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Rural Primary Schools Extension Project:

Radio Language Arts

Implementation Plan

December 1981

Project Director

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Rural Primary Schools Extension Project:

Radio Language Arts

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Rural Primary Schools Extension Project:

Radio Language Arts

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SECTION I

INTRODUCTION

The Rural Primary Schools Extension Project: Radio Language Arts (referred to hereafter as the Radio Language Arts Project or RLAP) is a five-year research and development project funded by the Office of Education, Bureau of Science and Technology, of the U.S. Agency for International Development (AID). The program is designed to develop, implement, and test the effectiveness of an instructional system which uses radio to teach English as a second language at the primary-school level (standards one to three).^{*} Both qualitative and cost aspects of effectiveness will be tested in this pilot project. The end product will be a radio-based English-language program for standards one to three complete with taped lessons (approximately 195 lessons of 30 minutes each for each school year, appropriate tests, teacher orientation materials, and classroom observation and data-gathering procedures). Although the project has been designated for specific application in Kenya, it is expected that the model which emerges can be replicated, with modifications, to other educational systems in the developing world.

At the time of the original project design (1979), a specific project site had not been designated. After considering several African nations, Kenya was chosen in November 1979, and the project was modified and elaborated for use in Kenya by a joint team of Kenya and U.S. specialists. The principal Kenya entity in the project is the Kenya Institute of Education (KIE) representing the Ministry of Basic Education, and the principal U.S. entity is the Academy for Educational Development (AED).

The general project design is an extension of the instructional model developed by AID and the Institute for Mathematics Studies in the Social Sciences (IMSSS), Stanford University, between 1973 and 1978, when a primary-school mathematics project was conducted in Nicaragua, Central America.^{**}

The following pages provide a detailed implementation plan, based upon approximately one year's experience in Kenya. It represents the cooperative ideas, opinions, and research of both the Kenyan and American team members. The following sections comprise the plan: 1) a brief description of the project and its place in the Kenyan context, 2) identification of the host country personnel and the current professional roles of both Kenyan and American personnel, 3) a description of the instructional system, 4) the evaluation design for the instructional program, 5) a schedule of activities by year, and 6) specifications of procedures for securing and maintaining equipment.

* Kenya uses the term standard to denote the U.S. term grade.

** Radio Mathematics in Nicaragua, edited by Jamesine Friend, Barbara Searle, Patrick Suppes; Institute for Mathematical Studies in the Social Sciences, Stanford University, Stanford, California, 1980.

SECTION II

DESCRIPTION OF THE PROJECT

A. General

The Radio Language Arts Project (RLAP) seeks to develop, implement, and test the effectiveness of an instructional system which uses radio to teach English as a second language at the primary level. The AID-funded project, with assistance from the Government of Kenya, is intended to provide information to the Kenya Ministry of Basic Education (MOBE) and to other countries about the effectiveness and cost of the radio instructional system employed in the project. The project is to be implemented by a team of specialists, the U.S. technical assistants contracted by the Academy for Educational Development (AED) and the Kenyan experts provided by the MOBE through the Kenya Institute of Education (KIE).

The project envisions the use of radio to reach, above all, the disadvantaged rural population for whom educational opportunities are frequently limited because of poorer educational resources. For that reason, among others, the radio English-language arts programs will be broadcast as part of the regular school curriculum during school hours. The daily, thirty-minute lessons will fill the English period in the timetable. As in the Radio Mathematics Project, radio will be the major medium of instruction, with an important role for teachers in pre- and post-broadcast activities as well as during the broadcasts. The radio lessons are not in any sense an attempt to do away with the classroom teachers or downgrade their role in the classroom, but are rather to enhance their effectiveness in teaching a difficult and important skill. This is, however, a different concept of educational broadcasting which departs from dependence on conventional textbook-oriented instruction.

There has been little, if any, systematic investigation of the effectiveness of teaching English as a second language by radio to primary-school children. But the evidence of radio's effectiveness in teaching mathematics to primary-school children is powerful enough to suggest that it can be effective in teaching other basic skills. The Radio Language Arts Project is an effort to demonstrate that within a particular educational setting, in this case Kenyan primary schools, radio can be an effective medium for language instruction. In addition, the project will document the instructional system and the implementation scheme so that other groups can apply the English-language arts materials to different cultural and physical settings.

B. Kenyan Context

The RLAP is consistent with the activities of the Kenya Institute of Education (KIE) which regularly engages in curriculum design, development, and evaluation in service to the Ministries of Basic Education, Higher Education, and Culture and Social Services. Through its Media Division, KIE also regularly develops educational radio support of the school curricula.

Although the intensive use of radio in daily broadcasts for a course is new to educational broadcasting in Kenya, the developmental process is similar to other curriculum and media support projects at KIE. Typically, such acti-

vities include the analysis of the particular needs of Kenyan children, the development of curricula to meet those needs, the writing of lessons, texts, teachers' guides, and audiovisual materials in selected, representative classrooms. After a trial period, pilot materials are reviewed and either accepted, revised and accepted, or rejected for implementation in the Kenyan classrooms. Implementation is typically in the hands of ministry supervisory staff although school broadcasts remain in the hands of the Media Division of KIE. This project then is typical of the KIE educational development process of Kenya.

The outside funding of the project, by AID, requires the close cooperation of the implementing agencies, the Kenya Institute of Education and the Academy for Educational Development, the prime contractor with AID.

C. Goals

The project is comprised of two equally important parts: 1) the development of carefully designed radio-based English-language instruction covering the first three years of Kenya primary school, and 2) a rigorous evaluation of these lessons in relation to Kenyan objectives for teaching English and the Kenyan curriculum.

The basic questions to be answered by the project are whether radio used this intensively can be as effective as or better than conventional classroom instruction in Kenya, and whether the use of radio is cost effective in achieving these results. As in other curriculum development projects in Kenya, the expectations are that new materials will receive thorough evaluation through trial in actual classrooms before decisions about implementation on a national basis are made. Decisions concerning implementation of the radio-based curriculum will be made independently by the Ministry of Basic Education on the evidence and recommendations furnished by the project.

