating agencies such as the Ministry and Institute of Education, USAID, Voice of Kenya, Kenya Institute of Administration, Kenya Cooperative College; financial planning and management:

   Senior Lecturer in Charge/Asst. Director, I. A. S.

   Lecturer in Charge of Course Development & Instruction

   Lecturer/Radio Education Specialist

   (Wisconsin Administrative Officer)*

b. Materials development section, responsible for preparation and periodic revision of course materials (study guide manuscripts):

   Lecturer in Charge of Course Development & Instruction

   Correspondence Tutors

   Editorial Assistant

c. Radio education section, responsible for preparing, taping, and producing radio programs, which are coordinated with written course materials:

   Lecturer/Radio Education Specialist

   Correspondence Tutors

d. Instructional staff, responsible for marking of papers, etc.:

   Lecturer in Charge of Course Development & Instruction

   Correspondence Tutors

   Part-Time Course Markers

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*During the first three years of this project, the Wisconsin Administrative Officer was usually involved in major administrative planning and decisions.

c. Administrative section, responsible for production, storage, and distribution of study guides; management of enrolments and fee collections; receipt, distribution, and return of lessons; student records and other clerical duties, equipment and building maintenance, etc.:

Administrative Assistant

Section Head, Accounts

Secretary

All Other Subordinate Staff

6. Staff: Growth and Shortages. The Project Agreement between USAID and the Government of Kenya called for The University of Wisconsin to provide a staff of three specialists and an unnamed number of short-term consultants. Kenya was to provide three counterparts to the Wisconsin Team, course writers (Correspondence Tutors) for five K.J.S.E. subjects, four clerk/typists, and a driver/messenger. It was understood that course writers for two additional subjects would be assigned to the project at a later date and that such additional subordinate staff as a secretary, accounts clerk (bookkeeper), clerks and typists, and part-time casual labor would be employed as required. It was also understood that the project's printing and duplicating requirements would be met by the University College printing department, but when this arrangement proved unfeasible, employment of a duplicating operator was authorized by the College.

The Ministry stipulated, of course, that all recruitment and hiring be done through the College's regular procedures and that the salaries of all staff must be met within the Government's maximum commitment of K£ 50,000 per annum. Following the College's procedures, all requests for additional staff were incorporated in the Unit's annual Estimates of Expenses, which were approved by both the College and the Ministry. This provision has permitted a steady increase in the number of staff positions.

Unfortunately, however, it has been easier to obtain approval for new clerical and other subordinate staff positions than to recruit qualified personnel. It is not unusual at University College for six months to elapse between the announcement of a vacancy and the appointment of the successful applicant, for the College's staff recruitment machinery operates almost as slowly in the appointment of clerical staff as in the appointment of a Senior Lecturer.

In a project such as this, in which the training of local staff is an important element, it is essential that a counterpart staff member be assigned to each project team specialist within, say, six months of the starting date. Unfortunately, only one Counterpart position was filled by the Institute of Adult Studies in 1967, and recruitment of Counterparts became an unforseen and serious problem. We have noted the considerable difficulty of recruiting qualified personnel for professional positions in a country where the competition for such personnel (between Government and the private sector, and between various agencies of Government) is so great. The first Counterpart Administrative Assistant resigned his post after only a few months, to become planning officer of the Kenya Tea Development Authority. His replacement (appointed only after the University College's prolongated recruitment/appointment procedures had been observed) has only this year (March 1970), after twelve months of training, been certified in the position.

In September 1968, Peter Kinyanjui was promoted from Counterpart Radio Education Specialist to Counterpart Senior Lecturer. Because he could not immediately leave his duties in the Unit's radio section, he was not able to begin training for his new post until April 1969. His successor as Counterpart Radio Education Specialist, appointed in May 1969, resigned to stand for Parliament only five months later. The position was again filled in April 1970. Recruitment of a Counterpart Lecturer in Charge of Course Development and Instruction was begun in August 1969. At this writing, the position has not yet been filled, nor have the positions of three Correspondence Tutors who resigned in November and December 1969 and May 1970.

These delays do not result from any lack of effort on the part of the Unit or the Institute administrations, but seem to be in the nature of things at University College.

The Unit also suffered from a staff shortage in the Project Team itself. During the first 16 months of the project, the restriction of the Wisconsin Team to three specialists placed a heavy burden on each member of the team. In addition to carrying out the administrative duties of a Chief of Party and the head of a new University department, the Wisconsin Senior Lecturer was responsible for training five course writers, editing study guide manuscripts, and directing course development. The Administrative Officer was therefore required to assume additional administrative and management duties, and the Radio Specialist's work program became difficult to organize because course materials did not

reach him on an organized, regular schedule. The work-load imposed on the Radio Education Specialist was also unrealistic. In addition to original scripting of radio broadcasts for five subjects every week and taping and producing these broadcasts, he was responsible for designing, building, and maintaining a radio studio and training his Counterpart.

Efforts to reduce the editorial work-load by employing part-time assistants were only temporarily and partly successful. Finding qualified people for this sort of employment in East Africa is in itself difficult. Training part-time employees for specialized work requires as much time and effort as training a full-time permanent editor and is usually less rewarding. Between December 1967 and June 1969, the project employed three different part-time editorial assistants, whose combined period of service totalled less than a year. Thus, because the Wisconsin Team did not include a full-time editor/course development specialist from the start, the project experienced delays in its development and production of instructional materials, and suffered inconsistencies in the editorial treatment of these materials.

In September 1968, Carl J. Vanderlin joined the Wisconsin Team as Visiting Lecturer in Charge of Course Development and Instruction, thus relieving the Chief of Party of most of his duties in these areas and making possible a more manageable distribution of the work load.

However, inadequate staffing in one area has not yet been adjusted. It was understood that the Institute's Extra-Mural Tutors (of whom there are four in a country of almost 225,000 square miles and more than 10,000,000 people) would also serve as the project's field staff. Unfortunately, the Extra-Mural Staff has never been at full strength during the past three years, and thus found it extremely difficult to meet the Extra-Mural Department's own commitments in the field. Duties in Nairobi made it impossible for the Wisconsin Team to carry out a systematic program of liaison with Ministry of Education Officers in the field or with the Teacher Training Colleges, or to schedule meetings with P3 Teachers, other students, or prospective students on a regular basis. The Team did organize a number of such meetings, the reports of which have been submitted to USAID/K, but these efforts in the field were necessarily occasional, hastily organized, and only partially effective. More than anything else, the zeal and dedication of the Counterpart Senior Lecturer, one or two Correspondence Tutors,

and some Extra-Mural Tutors have produced some sporadically effective field work, but not enough.

7. Recommendations. The Wisconsin Team's experience shows that a project such as this requires the following professional developmental staff:

a. A chief of party and director of the unit or department.

b. A correspondence education specialist in charge of course development and instruction.

c. A radio education specialist for the full term of the project.

d. A second radio education specialist for a period of two years.

e. A correspondence course editor.

f. An administrative officer.

g. Two field organizers.

h. Counterparts for all these positions.

Future growth of the C.C.U. may require an increase in staff positions. For example, in the past, all drawings, charts, etc. in mathematics, science, and geography study guides have been done by the course writers and other members of staff, particularly the Wisconsin Administrative Officer who, fortunately, brought to his job a useful and varied technical experience. However, as the science courses develop, it will be necessary to employ an artist first on a part-time basis and later, perhaps, full-time.

The need for field staff assigned specifically to C.C.U. duties has already been mentioned. However, the staff development problems of the Institute make it more likely that new field positions will go into the expansion of the Institute's own under-staffed Extra-Mural Department.

Program Development

The project's major program activity, described rather loosely in paragraphs G and H of the Contract Operational Plan, is stated more succinctly in the Revised Work Plan. It is "to provide through the Correspondence Course Unit post-primary educational opportunities for persons unable to attend full-time secondary schools. . . . More specifically, the activities under the Project will be designed to meet the needs of . . . P3 Teachers preparing for the Kenya

Junior Secondary Examination, . . . Other teachers (unqualified) and adults for whom these materials are appropriate, . . . Adults preparing for Forms III and IV which lead to School Certificate or East African Certificate of Education," and Harambee school teachers, but only if program plans for this group "have been clearly outlined by the Ministry of Education and agreed to by the Wisconsin Team and USAID/K."

As stated previously in this report, suggestions for assisting Harambee Schools by providing secondary school materials for their teachers were not approved by the Ministry because it considers C.C.U. materials, which are designed for adults, inappropriate for use with "schoolboys and girls."

1. The P3 Teacher. The P3 Teachers comprise the lowest classification of qualified (i.e., professionally trained) teachers now being certified in Kenya. As a rule, P3's have completed seven or eight years of primary school education and have earned the primary school-leaving certificate (either the Kenya Primary Examination Certificate or, more recently, the Certificate of Primary Education). They receive their professional training in a two-year course at a Teacher Training College or, if they have begun their teaching careers without professional training (and usually with only a primary school education), in an in-service training program conducted by the Kenya Institute of Education.

According to the 1968 Annual Report of the Ministry of Education (Nairobi, Government Printer, 1969), there were a total of 37,923 teachers employed in Kenya's primary schools in 1968.* Of these, 10,438 were not professionally qualified. The 27,485 qualified teachers were classified as follows:

University graduates	80
United Kingdom Ministry of Education Certificate	162

*The Kenya school system is similar to the British. Standards 1-7 comprise Primary School and lead to the Kenya Primary Examination (K.P.E.) or, more recently, the Certificate of Primary Education (C.P.E.). Four years of Secondary School (Forms I-IV) lead to the 'O' levels examination, through which the student earns the School Certificate or, more recently, the East African Certificate of Education (E.A.C.E.). Forms V-VI lead to the 'A' levels examination, which earns the Higher School Certificate and qualifies the student for university entry.