SECTION III

IDENTIFICATION OF HOST COUNTRY PERSONNEL AND STAFF ROLES

The project agreement negotiated between AED and KIE, within the framework of the bilateral agreement between the Kenyan and U.S. governments, specifies the professional field personnel of the project:

The Academy will provide a field staff of four: (1) a field coordinator whose responsibility will be coordinating site activities including supervision of the Academy team, as well as liaison with the Institute, (2) two language arts specialists whose major responsibilities will be curriculum analysis and development and materials writing, and (3) a broadcaster whose major responsibilities will be development of radio lesson design and production.

American personnel were identified under the AED-AID contract prior to the signing of the project agreement, with the exception of the field coordinator who joined the project shortly after the project agreement was signed.

The Ministry, in collaborating in the project, will provide through KIE (1) two language arts specialists whose major responsibilities will be curriculum analysis and development and materials writing, (2) one broadcaster whose major responsibilities will be development of radio lessons and production, and (3) one project feedback coordinator, working collaboratively with the field coordinator, to be responsible for all feedback collection, analysis, and reporting activities.

A. Host Country Personnel

The Government of Kenya (GOK) through the Ministry of Basic Education and the Kenya Institute of Education agreed to provide four professional Kenyan staff members to work on the project alongside the four American staff members. In addition, the project hires a number of full-time and part-time support staff to assist the team in its work. GOK also provides 20 part-time observers who carry out the classroom observation of radio lessons.

Given the high level of experience of Kenyan staff members and the importance of insuring the relevance of the project to Kenyan education, it was determined that Kenyan and American staff members would not work in an exact one-to-one counterpart relationship. Instead team members were chosen to provide specific skills for the benefit of the project. Although there will be considerable training and learning as a result of these staff relationships, it is expected that it will be from the interaction of all team members with one another and in the fulfillment of project assignments to meet the requirement of producing daily English-language broadcasts.

B. Staff Roles

Individual expertise and the integration of this expertise into a working team as well as the more specific delineation of the project's task within the Kenyan educational system has required some modification of personnel duties. This modification has largely been in the direction of specificity to insure that all the necessary tasks get completed within the timeframe established for the project. Appendix A specifies the current job descriptions for Kenyan and American field staff. Brief resumes of the professional staff are included in Appendix B.

C. Administrative Structure

The project is administered through the International Division of the Academy for Educational Development. Headquartered in the Academy's Washington office, the division is fully staffed and equipped to manage complex, long-term international development programs. The project director, working in the Washington office, provides the overall management and technical direction of the project. In addition to providing the normal back-stopping operations for the project, he coordinates technical assistance to the project through regular liaison with field staff through correspondence and field visits. He provides the liaison with the USAID technical monitoring officers and periodic liaison with host country officials.

Field operations are directed by the field coordinator. Since the project is a media project in relation to an established curriculum, it is administratively within KIE and housed at KIE. As a media project, it functions in some ways as a section of the Media Division much like the Audio, Visual, or Dissemination Sections. Roy Thompson, assistant director, and the head of the Media Division, is the immediate supervisor within KIE and the field coordinator's major liaison at KIE. In a sense, they fill similar roles within the two implementing agencies, KIE and AED. As indicated in the project agreement, project team members, both Kenyan and American, are under the professional and administrative supervision of the field coordinator within the regulations of KIE and AED where applicable.

SECTION IV

DESCRIPTION OF THE INSTRUCTIONAL MODEL

The instructional system for teaching English as a subject by radio to primary-school children in the first three standards (grades) has the following components: 1) the linguistic content, 2) the expected student behavior or skill in using the linguistic content, 3) the radio lesson format in which the linguistic content and student behaviors are contained and controlled, 4) tests, 5) teacher orientation materials, and 6) classroom observation and data-gathering procedures.

A. Linguistic Content

The Radio Language Arts Project will meet the stated objectives for teaching English in Kenyan primary schools. These objectives are consistent with the broader national goals for education and the objectives for primary education contained in the "Kenya Syllabus for Primary Schools" (Ministry of Education, 1978).

The "Kenya Syllabus for Primary Schools" consists of a series of broadly stated objectives for the entire seven years of primary school. For each year, or standard, detailed contents are arranged under two main headings: words (grouped by parts of speech such as nouns, verbs, prepositions, and so on) and sentence patterns. This provides the minimal list of linguistic content for each standard. No comprehension or performance objectives nor classroom activities are stated in the Syllabus; they are, however, included in the course book for the teacher for each level.

The Syllabus is actualized through a series of textbooks, The Progressive Peak English Course. For each standard there exists a pupil's book and a teacher's book. In addition, at each standard there is a reader integrated with the language book. For example, at standard one, the reader Hallo Children accompanies the standard one Peak book and provides the reading content. Reading activities are directed by the teacher making use of the teacher's book. The reading book introduces no linguistic content that has not been previously taught in the language book.

The radio curriculum will include the linguistic content of the Peak course to the extent possible in using radio as a medium. The team will develop a sequence of sentence patterns and words consistent with and drawn from the Peak course. Some differences in sequencing and in pacing will, particularly in the first year, be necessary in order to take maximum advantage of radio.

The first step in establishing the linguistic content was a linguistic analysis of the existing Kenyan English-language arts curriculum as exemplified by the Progressive Peak series and the supplementary reading materials, especially the first book entitled Hallo Children. This analysis was accomplished by the project team members. A sequence of linguistic items and reading scope and sequence was developed on the basis of linguistic analysis.

The development of English reading skills is central to the research of the project. This emphasis on reading skills is central to the research of Kenyan primary education in which English becomes the medium of instruction beginning in standard four. The second step, therefore, was the integration of the linguistic items (sentence structures, or grammar, and vocabulary), and the reading readiness and initial reading activities. This step was accomplished for standard one by English as a second language (ESL) curriculum specialists who were project consultants. Since this work was done outside of Kenya, simultaneously with radio lesson format trials in Kenya and further study of the conventional curriculum, this integrated curriculum was returned to the team for further revisions and refinement. The format for the radio curriculum, more properly called "Scheme of Work" developed by the curriculum specialists, is a series of frames. Each frame, designed to give guidance to the methodologists and scriptwriters, includes 1) linguistic structures or pairs of related structures, 2) minimum vocabulary for those structures, 3) the likely use of such structures in communication situations, 4) expected pupil behavior, 5) reading activities, and 6) pupil behavior with respect to the reading activity. The Scheme of Work for standard one is included as Appendix C.

Sentence structures and vocabulary are introduced in relationships which maximize the use of dialogues appropriate for the radio medium. To a very large extent they duplicate the structures and vocabulary of the Progressive Peak materials, although the presentation of new linguistic items will be necessarily slower in initial stages since radio is more limited in its sensory stimulation than conventional classroom teaching.

Initial reading instruction is carried out in the children's mother-tongue in most instances, mixed-language schools being the major exception. The project makes no assumptions about the quality or effectiveness of this instruction. However, since the children are so young and the demands to develop reading skills quickly are so important for the pupils, English reading activities will parallel and follow soon after mother-tongue instruction. Reading readiness activities in support of oral language skill development and in preparation for reading will be introduced soon after they are introduced in mother-tongue. Since the reading process in first and second language is closely parallel, it is expected that reading instruction in either language will reinforce reading in the other. Writing instruction will closely parallel reading, following shortly after mother-tongue writing.

B. Expected Pupil Behaviors

In addition to sentence patterns and words, the Scheme of Work will specify the situations in which a particular linguistic item may be used. This specification will be particularly important in insuring that the curriculum is relevant to Kenyan rural children. The Scheme of Work will specify the expected pupil behavior with respect to the situations for use of the linguistic content. The primary behavioral mode for the first three standards will be comprehension, but some performance behavior in speaking and writing will be integrated.

The linguistic content, the situations for use, and the expected pupil behavior will comprise the radio curriculum guide, called the Scheme of Work, from which daily broadcasts will be developed. The content will be integrally

related in the pre-broadcast, broadcast, and post-broadcast activities. There will be particular emphasis during the post-broadcast on activities directed by the teacher which cannot be effectively motivated or monitored by radio. This would include student-to-student dialogues, reading aloud, and so on.

Since the major summative evaluation of the project will be based on a comparison of student performance in conventional classrooms with student performance in the radio classrooms, the content in the two kinds of classrooms must be comparable.* Additionally, the radio lessons must incorporate those elements which are most effective on the radio. The radio Scheme of Work will be carefully reviewed by the project team to insure that it is consistent with the Kenyan curriculum. It will be reviewed by subcontractor consultants in language teaching, testing, and evaluation as part of their responsibilities to the project. Finally, it will be submitted to a subcommittee of language experts from the Lower Primary Panel, KIE, which is responsible for reviewing syllabuses. These experts will be asked to comment on the correspondence between the Scheme of Work and the primary English syllabus.

This extensive examination of the standard one curriculum, in addition to insuring that it meets the needs of Kenyan children, will insure that the best possible Scheme of Work is established. Since there is no body of research evidence to dictate what the content of a second-language curriculum for primary students should be, the collective wisdom of educational planners, curriculum specialists, methodologists, teachers, evaluation specialists, and sociolinguists will give the best possible guidance to the project. This judgement, tempered by the specific needs of rural Kenyan pupils, should provide a curriculum that is both teachable and relevant.

C. Radio Lessons

Each radio lesson has three components which make up a single instructional unit. These are the pre-broadcast preparations, the recorded broadcast, and the follow-up activities. Written teacher's notes for each lesson will guide the teacher through each component, and any ancillary print materials (such as student worksheets) will be supplied to the teacher in advance.

The instructions for the teacher will be developed using a consistent format that will provide maximum guidance with a minimum of reading, study, and preparation. The teacher will be able to quickly determine what he or she needs in advance of the broadcast, what to write on the blackboard, what to listen for and direct during the broadcast, and what to do to follow-up the broadcast. The language for teachers' instructions will be as clear and simple as possible. In general, teachers will be directed to model and participate in the activities rather than give lengthy explanations.

* Conventional curriculum in this report refers to the curriculum currently in use in the primary schools. Conventional classrooms refer to the classrooms in which project radio lessons are not broadcast. The use of the term is in no sense judgmental. It is used to contrast the regular Kenyan educational environment and the radio project curriculum and schools.

The pre-broadcast preparations require the teacher to make all necessary arrangements for the broadcast lesson. This might involve, for example, obtaining materials for use during the broadcast, choosing specific children who will be needed for certain tasks in the lesson, writing things on the blackboard, or guiding the pupils themselves in the preparation of worksheets. The feasibility of including set induction (that is, inducing a learning set by teaching any important prerequisites, motivating the children, and orienting them to the content of the broadcast lesson) in this component will be investigated during the first year of broadcasting. The pre-broadcast preparations always end with the teacher turning on the radio, tuning in the proper frequency, and adjusting the volume before the broadcast lesson begins.

Each broadcast lesson consists of several instructional segments ranging in length from a few seconds to three or four minutes. The total length of the lesson is 30 minutes. The segments are the building blocks from which the lesson is constructed. They are discrete units, not necessarily related to their immediate predecessors or successors within the lesson. This allows distributive learning which is one of the most important instructional design principles in the project. Segments teaching different objectives can be combined into one lesson, and several lessons can include segments teaching one objective. Distributive learning provides a redundancy which is both a teaching strategy and a means of insuring that absentees are not penalized too severely.

Segments differ in mode of presentation, pacing, expected participation or response by pupils, instructional load, and so on. They can be divided into two major types: formal and informal. The formal instructional segments generally involve one or two radio teachers (characters in their own right who continue throughout the year) who interact directly with the pupils. These formal instructional segments, in turn, fall into two subcategories. Initial instructional segments introduce specific linguistic content for the first time and continue to teach it until the writers believe that most pupils will have mastered it. Maintenance segments are then used occasionally to maintain the desired performance levels. The ratio of initial to maintenance segments, and the timing of maintenance segments during the year, are specified in advance for the guidance of the writers. Thus each objective within a given frame from the Scheme of Work will be addressed through a series of formal instructional segments which includes a set of initial instructional segments, to be broadcast over several consecutive lessons, and a smaller set of maintenance segments to be broadcast as necessary for review.