S1*	147
P1	1,798
P2	5,315
P3	16,992
P4	2,702
Any Other	289

The P3 Teachers, then, are the mainstay of the primary schools in Kenya, comprising about 60 per cent of the qualified teaching staff and almost 45 per cent of the total teaching staff. Following an upward revision of salary scales in 1969, a beginning P3 Teacher now earns K£ 225 ($630) per year. After 17 years of service, he reaches the top of the P3 scale with an annual salary of K£ 390 ($1092). About 70 per cent of P3 teachers are men. A typical P3 Teacher is probably between 21 and 40 years old, married, and has more than four (and perhaps as many as ten) dependents (including members of his extended family). His house probably has neither indoor plumbing nor electricity; he owns few if any books; 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. He may have access to a very small library, but it is probably miles away and impossible for him to use regularly.

By passing the K.J.S.E., the P3 Teacher can qualify for promotion to P2 grade and earn a substantial increase in salary. The P2 salary scale runs from K£ 288 ($806) to K£ 522 ($1461) per year after 15 years of service.

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*S1 Teachers have a basic qualification of School Certificate plus three years of teacher training, or Higher School Certificate plus one year of teacher training. S1 Teachers are normally posted to secondary schools. Of the total 309 U.K. and S1 Teachers, over 181 were posted in Nairobi; the remaining 129 were scattered through Kenya's seven provinces.

P1 Teachers have a basic qualification of School Certificate plus two years' training.

P2 Teachers have at least two years of secondary education (now formalized in the K.J.S.E.), but no School Certificate, and two years' training.

P3 Teachers have K.P.E. or C.P.E. plus two years' training.

P4 Teachers have completed Primary School but did not pass the school leaving examination; they have two years' of teacher training. Candidates for P4 are no longer being accepted at the training colleges.

Subjects examined in the K.J.S.E. are English, Geography, History, Mathematics, General Science (changed to Physical Science in the 1970 syllabus), Biology, and Kiswahili. To earn a K.J.S.E. certificate, the candidate must pass at least five of these subjects. Like all school examinations in Kenya, the K.J.S.E. is offered only once a year, and until the 1968 examination, a candidate was required to pass at least five subjects at a single sitting (i.e., in the same year). At the urgent recommendation of the Wisconsin Team, this requirement was changed in 1968, but only for P3 Teachers enrolled with the Correspondence Course Unit. The Ministry of Education agreed to allow these teachers to sit examinations in as few as two subjects a year and to carry forward credit for individual subject passes from one year to the next, until they had accumulated passes in five subjects. In 1969, again following a recommendation from the Wisconsin Team, this privilege was extended to all P3 Teachers. The Ministry of Education is now considering a third recommendation, that the same privilege be granted to employees of other ministries and, in time, to all adults who are preparing for the examination as private candidates (i.e., not attending school full-time).

It should be understood that while the Ministry of Education is convinced that it must upgrade all teaching in the primary schools and ultimately eliminate all teaching grades below P2, achieving this objective is not as simple as it may seem. Kenya is a developing country, poor by European standards, and the costs, first, of operating in-service training programs and, second, of paying the higher salaries to large numbers of newly promoted teachers each year are not easily met. These costs must be added to those of a rapidly expanding school system to which many new schools must be added each year by a country which is already devoting a larger proportion of its wealth to public education than is, for example, the United States. Today, there is also strong public pressure for universal free primary education in Kenya. Therefore, even as the absolute numbers of better qualified teachers increase, the relative proportions of P1, P2, P3, and Unqualified Teachers are not likely to change radically for some years.

2. The K.J.S.E. Preparatory Course. The K.J.S.E. course produced by the project now includes Forms I-II materials in English, Kiswahili, Mathematics, History, and Geography, and Form I materials in Biology. Form II Biology and Form I Physical Science are presently being developed.

A year's work in each subject comprises approximately 36 study guide lessons (12 lessons per term). Lessons alternate between requiring a written assignment submitted for grading and self-testing exercises in which the student tests his understanding of the material.

In Form I subjects, each lesson is accompanied by a radio program covering the main points of the lesson. In Form II, each radio program usually covers the main points of more than one lesson (usually two), the treatment being determined by logical associations of materials from related lessons. Other adjustments of the radio format are being developed following the recommendation of Professor Karl Schmidt, director of WHA Radio (The University of Wisconsin/ State Radio Network) who visited the project as a consultant in February and March 1969. Mrs. Ruth Plakius, formerly of the WHA School of the Air, served as a consultant from October to December 1969 to assist Mr. Michie in developing a new radio program format.

Each radio "term" runs 18 weeks, with broadcasts in Form I repeated each week and Form II broadcasts repeated the week following the original broadcast. The radio broadcast schedule also includes occasional summary reviews to mark the completion of a term's work.

In addition to the study guides written and produced by the Unit, most courses also include commercially published textbooks, workbooks, atlases, special kits (e.g., Mathematics), and other conventional classroom materials. Textbooks and other commercially produced materials are purchased from a local distributor of educational materials, the Text Book Centre, which mails them directly to the student. The cost of these materials is absorbed in the operating budget of the Unit so that the student is not required to pay directly for his textbooks. Instead, he pays a single fee to the Unit, based on the number of subjects he enrolls in. Administratively, this system is more easily managed than one which would attempt to base the fee for each subject on the cost of texts and materials.

The first phase of program development,* the preparation of the Form I materials in the original five subjects, began in June 1967 and was completed

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*The process of course development is described in Appendix C.

during the third quarter of 1968. This phase included the training of five Tutors (course writers). The materials prepared for Form I comprised approximately 180 study guide lessons (duplicated in quantities large enough to supply the first year's enrolment) and the same number of 15-minute radio tapes and broadcasts, plus five 30-minute review broadcasts. In addition, examinations to be taken at the conclusion of the second and third terms of each subject were also developed. These examinations are intended not only to permit the student to test his progress in the course, but also to familiarize him with the nature of the K.J.S.E.

The second phase of program development began about mid-year 1968 and was substantially completed a year later. Following the same procedures, which had been refined with experienced, Form II courses in the same five subjects were developed and produced. Again there were approximately 180 lessons and two examinations for each course, and, since the new radio format covers two or more lessons in each broadcast, approximately 90 15-minute tapes and broadcasts.

A sixth Form I course, Biology, written by the Biology Department of Pangani Girls High School in Nairobi, was begun in December 1968 and completed in December 1969, with the third term's study guide somewhat modified by the Biology Tutor who was appointed in September 1969. Development of a Physical Science study guide begun in September 1969 was interrupted in May 1970 by the resignation and departure from Kenya of the Tutor after the completion of one term's work.

Thus, by June 30, 1970, the project had developed and produced six Form I courses and five Form II courses comprising more than 400 individual lessons and examinations, and approximately 300 radio programs.

3. The School Certificate or E.A.C.E. Course. In the Revised Work Plan this course (Forms III-IV, leading to 'O' levels)* is scheduled for completion after the Project Team's scheduled departure from Kenya. During the third quarter of 1969, the Unit began planning the development of the Form III-Form IV program. Design, preparation, and testing of study guide materials in Form III English and Kiswahili began during the first quarter of 1970, and preliminary

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*See note on page 18.

editions of these study guides will be essentially complete during the fourth quarter of 1970. As long as the present Tutors in these subjects remain with the Unit, it can be assumed that development of Form IV English and Kiswahili will proceed normally in 1971.

However, the development of School Certificate Geography has been delayed because radical changes in the Ministry's K.J.S.E. syllabus has required the Geography Tutor to complete a massive revision of the K.J.S.E. study guides in 1970, before he can begin work on the Form III course.

In Mathematics and History, the protracted delay in recruiting replacements for the Tutors who resigned almost a year ago has, of course, delayed development of School Certificate courses in these subjects. It is probable, therefore, that the C.C.U. will not be able to offer a full Form III curriculum before 1972.

Utilization of Materials--The Instruction Program

Successful utilization of the study materials produced by the C.C.U. requires that they be incorporated into a systematic and continuous instructional program. The instruction provided by this project comprises a synthesis of (1) correspondence study guides, textbooks, and other teaching materials such as maps, mathematical instrument sets, etc., (2) supplementary radio broadcasts covering the material in one or more lessons of the study guide, and (3) the marking of students' lessons by qualified secondary teachers. (It should be understood that the term "marking" includes teaching in detailed marginal notations as well as evaluating the student's work.) Finally, the instructional process is made to function by an efficient apparatus for establishing and maintaining contact between the student and his teacher and school (the C.C.U.). That is the system for recruitment, enrolment, handling of fees, distribution of materials, and handling of lessons and examinations.

Correspondence and radio instruction in the original five K.J.S.E. subjects began in February 1968, when one term's work had been produced and the second term was under development. Instruction has continued without interruption (except for normal breaks in radio broadcast scheduling). Instruction in K.J.S.E. Biology began in February 1969 and will continue without interruption.