Every broadcast lesson consists of a mix of these formal segments to informal segments, again following a specified ratio. The latter segments include music, rhymes, games, rhythm activities, physical activities, and a story line using Kenyan animal characters. They are instructional segments, too, since their purpose is to support the formal instructional segments in teaching the content specified by the Scheme of Work. The informal instructional segments accomplish this primarily by providing readiness activities, maintenance activities, and an expanded language environment. They also provide transitions, entertainment, and a change of pace for the pupils, thereby helping to maintain a high attention and interest level among the children.

The follow-up activities are designed to supplement the broadcast lessons by providing an opportunity to review and practice the material covered in the broadcasts. They can also be used to cover areas which are particularly difficult to teach by radio. The lesson plans for these activities will be included in the teacher's notes.

The amount of time available for follow-up activities will vary from school to school. This is because the total amount of time devoted to English must be held constant from one year to the next so that children in conventional classrooms and radio classrooms will be given the same amount of instruction. Although this time is specified for each standard by national and district policies, in practice it differs from school to school. In standard one, for example, the norm is seven one-half hour English periods per week, but some schools report only five one-half hour periods, and others report five or more hours per week. Since the time of the broadcast lessons is constant, one-half hour per day or two and one-half hours per week, the time available for follow-up activities will vary from none to one-half hour per day or more. Whenever possible these activities will be scheduled in the same periods used during the preceding year, again to control variables between the conventional and radio instructional environments. In other words, a school which used seven one-half hour English periods for standard one in 1981 would use seven one-half hour periods in 1982, five for the broadcast lessons and two for follow-up activities.

The process by which the Scheme of Work is translated into broadcasts includes several steps. The first step is that the two methodologists take the individual frames from the Scheme of Work and plan how often a linguistic item will be repeated and with what variation, and suggest appropriate strategies for teaching it by radio. For example, a structure may appear in one lesson, practiced in the next three lessons, then practiced once a week for two to three weeks. Their decisions are based on the best possible experience and intuition and will be checked against what happens in the formative feedback from the classrooms.

The next step is scriptwriting. The two formal segment writers develop practice activities for each linguistic item using situations which not only stimulate the listeners to practice the item, but practice in life-like situations. The scriptwriter then selects formal and informal segments to include in one lesson, sequences them appropriately, and adds the necessary transitions. In selecting material for each lesson the scriptwriter follows general principles about the ratio of formal to informal instructional segments and initial to maintenance segments as well as specific guidance from the methodologists about segment sequencing.

From the written script, the producer and technical operator, working with the actors and musicians, prepare the radio broadcast. Lessons are tape recorded in advance of broadcast. When possible, production will be kept approximately six weeks ahead of the broadcast date to enable adequate preparation and distribution of pupil worksheets and teachers' guides.

Pupil worksheets will be developed using a standard format. Pupil exercises and activities to the extent possible will be carried out by radio. Certain activities, particularly pre-reading, reading, and testing, are better done on a worksheet. The classroom teacher will aid pupils in filling out

worksheets effectively. Whenever possible, worksheets will be maximally used over several lessons in order to reduce costs. Formative tests--not administered to all pupils each administration--will, of course, be collected and reviewed by the project on a regular basis. Other features of the instructional program include pupil-teacher produced worksheets, use of the blackboard, visual aids, and so on, to minimize print materials.

The complex interaction of personnel and components that result in the radio lesson, its production and broadcast, and the distribution of accompanying materials is diagrammed on the following flow chart. The timeline on the next page illustrates the schedule that must be maintained throughout the project in order to produce five lessons per week for each week of the school year.

D. Formative Evaluation

In the Radio Language Arts Project formative evaluation plays a particularly important role in the instructional system because of the feed-forward revision model. Since individual lessons are not pilot tested before use, team members will rely on formative evaluation results to indicate what materials must be reinforced or even retaught in future lessons to ensure adequate pupil performance. As the sample production timeline shows, in urgent cases a problem in one lesson can be corrected (that is, new segments can be added to future lessons) within three to four weeks of its broadcast. A secondary purpose of formative evaluation is to indicate which segments should be completely revised and rerecorded before the entire series of radio lessons is used again, in Kenya or elsewhere. Such revisions could improve the effectiveness of the series over that measured during the project.

Three different methodologies will be used to gather formative evaluation data: pupil achievement tests, classroom observations, and teacher and pupil interviews. These methodologies will be employed in 10 project observation schools. (Selection procedures for these schools are described in Section V.) No formative evaluation work will be done in the 21 pilot schools, to avoid any intervention effects which might interfere with the summative evaluation activities there. Each observation school will be served by two observers, under the feedback coordinator's supervision. These observers have been released to work on a part-time basis as part of Kenya's contribution to the project. In observation schools with more than one standard one stream, one classroom will be randomly selected for formative evaluation purposes.

The purpose of the weekly tests is to determine how well the pupils have mastered the objectives and language specified in the Scheme of Work. In some cases testing will be done with an entire class. At other times, a random sample of pupils will be chosen for testing. Most tests will be administered on Fridays, and will concentrate on measuring those objectives and language for which the initial teaching was completed during that week. To whatever extent is practical, weekly tests may also include items to test objectives and language which are in the process of being taught (to yield more information about the effectiveness of specific instructional strategies), which have been previously taught (to yield information about retention), and which have not yet been taught (to establish baseline data against which to measure possible learning transfer).

The team already has considerable experience in developing English tests for lower primary children, particularly in standard one. Pupils of this age are initially unfamiliar with such tests and experience some difficulty with the test-taking process itself. With carefully designed instruments and a minimum of mother-tongue instruction, however, they quickly catch on to what is wanted. The team will attempt to make testing situations as non-threatening as possible through careful orientation of administrators (i.e., the observers), teachers, and children.

Classroom observation will focus on the instructional process, and particularly on the broadcast lessons. On Fridays, prior to administering the weekly tests, both observers will observe the broadcast lesson simultaneously. Each observer will also observe one other lesson each week on his own, following a schedule devised by the feedback coordinator. In this way one lesson each week will be observed in all 10 schools, while the other four lessons will be observed in at least five schools. Project staff will observe as well, particularly in the three Nairobi-area districts.

Observers will use a lesson-specific form which calls attention to points on which the team members want feedback. For example, they might be asked to report on whether pauses for pupil responses are the proper length, whether children are able to play a certain game, or whether teachers did what the teacher's notes asked them to do. They will also be asked to add their own comments and observations.

The observers will occasionally interview teachers (and, when they are old enough to give helpful responses, pupils). Not only will such interviews give teachers the opportunity to offer their own criticisms and suggestions, but they will also provide information about attitudes toward the lessons and towards radio instruction in general. It is possible that headteachers and parents may also be interviewed.

At the end of each week, observers will collect all completed formative evaluation instruments and return them to the feedback coordinator in Nairobi. He, in turn, will analyze the data, summarize the results and their implications, and inform the other team members of his findings. They will then be guided by these results as they develop future lessons. When it is clear that pupils have not mastered what they were expected to master, the material in question will be reviewed or retaught and, if necessary, earlier lessons will be revised for future use.

The formative evaluation process is part of the research phase of the project only. Once the lessons have been developed, they can be used again and again without relying on the weekly tests, observations, and interviews.

E. Distribution

Because the RLAP radio lessons are developed week by week, it is not possible to distribute the ancillary print materials (including teachers' notes, pupil worksheets, and formative evaluation instruments) at the start of each year (or even each term). Furthermore, it is necessary to collect the completed formative evaluation instruments each week so that they may be returned immediately to Nairobi for analysis.

To meet these two needs, a weekly distribution system has been devised. Once a week, the field assistant will visit every school in every district except Kilifi to drop off materials for the next week's lessons, provide needed supplies (such as batteries), and replace radios in need of maintenance. At the end of the week, he will collect completed formative evaluation instruments from observers in the three western districts, while the project's driver will collect this material from the three Nairobi-area districts. Distribution and collection in Kilifi will be handled through a commercial transportation service.

Once this system is in operation, the project team will investigate the feasibility of distributing on a biweekly cycle whenever the necessary print materials are available in enough time and alternative means for collecting formative evaluation instruments can be found.

The instructional system described throughout this section, results in the production of the daily radio lessons and all ancillary materials and their distribution. This process is diagrammed in the Production Flow Chart which follows.

The production cycle is detailed on the Timeline for 1981 and the Timeline for 1982 which follow. Similar timelines will be developed for the additional life of the project.

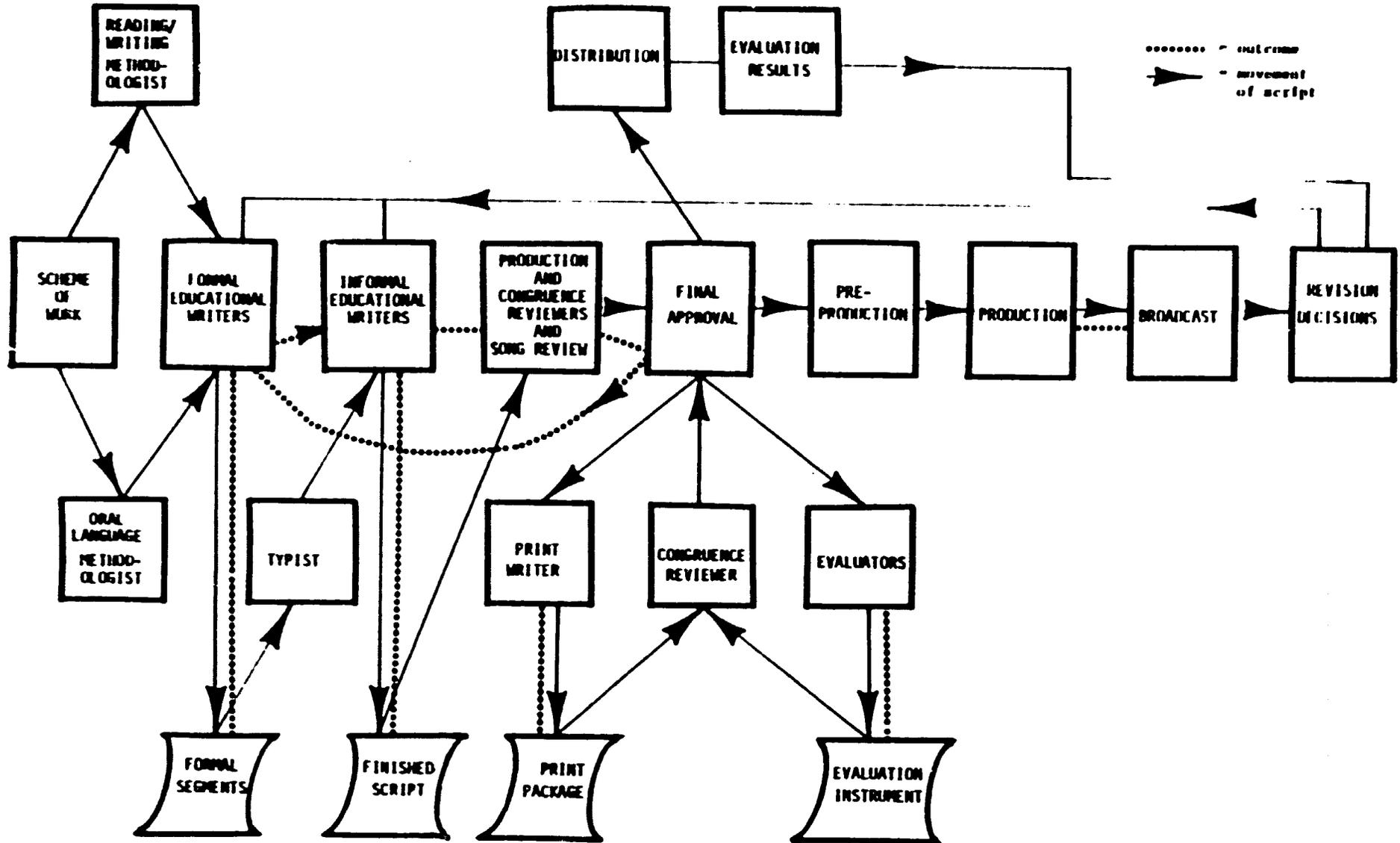
F. The Role of the Teacher

In Kenya, where primary teachers hold an important social as well as educational role and where the more qualified primary teachers are assigned to the lowest grades, it is important to provide a meaningful role for the classroom teacher in radio lessons. Teachers must have a favorable attitude toward the use of radio in the classroom. This is generally the case since many Kenyan teachers have had successful experiences in teaching with the use of KIE-produced educational radio. Additionally, they must feel they are making an important contribution to the success of the language lessons by direct involvement in the radio-directed activities. They must be more than passive listeners, actually guiding and directing their students as they would in the regular classrooms. Since broadcasting is not as common at the lower primary level as it is in the higher levels, it will be important to develop orientation materials that both provide convincing evidence of the teachers' role and provide the directions and instructions that will enable them to perform this role successfully.