One measure of the instructional activity of a correspondence education program is, of course, the number of lessons which receive the attention of the

program staff. In 1968 and 1969, C.C.U. course markers received and marked the following numbers of lessons:

	1968*	1969**
English	4,241	24,105
History	2,286	14,983
Geography	1,905	7,763
Kiswahili	1,253	848
Mathematics	1,197	17,677
Biology	--	600
	10,882	65,976

Materials produced under the project are being used in other, less formal ways as well. We cannot document an estimate of the number of non-C.C.U. students who use C.C.U. textbooks and study guides to prepare for the K.J.S.E., but we know that the number is substantial. We also know from a survey conducted in 1969 by the Voice of Kenya that several hundred thousand Kenyans have their radios on when the C.C.U. broadcasts are aired. How many of these listeners are actually listening is, of course, impossible to say. No doubt, many--perhaps most--of this audience would have their radios turned on at 5:00 and 5:30 p.m. Monday through Friday to listen to news reports or music or other educational broadcasting. Nevertheless, we think it is reasonable to assume that some broad social benefit is derived from the C.C.U. radio programs.

Recruitment of Students

Recruitment for the K.J.S.E. program began in December 1969. Several news releases prepared by the Wisconsin Chief of Party were published in the East African Standard, the Daily Nation, and the Kiswahili press. The Chief of Party and Director of the Institute also appeared on a 30-minute television program, and the Radio Education Specialist prepared several spot announcements which advertised the course for several weeks over VOK's English and Kiswahili

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*K.J.S.E. Preparatory Course, Form I only.

**K.J.S.E. Preparatory Course, Forms I and II, plus Unqualified Teachers Course (see below).

networks. Staff members from the Institute and the C.C.U. visited groups of P3 Teachers in a number of areas to explain the program and to answer questions about it. In addition, paid advertisements were placed in the local press, and the ministry circulated announcements to teachers through Provincial, County, and Municipal Education Offices. Extra-Mural Tutors and project staff members also visited a number of local Education Officers to acquaint them with the project and enlist their assistance in the recruitment of students.

A survey taken in August 1968 indicates that radio was the most effective medium for publicizing the program. About 45 per cent of the respondents first heard about the course for P3 Teachers over the radio. About 20 per cent heard about it from their Education Officers, and about the same number from friends or fellow-workers. About 12 per cent learned of the course from the newspapers.

From a number of complaints received from P3 Teachers, it was also learned that many of the application forms sent by mail to County Education Officers for distribution to teachers either were not received by these officers or were otherwise lost or misplaced. (See Appendix D.)

As a result of these experiences, radio announcements were used more extensively during the 1969 and 1970 recruitment periods, and the Ministry was asked to issue additional notices to County Education Officers urging their cooperation with the project.

As noted before, the lack of a field staff severely hampered the project's efforts to establish and maintain personal contact with all Provincial, County, and Municipal Education Officers and with a significant number of headmasters and teachers. Of the 15 or 20 such meetings which did take place, no clear pattern of effectiveness emerged. For example, meetings with County Education Officers and Assistant Education Officers in Nyeri, Fort Hall, Embu, Kisumu, Kakamega, Nakuru, Kericho, Machakos, and other densely populated areas seemed to result in an increase in enrolments from these areas. Yet perhaps the relatively high enrolment from these areas may be simply a demographic phenomenon. Also, some meetings at the Coast seemed to have some positive effect, while others apparently had little effect at all. Nevertheless, it was the feeling of members of staff who participated in these field meetings that they were generally valuable, that they did attract students to the program, and that their effectiveness would be increased by regular and frequent scheduling.

1. Enrolments. The Ministry of Education predicted that 2000 B3 Teachers would enroll in 1968. The actual enrolment figures for 1968 are as follows:

Total student enrolment	702
Enrolment by subject (Form I only):	
English	604
Geography	506
History	467
Kiswahili	350
Mathematics	517
Total enrolment by subject	2444

Enrolments in Form II as well as Form I subjects were accepted for the first time in 1969. Total enrolments for calendar years 1968 and 1969 are as follows:

Total student enrolment, Forms I and II: 1531

Enrolment by subject:	Form I		Form II	
English	1134		733	
Geography	976		706	
History	926		663	
Kiswahili	663		454	
Mathematics	918		530	
Biology	276		-	
Total enrolment by subjects	4893	+	3086	= 7979 subject enrolments

The enrolment figures for June 30, 1970, show the following:

Total student enrolment Forms I and II: 1903

Enrolment by subject:	Form I		Form II	
English	1360		948	
Geography	1181		893	
History	1102		842	
Kiswahili	798		588	
Mathematics	1113		723	
Biology	436		157	
Total enrolment by subjects	5990	+	4151	= 10,141 subject enrolments

2. Examination Results. In 1968 and 1969, approximately 500 C.C.U. candidates sat all or part of the K.J.S.E. Results of these examinations will be analyzed and evaluated in a separate report now in preparation. However, an analysis of the 1968 results which was prepared by the Counterpart to the Chief of Party is appended to this report (Appendix E) and will be summarized briefly here.

The percentage of passes for School Entries (students enrolled in full-time secondary schools) was 24.57 per cent; for all Private Entries (a classification which includes C.C.U. Candidates), 11.42 per cent.

For C.C.U. candidates sitting two or three subjects, the success rate was 60 per cent. For those sitting four or five subjects, it was 44 per cent, and for those sitting six or seven subjects, it was 34 per cent.

C.C.U. Candidates scored a 49 per cent pass rate in subjects which they had studied with the Unit. In all subjects, including those which they had studied elsewhere or on their own as well as those studied with the C.C.U., the pass rate was 39 per cent. In subjects which C.C.U. candidates had not studied with the Unit but had prepared elsewhere, the pass rate was 20 per cent.

For reasons given in the appended analysis, these favorable results are not offered as evidence of the project's success. In 1968 (and probably in 1969) it was too soon to say. Yet despite the disappointing enrolment, the early results were encouraging.

The 1969 U.Q.T. Program

In 1968 the Kenya Institute of Education (K.I.E.), whose responsibilities in the Ministry of Education include teacher training, persistently sought the cooperation of the C.C.U. in a program for improving its in-service course for Unqualified Teachers (U.Q.T's). The U.Q.T. upgrading course is intended to improve the teaching effectiveness of previously untrained teachers. Until 1969 the program consisted of a year's study divided into three short residential courses in methods of teaching. These were conducted during school holidays at training colleges and residential high schools, and, between residential sessions, they were supplemented by radio lectures. The U.Q.T.'s who passed a K.I.E.

examination at the end of the year were upgraded to P3 Teachers.* The course is organized by a team of five Canadian specialists assigned to K.I.E. under the Canadian foreign aid program. Residential classes are taught by staff members of the teacher training colleges.

During the first year of the program, K.I.E. and other departments of the Ministry decided that the course required additional academic substance and that it should be strengthened by a year's work in two or three secondary school subjects. Only those U.Q.T.'s who passed the first phase of the program, professional training, would be admitted to the second year of study.

Following considerable discussion and negotiation between the C.C.U. and K.I.E., the Unit agreed to conduct the second year's academic course, using materials in English, History, and Geography which it had already developed for its K.J.S.E. upgrading course. The U.Q.T.'s, however, take only the first two terms (24 lessons) of Form I English and either Form I History or Geography, plus a special two-term course in traditional Mathematics prepared by the Canadian team in cooperation with the C.C.U. (K.I.E. officers felt that the Unit's K.J.S.E. course in New Mathematics was too difficult for Unqualified Teachers.) Unqualified Teachers may also follow the project's radio broadcasts, and they are also required to attend two short residential courses, in August and December, organized by K.I.E. and conducted by secondary school teachers. At the end of the December session, the students take examinations in three subjects. These examinations are prepared by C.C.U. Tutors, approved by K.I.E., and marked by residential course teachers.**

In addition to organizing the residential sessions, approving the examinations, preparing the Mathematics course, and selecting the students, K.I.E. is responsible for some of the administrative work connected with the correspondence

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*U.Q.T.'s without the elementary school certificate earn Shs. 170/-, or $24, per month; those holding a Certificate of Primary Education earn Shs. 192/-, or $27, per month).

**Because the special course in traditional Mathematics was not available early in 1969, the pattern of the first C.C.U./U.Q.T. program was somewhat different. From February to August, students took two subjects, English and either History or Geography, and sat their examinations in these subjects at the August residential session. From September to December, they took traditional Mathematics, and sat the exam at the end of the second residential session.

course; for example, distribution of applications, mailing of study guides, organizing the residential sessions and examinations, liaison with County Education Officers.

1. Results. In 1969, 2031 Unqualified Teachers who had passed the first phase of the K.I.E. in-service course enrolled for the second phase with the C.C.U. Of these, 1614, or 79.5 per cent, completed all course work, passed the final examinations in three subjects, and were upgraded to P3 status. An additional 63, or 3.1 per cent, passed the course but were temporarily denied reclassification pending clarification of certain administrative irregularities. It is likely that most of these irregularities have now been resolved, so that the final success rate was about 82 per cent.

In the individual subjects, the results were:

Subject	Sat Examination	Passed	Percentage of Passes
English	2014	1918	95.2
History	1318	1137	86.2
Geography	698	671	96.4
Mathematics	1955	1777	90.8

2. Implications of Results. Anyone familiar with correspondence study will immediately recognize that these results are unusually high. While the pass rate of C.C.U. candidates who sat the K.J.S.E. in 1968 and 1969 was also higher than might be expected and substantially higher than the national average, it does not approach the success of the U.Q.T. course.

The number of U.Q.T. students who in 1969 completed all written lessons and sat the final examinations is even more impressive. The completion rate, that is, the number or percentage of lessons actually written and submitted by students in a given course, is a significant determinant of the effectiveness of that course. A completion rate, of say, 60 per cent is more than most correspondence study administrators dare hope for. In 1969 the completion rate for Unqualified Teachers in this program approached 97 per cent in Mathematics and 99 per cent in English, History, and Geography.