The classroom teachers will maximize the radio lessons. They will necessarily, in the language class, serve as models for any of the participatory activities, both during broadcasts and in post-broadcast sessions. They will ensure that pupils focus on the radio activities, provide materials when called upon, and individualize instruction through post-broadcast exercises.

It is not clear at this point exactly how much teacher inservice training will be necessary. Experience so far indicates that teachers can quickly determine what the project team wants out of a trial lesson or activity and can successfully conduct follow-up activities with a minimum of instruction. They have generally been at ease with the team and have had excellent rapport with their students so that the kind of interruptions of the normal classroom

Production Flow Chart



RADIO LANGUAGE ARTS PROJECT

TIMELINE

1981

FUNCTION	NOVEMBER															DECEMBER											1 week vacation re-start January 4, 1982									
	2	3	4	5	6	9	10	11	12	13	16	17	18	19	20	23	24	25	26	27	30	1	2	3	4	7		8	9	10	11					
SEDLAK/ CUTLER	M H			N N			M H			M H			M H			M H						MH - Methodology SS - Segments Holiday meetings will be reserved for staff meetings as needed														
CUTLER/ MONTUCCI	D	S S S			-			S S S			-			S S S			-			S S S			-			S S S										
BROCKE						6-----10					11-----15					16-----20					21-----25					26-----30										
SEDLAK/QUARDO REVIEW																6/10			11/15				16/20			21/25										
CHRISTENSEN FINAL APPROVAL																6/10			11/15				16/20			21/25										
REPAIR SCRIPT																6---10					11--15					16--20					21-25					
TYPING COPYING					S S		S S S S S			S S S S S			C 6/10		S S S S S			C 11/15		S S S S S			C 16/20		S S S S S			C 21/25								
PRE-PRODUCTION KARDE/KAROTA	1---5																				6---10					11-----15					16--20					
PRODUCTION QUARDO/KARDE/ KAROTA-STUDIO	1-----5																				6-----10					11-----15					16-----20					
KARDE PRINTING	1---5																				6-----10					11-----15					16-----20					
CHRISTENSEN/ SEDLAK PRINT APPROVAL					1/5																		6/10			11/15			16/20							
ONTO EVALUATION	1---5																				6---10					11--15					16--20					

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RADIO LANGUAGE ARTS PROJECT

TIMELINE

1982

FUNCTION	JANUARY										FEBRUARY																															
	18	19	20	21	22	23	24	25	26	27	28	29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26				
METROLOGY (M)		M	M						M	M				M	M					M	M						M	M														
FORMAL SEGMENTS (S)			S	S	S					S	S	S			S	S	S				S	S	S				S	S	S						S	S	S					
SCRIPTS			41	-----	45				46	-----	50				51	-----	55				56	-----	60				61	-----	65					66	-----	70						
CONCURRENCE PRODUCTION REVIEW		$\frac{36}{40}$							$\frac{41}{45}$					$\frac{46}{50}$						$\frac{51}{55}$					$\frac{56}{60}$							$\frac{61}{65}$										
FINAL REVIEW		$\frac{36}{40}$							$\frac{41}{45}$					$\frac{46}{50}$						$\frac{51}{55}$					$\frac{56}{60}$							$\frac{61}{65}$										
REVISE SCRIPTS			36	-----	40				41	-----	45				46	-----	50				51	-----	55				56	-----	60					61	-----	65						
TYPING SEGMENTS (S) COPYING (C)	S	S	S	S	C				S	S	S	S	C	S	S	S	S	C			S	S	S	S	C	S	S	S	S	C				S	S	S	S	C				
PRE-PRODUCTION		31	-----	35					36	-----	40			41	-----	45				46	-----	50				51	-----	55								56	-----	60				
STUDIO AND POST-PRODUCTION			31	-----	35				36	-----	40				41	-----	45				46	-----	50				51	-----	55								56	-----	60			
PRINT MATERIALS			31	-----	35				36	-----	40				41	-----	45				46	-----	50				51	-----	55									56	-----	60		
FORMATIVE EVALUATION MATERIALS			31	-----	35				36	-----	40				41	-----	45				46	-----	50				51	-----	55										56	-----	60	
REVIEW PRINT AND EVALUATION			$\frac{31}{35}$						$\frac{36}{40}$						$\frac{41}{45}$					$\frac{46}{50}$					$\frac{51}{55}$									$\frac{56}{60}$								
DISTRIBUTION WEEKLY BIMONTHLY			6	-----	10				11	-----	25				16	-----	20				21	-----	25				26	-----	30							31	-----	35				
BROADCAST																																										
FORMATIVE EVALUATION ANALYSIS									1	-----	5					6	-----	10				11	-----	15				16	-----	20							21	-----	25			
FEED-FORWARD LESSON REVISION EARLIEST LATEST																																										

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activities required by lesson trials have been smoothly handled by the teachers.

So far this contact has been face to face. This first-hand experience will have to be translated into understandable instructions requiring a minimum preparation on the part of the teacher. Kenyan staff members who have considerable teaching experience will write the teachers' orientation materials and manual. Drawing on the experience of the Radio Mathematics Project, we do not expect to provide extensive and costly teacher training. The training and experience of Kenyan teachers and the supervisory system in primary schools suggests as well that this will not be necessary.

Further experience in the schools and with the radio lessons may require more inservice teacher training than we now anticipate. The language radio lessons may require greater teacher participation in the lessons or more complex post-broadcast activities than we now expect. There are then several unanswered questions about teaching training and the necessary resources to devote to this.

As now envisioned, the teacher-training materials will consist of a one-day orientation for teachers and headteachers (principals) prior to the broadcast school year, teachers' handbooks, and daily teachers' notes. The teachers' handbooks will eventually be small booklets of general instructions regarding the use of radio lessons. During the development phase, pages of instructions will be produced and distributed as guidance is needed. The daily teachers' notes will be distributed weekly with student materials. Notes will include the following: simple descriptions of the lesson objectives; lists of the vocabulary introduced; lists of songs and activities, giving details of new songs or games; details of what must be written on the blackboard; materials the teacher must provide; and any other specific instructions.

SECTION V

SUMMATIVE EVALUATION DESIGN

A. Summative and Formative Evaluation

It is important to clearly differentiate between the summative and formative evaluation strategies in the RLAP. They have different purposes and require different techniques. The purpose of the formative evaluation is to provide regular feedback to the team on the effectiveness of each broadcast lesson in actual practice. This feedback, in turn, will guide the modification of instructional design principles, the production of future radio lessons, and very occasionally the revision of lessons which have already been broadcast. The formative evaluation requires significant classroom intervention in the form of weekly tests, regular observation (as often as every day), structured student interviews, and possibly other techniques as well. It is not designed to demonstrate the effectiveness of the RLAP in comparison to any other option. In other words, it is entirely separate from the summative evaluation.

The summative evaluation, on the other hand, will test the effectiveness of the RLAP. The Government of Kenya will want to know whether this approach to teaching English can improve pupil achievement in comparison with conventional Kenyan approaches in a cost-effective manner in order for the Ministry of Basic Education to decide whether or not to continue the project and extend it to all primary schools in the country. AID will want answers to similar questions about program effectiveness and cost in order to decide whether or not to make the RLAP available to other countries, possibly as one component of a larger primary radio curriculum. This section describes the summative evaluation design suggested for the project.

B. Identification of Project Classrooms

Pupils will be taught English language as a subject by the Radio Language Arts Project in radio classrooms or by conventional methods in regular classrooms. Given the mission to reach rural students, the project sought to identify schools and classrooms which are representative of the majority of Kenya's rural population. Because of limited resources it was necessary to limit selection to these schools accessible to the project personnel for educational treatment, observation, and evaluation.

1. Student sample representativeness

The overriding question of representativeness of the sample student population for a language arts project relates to the linguistic diversity of Kenya. The first strategy for selecting project classrooms was to choose a large portion of the schools from the major linguistic groups.

Language background was not the only criterion, however. In addition to linguistic diversity, academic diversity was also assumed to be important in judging the effectiveness of radio as a medium. The academic quality of a school was roughly judged by the level of performance by its primary-school students on the nationally administered, standardized exam given at the end of standard, or grade, 7--the Certificate of Primary Education (CPE). This exam,

closely patterned after the British school exams, is the only standardized exam given at the primary level and determines which students continue on to secondary school. It was decided that within a given linguistic community a range of schools would be selected to judge whether the programs were effective at all levels of academic performance. A stratified random sample based on CPE scores was taken. One pilot school was finally selected from each strata--high, middle, low CPEs--from each of seven geographic and education districts representing seven different language groups.

Five of these districts represent approximately 68 percent of the population of Kenya linguistically. The sixth district includes the Masai people--slightly over 1 percent--who, although not a major language group, typify divergent cultural patterns which it was important to include in the sample; specifically they are nomadic and representative of other peoples and areas of the country. The seventh district includes the Swahili-speaking people--less than 1 percent--of the coastal area. Although Swahili is spoken by a minority of Kenyans as a first language, it is the most widely-used lingua franca in Kenya and East Africa as a whole. It is the designated national language. It is a required subject in schools from standard four, and it is widely used, with varying degrees of skill, as a means of communication throughout the country, especially in the towns and cities. In addition, the Swahili speakers are predominately Muslim, typifying still another subcultural group.