The apparently greater success of the U.Q.T. program is even more dramatically emphasized when one remembers that most U.Q.T.'s had completed their formal education at the seventh or eighth grade of primary school, whereas

P3 Teachers have an additional two years of formal education at the teacher training colleges.

Without using the sophisticated investigative techniques which a detailed analysis would require, we can only point to certain obvious differences between the programs in an effort to explain the apparent greater success of the U.Q.T. course.

First, the U.Q.T. in-service training program is the only means by which Unqualified Teachers can be upgraded. Candidates for the first phase of the course are carefully selected and recommended to K.I.E. by County Education Officers, who are encouraged to nominate only those teachers who have given evidence of ability and motivation. The first year's professional training by K.I.E. is, in effect, a second selection process, and only those teachers who complete this training successfully are permitted to enter the C.C.U. academic course.

In contrast, the K.J.S.E. Preparatory Course is only one of a number of ways in which P3 Teachers may prepare for the Junior Secondary Examination. Before the Correspondence Course Unit accepted its first student, thousands of P3 Teachers had already enrolled in secondary school courses with a number of commercial correspondence colleges and had already paid considerable sums in fees to these institutions. In some areas, the local branch of the Kenya National Union of Teachers has provided K.J.S.E. "swat" courses for P3 Teachers at very little cost.

We know that large numbers of P3 Teachers also prepare for the K.J.S.E. independently, using whatever materials they can obtain. We also know that a great many teachers (as well as nonteachers) who are not enrolled with the C.C.U. follow the Unit's radio lessons and use C.C.U. study guides and textbooks. A nettlesome administrative problem has been the loss of study guides and textbooks in the mails, particularly in 1968 and 1969, before steps were taken to reduce the number of postal losses. There is considerable evidence that these materials find their way into the hands of P3 Teachers who are preparing for the K.J.S.E. Perhaps such unplanned supplementary distribution of educational materials can be reckoned one of the ancillary benefits of the project.

Second, the U.Q.T. program is organized and controlled by K.I.E. through a field organization which includes the Canadian Team and other K.I.E. officers,

as well as all County Education Officers. All information to participants is channeled from K.I.E. through the County Education Officers, who are responsible to their superiors in the Provincial Education Offices and in Nairobi for proper management of the course. The K.I.E. also has some administrative control over the teacher training colleges and the residential secondary schools which provide teaching staff for the residential sessions.

The C.C.U. course for P3 Teachers, although it is sponsored by the Ministry, is essentially voluntary. The project has lacked the permanent field organization needed to ensure the continuing formal cooperation of all County Education Officers, who may have the heaviest work-loads in the Civil Service. Thus, while recruitment and supervision of candidates for the U.Q.T. course is done very effectively at the local level, most recruitment of C.C.U. students must be managed from Nairobi.

Third, the U.Q.T. residential sessions have proved very effective. They help motivate the student to complete lessons on schedule, since students are required to complete a specified number of lessons before each session. In practice, however, no U.Q.T. who is enrolled in the program is turned away from these sessions, and if he is behind in his work, the resident teachers help him catch up. Since only those students who have attended the residential sessions are eligible to sit the examinations, it is reasonable to assume that most U.Q.T.'s who sit the examinations are well prepared.

While the U.Q.T. course proceeds in stages which are chronological as well as academic, the C.C.U. was not able to organize any residential sessions until recently, and then only for a small number of P3 Teachers. The project cannot command an instructional staff large enough to cope with a thousand or more students. In August 1970 two residential sessions for 60 students were conducted by the Correspondence Tutors and other members of staff at the Adult Study Centre. Informal reports on the sessions indicate that they were very successful. A formal report is now being prepared by the Chief of Party and will be submitted to USAID/K shortly. (See Appendix F.)

Thus, the U.Q.T. and P3 courses make an interesting contrast between a tightly controlled program, in which the student's personal motivation is strongly reinforced by strong institutional direction and supervision, and one in which he is essentially "on his own," as is true of many programs of adult education.

The Unqualified Teacher who enters the K.I.E./C.C.U. course knows that he has been specifically selected for upgrading, that this opportunity is made available to only about one in five teachers in his position, and that this may be his only opportunity to improve his status in the teaching profession. He knows that to pass his course he must submit his lessons on schedule, that he must attend the residential sessions (for which he pays a fee in addition to the correspondence course fee), and that he must take his final examinations at the end of the year.

Again, compare the U.Q.T. with the P3 Teacher who wishes to be upgraded. He is encouraged to enroll with the C.C.U., but he is not required to. He is also encouraged to submit lessons on schedule, but again he is not required to, and his only deadlines are self-imposed. Since the K.J.S.E. is a national examination not directly connected with the project, the P3 Teacher may sit the examination this year or next, and he may sit an examination whether he has submitted all lessons or none. His motivation, then, is essentially self-generated, and he is inevitably more vulnerable than the U.Q.T. to the interferences and delays that adults who study independently always face.

This comparison suggests, then, that a rigidly controlled, single purpose, "closed" in-service training program may be the most effective way to use radio/correspondence study for upgrading teachers. On the level of common sense, at any rate, this seems an inevitable conclusion.

The 1970 U.Q.T. Program

Enrolment in the 1970 U.Q.T. radio/correspondence course is about 13 per cent lower than that for last year, with 1762 students having passed the first phase of the course conducted by K.I.E. Since the examinations will not be given until December, results will not be known until January 1971.

APPENDIX A

C.A.S. BY CORRESPONDENCE

Summary of Answers to the Questionnaire

(By P. E. KINYANJUI)

The questionnaire attached was sent to about 4000 P1 and P2 Teachers in the country. This figure represents about 50% of all the teachers in these grades. To date (15 September, 1969) about 1100 replies have been received and more are still coming in. Also there have been very many requests from teachers for more forms to be sent to them. Many teachers regarded the questionnaire as an enrolment form and were asking when they could start paying the fees. Many were very keen on the prospects for promotion provided by the Certificate of Adult Studies. Many said that such a course by correspondence has been long overdue.

Central Province had the largest number of replies (with 367), while Rift Valley Province had the least (with only 18). Something must have gone wrong with the distribution of forms in the Rift Valley area.

As can be seen from the Table, all the teachers who replied (with an exception of 2 or 3) had passed the K.J.S.E., and many had passed the Cambridge School Certificate (or the new E.A.C.E.) in one or more subjects. There were 852 replies from P2 Teachers as compared with 252 from P1 Teachers. A good proportion of P1 Teachers had been promoted from the P2 grade after having passed the C.S.C. as private candidates.

The most popular subjects (apart from English which is compulsory) were Geography, History and Economics. Sociology and Political Science were the least known. Many teachers asked for a wider range of subjects to be provided in the C.A.S., and suggested the following additions:

Kiswahili

Biology

General Science

Mathematics

Home Economics

Health Science

Public Relations

Commercial Subjects

Music

Educational Psychology

Religious Education, etc.

A majority of teachers felt that the proposed three-year study by correspondence was too long, and that they could complete the course in about two years. Many of them said that they would be able to devote, on the average, about 20 hours per week to their studies.

There were many general comments made on the questionnaire and they were all in favour of the proposed C.A.S. course by correspondence. These general comments and questions are summarised below:

(1) Is there going to be radio broadcast to accompany correspondence instruction?

(2) If so, the radio broadcast should be after 6 p.m. or between 9 and 10 p.m.

(3) Is promotion to S1 automatic after gaining the C.A.S.?

(4) Would teachers be allowed to accumulate passes for the C.A.S. or must they pass all subjects at one sitting?

(5) Would personal tutors be available in various Centres in the country for consultation?

(6) When will part-time degree courses by correspondence begin? For example, B. Ed.?

(7) The proposed three years of study for the C.A.S. is too long. Many P1 Teachers should be able to qualify for the C.A.S. in 1 year. Most of P2 Teachers should be able to qualify for the C.A.S. in 2 years.

(8) English should not be made a compulsory subject.

(9) Kiswahili could be an alternative subject to English.

(10) Economics, Political Science and Sociology courses should start at the elementary level since many teachers did not study them at school.

(11) In-service residential courses should be held during the school holidays.

(12) Extra-Mural centres in Nairobi and elsewhere should combine correspondence study with evening and weekend classes.

(13) Textbooks should be included in the fees, even if it will mean raising the fees.

(14) Postage cost should be included in the tuition fees.

(15) Provisions should be made for payment of fees by instalments.

(16) The proposed C.A.S. course by correspondence should start as soon as possible.

(17) The proposed course should be open to all qualified people, not just to teachers.

UNIVERSITY COLLEGE NAIROBI INSTITUTE OF ADULT STUDIES

Questionnaire for the Proposed C.A.S. Course by Correspondence

Name.....

Postal Address.....

City/Town..... County.....

Occupation..... Grade .....

Place of Employment..... County.....

Teachers Service Commission No.....

Years of Schooling Completed Name and Address of School or College

Primary/Full Primary.....

Intermediate.....

Secondary.....

Teacher Training.....

Correspondence Courses.....

Other.....

Record of Examinations (including upgrading examinations)

Examination	Year	Result	Where taken
1.			
2.			
3.			
4.			
5.			

Would you be interested in studying for the Certificate of Adult Studies by Correspondece?.....

Tick the subjects you would like to study:

English	
Geography	
History	
Economics	
Political Science	
Sociology	

How many hours per week can you give to your studies?.....

Any other comments on the proposed course will be welcome.....

.....

Summary of Answers to the Questionnaire on 'C.A.S. by Correspondence'.

	Central Province	Nairobi	Nyanza Province	E. and North Eastern Province	Western Province	Coast Province	Rift Valley Province	TOTAL
Total	367	90	84	292	128	126	18	1105
P1	89	18	24	41	37	39	4	252
P2	278	72	60	251	90	87	14	852
K.J.S.E.	211	68	35	163	54	62	10	603
C.S.C. (E.A.C.E.)	156	22	49	129	74	64	8	502
English	367	87	84	292	127	126	18	1101
Geog.	332	68	59	213	97	102	15	876
History	304	78	70	209	97	90	17	865
Economic	177	24	29	81	57	42	8	418
P. Science	51	8	12	43	30	27	5	176
Socialogy	124	22	13	50	28	44	7	388
Hrs/Week	27 hrs.	18 hrs.	23 hrs.	10 hrs.	16 hrs.	14 hrs.	23 hrs.	

Average 19 hrs.

APPENDIX B

THE STAFF TRAINING PROGRAM

Training Senior Staff

Senior staff positions have been filled by members of the Wisconsin Team, whose responsibilities include the training of Counterparts to succeed to these positions at appropriate times and thus assure continuity of the program after the USAID/Wisconsin "phase-out."

Senior Lecturer in Charge/Assistant Director, I.A.S. Mr. Peter Kinyanjui, an honors graduate of Makerere and a Syracuse University M.A., began his training as Counterpart Radio Education Specialist, and from June 1967 to September 1968 he received the training described in paragraph 3 below. Following his promotion, Mr. Kinyanjui participated in an on-the-job training program under the direction of the Wisconsin Chief of Party, and on May 1, 1970 he was appointed to succeed the Chief of Party as head of the C.C.U. His training consisted primarily of practical work in the methods and problems of administering a radio/correspondence education program, including the development, production, and coordination of printed and radio study materials; supervision of both professional and clerical staff; conducting staff training programs; relationships with other departments of the Institute, the University College administration, and cooperating agencies; and financial planning.

During his training period, Mr. Kinyanjui became familiar with the duties of all members of staff, with the business management of the Unit, and with all steps in course development, course production, and instruction: i.e., course design, development of manuscripts; editing, mechanical preparation and production, and distribution of study guides; preparation and production of radio broadcasts; distribution and marking of lessons, etc. Toward the conclusion of his training, Mr. Kinyanjui often represented the Unit as the Senior Lecturer "pro tem" in dealings with the University College administration and the Ministry of Education, as well as with members of staff.

A final step in this training program will consist of short-term participant training at The University of Wisconsin, where Mr. Kinyanjui will study the operation of a large and multi-faceted University Extension system.

Lecturer in Charge of Course Development and Instruction. Unfortunately, the University College recruitment procedures have functioned even more slowly than normally, and this counterpart has not yet been appointed. It is hoped that the appointment will be made shortly, so that at least a few months of training may be given before the departure of the Wisconsin Team. This counterpart's training, under the direction of the Wisconsin Lecturer in Charge of Course Development and Instruction, will include on-the-job training in course design; supervision of Correspondence Tutors in planning, scheduling, and developing new and revised course materials, and in the employment, training, and supervision of course markers; supervision of the Editorial Assistant; liaison with the Kenya Institute of Education and the Ministry in matters pertaining to the K.J.S.E. and School Certificate syllabuses.

Lecturer/Radio Education Specialist. Following Mr. Kinyanjui's appointment as Counterpart Senior Lecturer, a second Counterpart to the Wisconsin Radio Education Specialist, Solomon Wanguru, was appointed and began his training in May 1969. Mr. Wanguru, who received his B.S. degree from The University of Wisconsin and had been a secondary school teacher in Kenya, resigned to stand for Parliament in December 1969. A third Counterpart, Dalail Mzee Ahmad, was appointed April 1, 1970 and is now receiving intensive on-the-job training in the preparation of radio broadcasts for the K.J.S.E. courses under the direction of the Wisconsin Radio Education Specialist. Mr. Ahmad had been a student in England and an experienced radio broadcaster with B.B.C. His training in the Unit comprises work in scripting, voicing and taping, and producing lesson broadcasts in the Unit's own studio and over the Voice of Kenya, and well as in the mechanics of operating and maintaining the equipment installed in the Unit's studio.

Training Correspondence Tutors

Tutors in History, Geography, Kiswahili, and Mathematics were seconded from the Ministry of Education to the C.C.U. and reported for training between May 1 and June 1, 1967.[1] A Tutor in English was recruited in June.[2] Additional Tutors in Biology and Physical Science were appointed in September 1969.[3] As reported above, the Tutors in Mathematics, History, and Physical Science have resigned their positions, which at this writing remain unfilled.

All Correspondence Tutors are qualified and experienced secondary school teachers. Their initial on-the-job training exercise in correspondence teaching covers from four to six months, depending upon responses to training activities. These activities include some analysis of the educational backgrounds and characteristics of C.C.U. students; an examination of several alternative formats of correspondence lessons; instruction and practice in a style of writing that is simple in substance and structure yet appropriate for adults in content and approach; planning and designing study guides in the light of the relevant Ministry of Education syllabus in the subject; and intensive practice in lesson writing, accompanied by even more intensive critical review and analysis of these practice lessons. The Tutors are also familiarized with the Unit's radio broadcasts and involved in broadcast preparation, and in the recruitment and supervision of markers in their subjects.

Training the Editorial Assistant

A University College Nairobi graduate and former secondary school English teacher, Kutub Kassam, was appointed to this post December 1, 1969. The

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[1] Oliver Ob'bayi (History), B.A., University of Wisconsin; John Kamawira (Geography), B.A., University of London (Makerere); Kalfan Mazrui (Kiswahili), Diploma in Education, Southampton University; Joseph arap Chumo (Mathematics), B.A., Evansville College, Diploma in Education, University of East Africa (Nairobi).

[2] Mrs. Barbara Skeath, B.A., Leeds University.

[3] Edward Joell (Biology), B. Sc., Morgan State College; Mrs. Celia Kamau (Physical Science), Ph. D., University of London.

assistance of a University of Wisconsin Consultant/Editorial Specialist, whose sole task was to train the Editorial Assistant, made it possible to shorten a projected six-month training program to four months. The details of the training program have been submitted to USAID in the End-of-Tour Report of the Wisconsin Consultant, Raymond M. Duerst. Briefly, Mr. Kassam was familiarized with the Unit's basic style of presentation, was instructed in editorial and proof-reading techniques, and studied the processes used in the preparation of manuscripts and duplication of study guides. His training included intensive periods of practice in editing correspondence lessons, followed by review and critical analysis of his work by the Consultant, the Wisconsin Chief of Party and his Counterpart, and the Lecturer in Charge of Course Development.

Training the Administrative Assistant and Subordinate Staff

The present Administrative Assistant, Mrs. Wangui Mwihia, was appointed in April 1969 and confirmed in her appointment in March 1970. (A previous appointee had resigned after a short time to take a more responsible and highly paid position with the Kenya Tea Development Authority.) The Administrative Assistant's training, directed by the Wisconsin Administrative Officer, covered all aspects of office management, including training and supervision of subordinate staff; planning and supervision of study guide production, inventory, and distribution; ordering and distribution of textbooks; receipt of student applications and fees; receipt, distribution, and return of lessons; record keeping; correspondence with students; and processing of purchase orders and inventory and maintenance of supplies and equipment.

All subordinate staff have been trained under the direction of the Wisconsin Administrative Officer, and more recently, under the immediate supervision of the Administrative Assistant. In addition to on-the-job training, the duplicating operator also received offset press training from the local distributors of the Addressograph/Multigraph press. Because there is a fairly high degree of turnover in such posts (expatriate secretaries leave; trained secretaries are hired away by the private sector and, surprisingly, by U. S. agencies; well trained bookkeepers, and clerk/typists find more attractive opportunities), training of subordinate personnel is a continuing process in the Unit.

Training the Course Markers

Approximately 75 part-time course markers, all experienced and qualified secondary school teachers, have been recruited and trained thus far. Since these are not permanent positions, and many markers are expatriate teachers who must return to their home countries, some markers leave the Unit from time to time and others are employed.

Training consists of orientation sessions covering the special needs of adult correspondence students, and teacher-students particularly, as well as some discussion of the techniques of teaching by correspondence. These are followed by critical reviews and analysis of papers marked by new markers, and periodic reviews of their papers by the appropriate Tutor and members of the senior staff.

On June 30, 1970, the following numbers of course markers were actively employed by the Unit:

English - 11
Geography - 6
History - 10
Kiswahili - 5
Mathematics - 10
Biology - 2.

APPENDIX C

THE COURSE DEVELOPMENT PROCESS

The process of study guide development and production begins with the Ministry of Education syllabus in the subject, which prescribes the topics to be covered in a year's work and lists the approved textbooks and supplementary materials for the course. In consultation with the course developer (Lecturer in Charge of Course Development and Instruction), each Tutor designs his course and develops a detailed outline of the material to be presented, indicating the supplementary materials that may be required. The Tutor and course developer also determine which text books and supplementary materials are most suitable. In making this choice, cost is considered as well as the quality of the text and its suitability for adult students. Because of the cost factor, most courses rely less heavily on textbooks than, for example, a conventional University of Wisconsin correspondence course. As a rule, the substantive teaching and presentation of information is done by the study guide, which is therefore a textbook and workbook as well as a guide to study.

Following the course developer's approval of the course design and outline, the Tutor prepares one or two lesson manuscripts which are reviewed by the course developer principally to confirm or modify the general approach of the study guide and the methods of presentation. During the first two phases of program development (Forms I and II of the K.J.S.E. Preparatory Course), time limitations and the pressure of deadlines made it impossible to carry out any systematic testing and evaluation of lessons at this point. In effect, each term's work was tested in a preliminary edition (usually mimeographed) used by C.C.U. students, and all Form I study guides have been revised, some partially, others (English and Kiswahili particularly) very extensively as a result of the feed-back from students, in their papers and in meetings between C.C.U. staff and students throughout the country in 1968. A more systematic

procedure for testing materials has more recently been developed, and Tutors now test preliminary drafts of new lessons with groups of volunteer primary teachers at several schools in the Nairobi-Kikuyu-Machakos areas.

Following the course developer's approval of the course design and the preliminary and revised lesson drafts, the Tutor proceeds with the remainder of his manuscript, and each lesson is reviewed, revised at this point if necessary, edited, typed, and returned for the Tutor's review and revision. It is then retyped for a second editing. Following a final review of the edited manuscript and any necessary modifications by author, editor, and course developer, each lesson receives its final typing and proof-reading before being duplicated by offset press.

In addition to the professional staff, this process involves the clerical staff, duplicating operator and casual labor who assist him, and the Administrative Assistant who schedules and supervises all typing and production. In most study guides, some illustrations, charts, graphs, figures, etc. are required. Until very recently, when an artist was employed on a part-time basis, these illustrations were made by some Tutors and the Wisconsin Administrative Officer, who fortunately, in addition to his other experience and abilities, brought this most important skill to the project.

Radio program development begins with the edited lesson manuscript, which serves as the basis for all or part of a 15-minute script written by the Wisconsin Radio Education Specialist, or by his Counterpart and reviewed by the Wisconsin Specialist. The Tutor may also provide the script writer with additional material or ideas particularly suited to oral presentation. Following a review of the script by the author, the script is typed, reviewed, and taped (formerly in a VOK/Schools Broadcast studio, but now internally, since the completion of the Unit's own fully equipped studio). Programs are voiced by the Radio Specialist and his Counterpart and other members of the Institute staff under the guidance and direction of the C.C.U. Radio Specialist. For example, Form I History was voiced principally by Mr. John Fox, Tutor in English at the Adult Study Centre; Forms I and II Kiswahili by Kiswahili Tutor Kalfan Mazrui with the assistance of Geography Tutor John Kamawira and Mr. Kinyanjui; Form I Geography by Mr Andrew Brockett, Tutor in History at the

Study Centre; Form I English by Mr. Michie, Forms I and II Mathematics by Mr. Kinyanjui, Form I Biology by English Tutor Barbara Skeath, and Form II Geography by Mr. Michael Moore, Extra-Mural Tutor in Mombasa and Nakuru.

Printed study guides are inventoried in the Unit's store room, ready for mailing to students; master tapes are stored in the radio office.

APPENDIX D

UNIVERSITY COLLEGE NAIROBI — INSTITUTE OF ADULT STUDIES

CORRESPONDENCE COURSE UNIT
P. O. Box 30688, Nairobi

APPLICATION FOR ENROLMENT IN K.J.S.E. CORRESPONDENCE COURSE - 1969/1970
(TYPE OR PRINT ALL INFORMATION)

Mr./Mrs./Miss .....
(Name in full)

Complete Postal Address .....
.....

Occupation ..... Grade .....

Place of Employment ..... County .....

Your K.P.E. or C.P.E. No. ..... Date Received .....

Teachers Service Commission No. .....

If you have previously enroled with this Unit, what is your registration number? .....

DO NOT WRITE HERE
Reg. No. .....
Date .....
Fee .....
Fee submitted .....
Study guides posted .....
Books posted .....
Remarks .....

Years of Schooling Completed — Name and Address of School or College

Primary/Full Primary .....

Intermediate .....

Secondary .....

Teacher Training .....

Correspondence Courses .....

Other .....

Have you passed an upgrading exam to qualify as a P3 Teacher? ..... When?.....

How many hours per week can you give to your studies? .....

Tick subjects you want to study.				Tick subjects you have completed.		
Subject	Form I	Form II	Both Form I and Form II	Form I	Form II	Where? When?
Biology		* See below				
English						
Geography						
History						
Kiswahili						
Mathematics						
Physical Science	* See below					

* Biology II will be available in March 1970. Physical Science I will be available in May 1970. You may enrol in these courses before these dates, and materials for the courses will be sent to you as soon as they are available.

I enclose shs. ..... in full/part payment of the tuition fees for the radio/correspondence courses listed above. Serial number(s) of money or postal order(s): .... *(See reverse side of sheet for instructions regarding fee payment.)*

To be filled in only by applicants who wish to complete fee payment by monthly instalments :

To complete my fee payment for these courses, I agree to pay shs. 20/- per month for a period of ..... months.

Date of application .... Signature

CCU.1-11/69

UNIVERSITY COLLEGE NAIROBI INSTITUTE OF ADULT STUDIES

CORRESPONDENCE COURSE UNIT - 1969/1970 K.J.S.E. COURSES

In co-operation with the Kenya Ministry of Education, the Institute of Adult Studies of University College Nairobi has established a Correspondence Course Unit to help meet the educational needs of the nation. This Unit is now conducting a series of radio/correspondence courses designed to help P3 teachers and other students who have completed primary school prepare for the Kenya Junior Secondary Examination.

Courses in six subjects at the *Form I* level are available: *English, Kiswahili, Mathematics, Geography, History, and Biology*. You may also enrol in *Form I Physical Science*, which will become available in May 1970. *Form II* courses in *English, Kiswahili, Mathematics, History, and Geography* are also available. You may also enrol in *Form II Biology*, which will become available in March 1970. Form II Physical Science will be available in 1971.

P3 teachers who earn the K.J.S.E. Certificate are eligible for promotion to P2. The K.J.S.E. is also the qualifying examination for private candidates who wish to sit the examination for the new East African Certificate of Education. However, the C.C.U. radio/correspondence courses are not merely "cram" courses for K.J.S.E. but are designed to cover the academic work normally covered in two full years of Form I and Form II study in school. In addition to correspondence study materials, textbooks, and postal instruction by qualified secondary school teachers, the course includes regular radio lectures over V.O.K.. These broadcasts provide additional guidance and supplementary instruction in each subject. A schedule of radio broadcasts is included with each set of study materials.

You are advised to study not more than three subjects at the same time, since adults engaged in teaching or other full-time employment may find it difficult to carry a full academic work-load. However, a student who feels that he can devote more time to his studies may undertake more than three subjects. To earn a K.J.S.E. Certificate, a student must receive passes in five subjects. However, *P3 teachers in this programme are not required to sit or pass K.J.S.E. in all five subjects in the same year.* The Ministry of Education permits *P3 teachers only* to sit for as few as two subjects at one time, to accumulate credits for passing these examinations, and to complete K.J.S.E. at a later date.

You may enrol at any time during the year. Most students should complete a Form I or Form II subject within a year. Some, however, will be prepared to work more quickly while others may, if they need additional time, have as long as two years to complete a Form I or Form II subject. Students may also work more rapidly in one subject than another.

FEES : For students who wish to enrol in *either* Form I *or* Form II subjects, but not both:

No. of subjects	If paid in full on enrolment	If paid by Instalments	Deposit	Monthly payments
1	55	65	25	shs. 20/- per month for 2 months
2	95	105	45	shs. 20/- per month for 3 months
3	130	145	45	shs. 20/- per month for 5 months
4	165	185	45	shs. 20/- per month for 7 months
5	200	220	60	shs. 20/- per month for 8 months

For students who wish to enrol in *both* Form I and Form II together:

1	95	105	25	shs. 20/- per month for 4 months
2	165	185	45	shs. 20/- per month for 7 months
3	225	245	45	shs. 20/- per month for 10 months
4	285	310	50	shs. 20/- per month for 13 months
5	345	370	70	shs. 20/- per month for 15 months

An application for enrolment will be found on the reverse side of this sheet. If you wish to enrol in the Correspondence Course Unit, complete the application form and post it with your fee payment to:

Correspondence Course Unit
Institute of Adult Studies
P. O. Box 30688
Nairobi.

You are advised to send your application and fee payment by registered post. You may make your fee payment by bank draft, money order, or postal order. *Do not send currency notes by post.* Personal cheques will not be accepted. The draft or order should be made payable to UNIVERSITY COLLEGE NAIROBI, and crossed. Be sure to write the serial number(s) of your money or postal order(s) in the space provided on the application form. Students living in the Nairobi area may, if they wish, enrol in the office of the Correspondence Course Unit, Gandhi Wing, University College Nairobi or at the C.C.U. Building, Adult Studies Centre, Kikuyu.

APPENDIX E

CORRESPONDENCE COURSE UNIT

INSTITUTE OF ADULT STUDIES

UNIVERSITY COLLEGE NAIROBI

AN ANALYSIS OF THE 1968 K.J.S.E. RESULTS FOR C.C.U. CANDIDATES

(By P. E. Kinyanjui, Ag. Asst. Director)

This is a report on the analysis of the examination results of the Correspondence Course Unit Candidates who sat for the Kenya Junior Secondary Examination in November, 1968. Although the full K.J.S.E. Preparatory Course is a two-year programme, some of the students enrolled with the Unit found themselves ready to attempt the examination after only one year of study with the C.C.U. at Form One level. This report is based on the performance of these students--both in those subjects which were being offered by the C.C.U. as well as in those which were not being offered at the time of the examination.

Of the seven subjects offered in the examination, only four could be studied with the C.C.U., namely English, Kiswahili, Geography and History. Although the C.C.U. was providing a course in New Mathematics, all students took the "Traditional Maths" in the examination because this is what they had learnt in school. Also, according to the regulations, only approved schools were allowed to sit for the New Maths Paper. C.C.U. students who had studied New Maths for only one year could not therefore, be regarded as ready to sit for this Paper. However, C.C.U. students will be sitting for this Paper for the first time in November 1969 when they will have completed a full two-year course. The remaining two subjects, namely Biology and General Science, were not being offered by the C.C.U. in 1968. Biology was offered for the first time in 1969 and Physical Science (in place of General Science) would be available in 1970. Thus one could distinguish between those subjects which

were studied with the C.C.U. and those which were not. As we shall see later, there was a marked difference in the students' performance in these two groups of subjects.

Examination results in the various subjects were received from a total of 238* C.C.U. candidates. It had been revealed in an earlier Student Survey** that most of the students enrolled with the C.C.U. had been studying on their own for a number of years. Indeed many of them had previously attempted the K.J.S.E. several times as private candidates, but failed to get the required five subject passes at one sitting. This was very difficult especially for teachers who were employed full-time and only studied during their spare time with almost no help or guidance from anyone. With the new regulations, the burden should become lighter for P3 teachers in that they will be able to enter for K.J.S.E. either for "full-examination" (i.e. offering 5 or more subjects) or as "part-examination" (i.e. offering less than 5 subjects). Subject passes obtained in either case will be credited to the candidate and will be carried forward to subsequent years until a full qualification is obtained (i.e. 5 subject passes).

Out of a total of 488 subject passes, 401 passes were obtained in those subjects offered by the C.C.U. In these subjects the percentage passes ranged from 76% in Kiswahili, 52% in English, 33% in Geography to 27% in History. These represent an average of about 49%. In comparison, there were 87 passes in those subjects which were not available from the C.C.U. The percentage passes were 26% in Mathematics ("traditional"), 20% in Biology and 11% in General Science, thus representing an average of about 20%. This low passing rate compares with the average of 11.42% which is roughly what the performance of private candidates was in the year 1968***.

* Results of some candidates had not yet come out of the computer which was used to mark examination papers for the first time in Kenya. At the time of writing, investigations were still going on to trace the missing results

** See P. E. Kinyanjui: A Survey on Learning and Study Methods Used by Students Enrolled in Radio/Correspondence Course in Kenya, 1968.

*** School Candidates averaged 24.57% passes.

The analysis of the results also revealed a marked distinction in performance between those students who sat for fewer subjects and those who tried to sit for too many subjects. It is unfortunate that the majority of the students were in the latter category. The total for those in the first category (1 to 5 subjects) was 98 while that for the second category (6 or 7 subjects) was 140. The average number of subjects per student was 5. The best results were obtained by those students who sat for 3 subjects or less. They scored about 60% passes. Those who sat for 4 or 5 subjects scored about 44% passes, while those who sat for 6 or 7 subjects scored only 34% passes. The best advice to most students would be for them to register for only those subjects in which they feel confident, and once they pass in these then they can tackle the harder subjects later. After all, P3 teachers can now accumulate credits for passing various subjects taken at different times. One reason why most students might seem a bit over-ambitious is that in the past they had to score five passes at one sitting in order to get the certificate. Hence the aim was to register for as many subjects as possible and hope that one would score five passes. The other reason is that the registration fee was Shs. 40/- for "full-examination" and Shs. 20/- for "part-examination". So one could as well get "value for one's money".

It is difficult to determine all the factors which contributed to the difference in the performance by the C.C.U. candidates. Most of them had had about one year of study with the Unit - in some cases less, depending on when they enrolled. Many of them had been working on their own for many years since they left school or training college. Some might have attended secondary school for a year or so, but had not passed the K.J.S.E. A good number had attempted the examination several times in the past and had scored some passes, but not sufficient to qualify for the certificate. There were others who had been studying by commercial correspondence schools in Kenya and abroad. A few who were more diligent than others had been working ahead of the C.C.U. courses and were at about the second-year level. So one cannot attribute the success of all these candidates wholly to the C.C.U. Neither does the C.C.U. claim all the credit for the performance of these students. Nevertheless, it is evident from the figures that the subjects offered by the Unit yielded better results than those subjects which were not. At the same time, students

who were enrolled with the C.C.U. scored higher percentage passes than private candidates who were on their own.

The C.C.U. broadcast regular radio lectures over Voice of Kenya in order to provide additional guidance and supplementary instruction in each subject. The correspondence study guides prepared by the Unit contained many self-test exercises and written assignments which the students were required to do on their own. There were also the mid-year and end-of-year examinations which were set on a pattern similar to that of the K.J.S.E. Although the students were not under any supervision but "on their honour", as it were, these examinations should have given them good practice in answering questions. So, it is difficult to single out any one factor that gives explanation for the better performance of the C.C.U. candidates. But one thing is certain. For most students, this was the first time they had ever been engaged in an organised and systematic form of study since they left formal institutions. This has been confirmed by many letters from successful students, thanking the C.C.U. staff for "guidance and coaching," for "help and encouragement from the radio broadcasts," for "assistance in crossing the bridge," and so on. It is encouraging to note here that these students felt they were receiving individual and personal tutoring through the post and through the radio from people they probably had never met.

It has always been the wish of the C.C.U. to provide opportunities for more frequent meetings with the students, but due to shortage of staff and pressure of work, this has not been easy. It is hoped, however, that as the present courses get completed it will be possible for the staff to have more contacts and counselling with correspondence students. There is no doubt that these students are hard-working and very keen to advance themselves, and as such they merit every assistance and encouragement the Unit can provide. The year 1969 will see the first group of "mature" C.C.U. candidates sit for the K.J.S.E., and better results are anticipated.

CORRESPONDENCE COURSE UNIT

INSTITUTE OF ADULT STUDIES

UNIVERSITY COLLEGE NAIROBI

AN ANALYSIS OF THE 1968 K.J.S.E. RESULTS FOR C.C.U. CANDIDATES

	Subject	Total No. of Candidates	Total No. of Passes	Percentage Passes
(A) Subjects Offered by C.C.U.	KISWAHILI	223	170	76%
	ENGLISH	236	122	52%
	GEOGRAPHY	178	58	33%
	HISTORY	190	51	27%
(B) Subjects not offered by C.C.U.	MATHEMATICS	177	46	26%
	BIOLOGY	153	30	20%
	GENERAL) SCIENCE)	100	11	11%

	TOTAL		
Subjects taken	1257)	Average No. of subjects per candidate	5.
Candidates	238)		
Total Subject Passes (A and B)	488	Percentage Passes	39%
Total Subject Passes (A)	401	Percentage Passes	49%
Total Subject Passes (B)	87	Percentage Passes	20%

	Total Number	Total Subject Passes	Percentage Passes
Candidates sitting for 2-3 subjects	48	68	60%
Candidates sitting for 4-5 subjects	50	95	44%
Candidates sitting for 6-7 subjects	140	322	34%

Summary and Conclusions

1. The candidates scored better results in those subjects which were being offered by the C.C.U. than in those subjects which were not.

2. Candidates who sat for fewer subjects had a higher percentage of passes than those who attempted too many subjects.

3. The average percentage pass for C.C.U. candidates was slightly higher than that for school candidates, but considerably higher than that for private candidates who were on their own.

4. The new regulations permitting all P3 teachers to accumulate their subject passes should encourage them to enter for the K.J.S.E. On passing the examination, then they become eligible for promotion to P2 grade.

5. Candidates who are practising teachers should be advised to register for fewer subjects in the K.J.S.E. beginning with those subjects in which they feel confident.

6. From 1969 onwards, the K.J.S.E. will assume greater importance in that all private candidates will be required to pass this examination before they are allowed to sit for the new East African Certificate of Education.

7. Radio broadcasts were found to be useful in providing supplementary instructions as well as general encouragement.

8. Mid year and end-of-year examinations of the C.C.U. served as useful preparation for the actual K.J.S.E.

9. Systematic and better organised form of study was one of the major factors that contributed to a high pass rate for C.C.U. candidates.

APPENDIX F

CORRESPONDENCE COURSE UNIT RESIDENTIAL COURSE

10 - 29 August, 1970

Since the Unit was established, it has been our wish to conduct residential courses for our students, but owing to various difficulties this has not been possible. At last we have been able to hold what we considered to be a "pilot project" to see how successful such an exercise would be.

The course was held at the Adult Studes Centre, Kikuyu, from 10 - 29 August, 1970, in a series of three sessions, each of one week as follows.

First session: 10 - 15 August, 1970

Second session: 17 - 22 August, 1970

Third session: 24 - 29 August, 1970

The nominal cost for each session was Shs. 50/-, which included food and accommodation. We set a target of thirty students each week. Application forms had been sent out to all out students. As it came out the first session nearly topped the target. The latter two had an average of twenty students each.

Time Table

The main feature of the time table was a series of lectures conducted by the Correspondence Tutors in their disciplines. The main lectures provided opportunities for the tutors to discuss the content of their subjects in a fairly general approach. They were the groundwork of the whole course.

Tutorial Meetings. These meetings offered opportunities where more particular topics were covered. The tutors were also able to attend to individual problems. The groups were smaller and so the personal contact with the students was much closer than would otherwise be possible in the general lectures. Both the tutors and the students found these sessions very useful.

Radio Programmes. These programs which supplement correspondence lessons were on throughout the week. Our radio tutors were always available to assist the students with any problems they might encounter during these sessions. These session were generally popular with the students.

Films. These were shown two times a week. We endeavoured to show films on educational topics as well as for entertainment. Most of the students expressed the view that they found them useful. A few would have liked to see films every evening.

From a casual perusal of the views expressed by most of the students I notice that in future other activities should be offered in the evenings, such as debates, lectures, discussion seminars etc. In the earlier parts of evenings indoor and outdoor games might be useful. As it was, many of them found the time in the evenings a little too much on their hands.

Excursions. We organised one trip a week. The first trip was to East Africa Industries. Many of us had not appreciated what was being done in this manufacturing complex. Various household items are manufactured there. The second and third trips were made to Nairobi Game Park. High calibre films, stroll through the Animal Orphanage and a trip round the park - all for 1/- per head.

Housekeeping Arrangements and Accommodation. Practically every participant expressed their satisfaction with accommodation and diet. A few found it a little too cold at Kikuyu.

Library. This was used regularly. The Unit had placed a number of reference books in the library which were invaluable to the students. Unfortunately, some of these books were found missing at the end of the course.

Group Photographs. We had a group photograph each week for the participants. I must to record here the Units gratitude to Messrs Jerry Parson and Ed Joell who offered themselves as our photographers.

Student Evaluation of the Course. To help us in assessing the successes and failures of this course we asked the students to evaluate the effectiveness of the course as far as their studies were concerned. We are interested in knowing what particular areas were strong or weak so that future courses can

be improved. We therefore issued an Evaluation questionnaire to each student. We are still examining the data from these questionnaires.

General Impressions

I must take this opportunity of expressing the thanks of the C.C.U. to the A.S.C. for the facilities they put at our disposal during the course. I hope the spirit of co-operation displayed then will continue in the future. I believe my colleagues in the C.C.U. will join me in wishing our thanks to go on record. We thank the Ag. Director of I.A.S., the Ag. Asst. Director of A.S.C., the Ag. Administrative Secretary, the Cateress, and the Clerical staff. Miss. F. Okwemba also deserves mention for gracefully coming to our rescue in her subject. Mr. John Okach gave a very interesting lecture on Sociology.

One view expressed by almost every student was that the duration of each session of the course was too short. Correspondence Tutors also generally feel the same. The students also felt that courses of this nature should continue. Tutors should also be able to go out more often than they have hitherto done to see the students at various centres. Extra-Mural Division staff could be very useful in such an exercise.

On the whole the course was very successful.

John C. Kamawira
Director of Studies.

A.I.D. HISTORICAL AND
TECHNICAL REFERENCE
ROOM 1656 NS

SUMMARY OF STUDENT SURVEY

(A Report by Peter Kinyanjui, Lecturer in the Correspondence Course Unit).

Response

Of the 680 students to whom the questionnires were sent, 338 have replied. This represents about 50% response. More replies are coming in slowly, and up-dated summary sheets will follow in due course. The following summary is based on the 50% response.

The Students

The bulk of our students (63%) are between 21 and 30 years old. Only 4% are 20 years and under. The rest (33%) are over 30 years old. 71% are married and 29% are single. Over half of the students have between 4 and 10 dependants. Even some students who are single have got family responsibilities. So we can conclude that our students are mature people with family responsibilities which raise some difficulties in studies, fees, quiet time, etc. 95% are teachers and 5% are non-teachers. (See the occupations of the non-teachers in the summary sheet).

Studying

All our students have had Primary Education, but only 6% have had some formal Secondary Education for 1 or 2 years, and for one reason or another they did not continue with Secondary Education. Many have been studying on their own, and only about 10% have studied by Correspondence, mainly Rapid Results College or British Tutorial College. Our students have been out of formal schooling for some time. About 60% have been out of schooling for 9 years and over. All our students are working towards the K.J.S.E. 82% wish to go on to School Certificate.

91% of the Students study alone and only 9% study in groups. Only 20% of the students have the use of electric light. Others do their work during daytime or use lamps at night. 60% are spending an average of only 1 to 3 hours in the preparation of each lesson. Students should be encouraged to spend more time in preparation. Many students are asking for more supplementary reading materials, especially in Geography and Mathematics. A Kiswahili dictionary is also in great demand, especially in up-country areas.

Only 36% of the students have access to a library and most of these live in or near Nairobi. There is need for establishing library centres in some parts of the country. Only 43% of the students read newspapers often enough. They should be encouraged to read English and Kiswahili newspapers, the weekly editions at least.

Many students are asking for occasional face-to-face teaching when they could present most of their problems to the Tutors. In Mathematics, this is imperative. Some "study-listening-reading" centres will help to create groups of students in various parts of the country.

Listening

Although 84% of the students have radios at home, only 43% listen regularly. The commonest complaint is about time of the broadcast. 45% of the students find 5-5:30 p.m. a suitable broadcast time. 55% do not find the time suitable. The times which are most popular with many students are between 5:30 and 9:30 p.m. Perhaps we should still keep the present time, but request a different time for repeats, and on other services of the Voice of Kenya, if necessary.

There are some students who find that they don't have to listen to the radio programmes regularly. On the whole, the radio has been very helpful to many students. In Mathematics, the students have found many difficulties, and the radio has been of little help. Many have asked for face-to-face teaching sessions. A number of students who have fallen behind the radio schedule have asked for repeats of the earlier lessons. The revision (review) programmes should be most welcome by such students. Only 12% have experienced poor or very poor reception in their areas. These are mainly in W. Kenya. Incidentally, the radio has been the most powerful medium for advertising our courses. 44% of the students were reached by radio and only 19% were reached through the Local Education Offices.

General Comments

Some students have indicated that their progress in Mathematics and History has been unsatisfactory. In Mathematics they have asked for occasional face-to-face teaching. Others have asked for model answers on written assignments to be sent to them with their marked papers. More reference books are requested, especially in History, Geography and Kiswahili (a dictionary). There is need to establish libraries at various centres and stock them with more reference books. Study and listening groups should be encouraged. Many students are asking for concentrated face-to-face teaching especially during the school holidays.

Several students have complained that their written assignments have not been returned to them regularly. Many students have also been asking for courses in Biology and General Science which could offer alternatives for Mathematics to some students.

On the whole, the Radio/Correspondence Courses have been received enthusiastically by most students. They are finding them useful in their preparation for the Kenya Junior Secondary Examination. But there is considerable room for improvement to make the Correspondence Course Unit a more efficient and effective service agency.

Summary of Student Survey

Responses 338

Age	
20 and Under	14
21 - 25	100
26 - 30	114
31 - 35	54
36 - 40	29
Over 40	17

Married 243

Single 82

Dependants

None	41
1 - 3	52
4 - 6	84
7 -10	76
Over 10	27

Occupations (other than teaching)
Students 2, Clerks 2, Policemen 2, Veterinary Ass'ts 2, Laboratory Ass't 1, Road Foreman 1, Soldier 1, Punch Operator 1, Salesman 1, Unskilled Laborer 1, Agricultural Instructor 1, Painter 1, Locomotive Fireman 1.

Schooling

Primary only	117
Primary and Teacher Training	185
Secondary	20

Private Study by Correspondence 35

Passed KPE

1964 - 7	32
1960 - 3	88
1955 - 9	127
1950 - 4	37
Before 1950	36
	320

Exams To Be Attempted Later

School Certificate	278
Higher School Certificate	38
Others (K.E.T. etc.)	27

Radio At Home

Yes	277
No	51

Study Easily At Home

Yes	181
No	150

Study Alone 309

Study in A Group 17

Electric Light

Yes	64
No	255

Summary of Student Survey (Cont.)

Listen Regularly

Yes	144
No	180

5 - 5:30 Suitable Broadcast Time

Yes	139
No	168

Other Times

Before 5:00 P.M.	20
5:30 - 7:30 P.M.	81
7:30 - 9:30 P.M.	73
After 9:30 P.M.	9

Reception

Good	170
Fair	91
Poor	25
Very Poor...	11

Preparation

1 - 3 hours	169
4 - 6 hours	87
7 - 9 hours	16
10+ hours	14

Radio Lessons

English	Very Helpful	197
	Fairly Helpful ...	59
	Not Very Helpful..	6
	Useless	2
Kiswahili	Very Helpful ...	125
	Fairly Helpful..	58
	Not Very Helpful	13
	Useless	1
Maths	Very Helpful	92
	Fairly Helpful	75
	Not Very Helpful ...	49
	Useless	9
Geography	Very Helpful	132
	Fairly Helpful...	81
	Not Very Helpful	17
	Useless	2
History	Very Helpful	112
	Fairly Helpful...	74
	Not Very Helpful	31
	Useless	6

Progress

English	Satisfactory	168
	Fairly Satisfactory	96
	Poor	12
Kiswahili	Satisfactory	99
	Fairly Satisfactory ...	62
	Poor	13

Summary of Student Survey (Cont.)

Maths	Satisfactory	48
	Fairly Satisfactory	94
	Poor	75
Geography	Satisfactory	102
	Fairly Satisfactory	116
	Poor	12
History	Satisfactory	84
	Fairly Satisfactory	111
	Poor	22

How Student First Heard of C.C.U.

Friend	48
Fellow-Worker	18
Radio	134
Newspaper	34
Local Education Office	57
Others	5

How Often Students Read Newspapers

Often	133
Seldom	154
Never	23

Access To Library

Yes	112
No	197

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