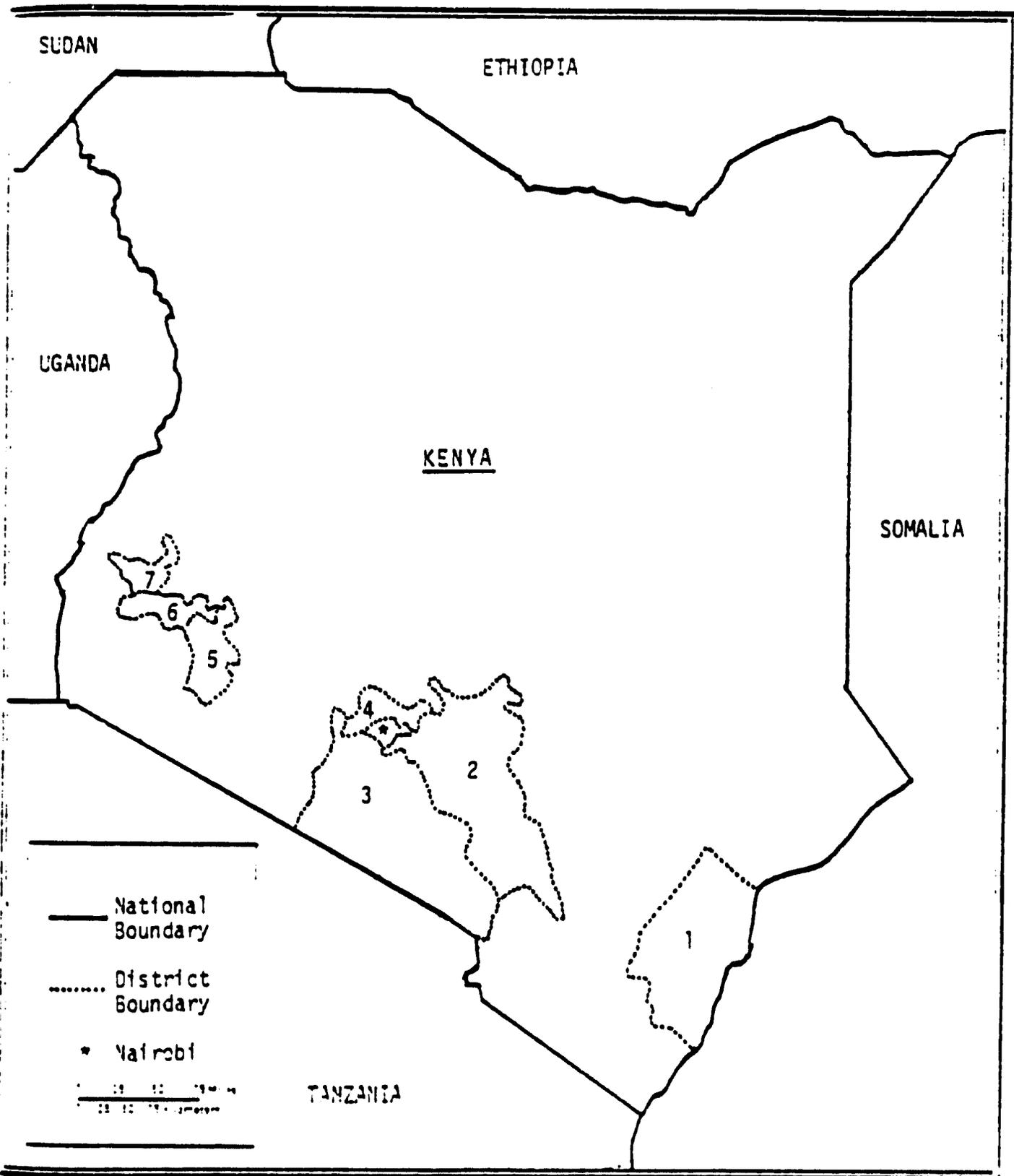
2. Accessibility of sample

There is no pretense that this sample represents the entire country. There are vast regions of the country where it would be physically impossible for the project to distribute teachers' and students' materials or to observe the effects of radio broadcasts on students. In some of these areas, the Voice of Kenya (VOK) radio signal does not penetrate in any case. The areas not covered by the study are largely the northeast region, which is arid and rather sparsely populated and nomadic, and the northwest region around Lake Turkana, which is difficult to reach on a regular basis.

The question of how well the schools represent the seven districts is one of the areas of investigation. The primary purpose of the summative evaluation is to determine if the instructional system works in the project schools.

For 1982 we plan to choose an additional 21 control schools from the same seven districts. These schools will be visited only for the purpose of giving a post-test. Since accessibility is not a major consideration in the selection of these control schools, we can use a simple stratified random selection process, with stratification according to CPE exam results. Post-test scores from these control schools can be compared with post test scores from conventional classrooms in the 21 pilot schools in our original sample to see how representative our pilot schools are of the districts in which they are located. Then the pilot group of standard one classes will be compared against the previous standard one cohort in the same schools as well as against standard one students of the same year in the pilot schools. As we will not need as large a sample of students from the new control schools, it should be sufficient to test only one stream of standard one students (chosen at random) from each control school in order to verify the representativeness of our pilot schools.

RADIO LANGUAGE ARTS PROJECT DISTRICTS



- | | |
|-------------|-------------|
| 1. Kisumu | 5. Kericho |
| 2. Machakos | 6. Kisumu |
| 3. Kakamega | 7. Kakamega |
| 4. Kisumu | |

There is additional reason for using more control schools. It is quite likely that the radio classes will develop better test-taking skills, of the type used on the post-test, as many of the worksheets given to the radio classes will use the same format as parts of the post-test. In order to estimate the magnitude of this effect we will (at random) choose an additional stream from each of the 21 control schools which has more than one stream and distribute work sheets similar to the post-test format which can be used by the teacher in those streams for use in one or two practice sessions prior to administering the post-test itself.

It should be emphasized that the control schools will be used to verify the representativeness of the pilot schools and to estimate the effect of practice in test-taking skills for radio pupils. These schools will not serve as the control group for the summative evaluation, however. The summative evaluation will be based on a comparison of results from conventional and radio classrooms in the same schools.

Once the 21 pilot schools were chosen for summative evaluation purposes, the next step was to choose 10 observation schools for formative evaluation. Ideally these schools would match the pilot schools so that lesson developers could be reasonably certain that, if radio lessons worked well in the observation schools, they would work well in the pilot schools. For this reason, the team decided to match observation to pilot schools.

Since it will be easier for team members to observe in the three Nairobi-area districts, two observation schools were assigned to each of these districts. They would match the top and bottom pilot schools, according to 1980 CPE results. The remaining four districts were assigned one observation school each, to be matched to the middle pilot school by CPE score.

The District Basic Education Officer in each project district was consulted personally about the selection of these observation schools. He was presented with a list of the 10 schools nearest the target pilot school in CPE scores. Following his advice, this list was then edited to exclude schools which did not also match the target school in size and pupils' mother-tongue(s), and to exclude schools which would not be accessible to potential observers. From this edited list, the school nearest to the target pilot school in CPE results was selected as the observation school. Two observers for each observation school were then identified and trained.

It should be noted that the summative evaluation post-tests will be administered in the observation schools as well as the pilot schools. Results of these tests will help verify the match between the two sets of project schools. It will also give an indication of the size of the effect of increased supervision, since the presence of observers in the schools will probably be interpreted as a form of supervision by the teachers and headmasters.

Chart V-1 shows the 31 RLAP schools chosen: 21 pilot schools and 10 observation schools.

CHART V-1

RADIO LANGUAGE ARTS PROJECT

PROJECT SCHOOLS

<u>DISTRICT</u>	<u>PILOT</u>	<u>OBSERVATION</u>
1. Machakos	Misakwani (high) Kitonyini (middle) Kisovo (low)	Metuma Tango
2. Kakamega	Mukumu Mixed (high) Shikondi (middle) Muraka (low)	Lusui
3. Kericho	Kakaturgor (high) Torit (middle) Chepsir (low)	Sotik
4. Kisumu	Rabuor (high) Lela (middle) Awasi (low)	Sianda
5. Kiambu	Lusigitti (high) Githiriono (middle) Kingeero (low)	Githaiti Gicoco
6. Kilifi	Takaungu (high) Shariani (middle) Mambrui (low)	Chumani
7. Kajiado	Olturoto (high) Oloyiankalani (middle) Upper Matasia (low)	Kibiko Isenya

C. Evaluation Design

The summative evaluation design chosen is presented in Chart V-2. There are 21 pilot (summative evaluation) schools. The table presents the design for one classroom in one school.

In November, 1981, this classroom of pupils (identified as Red) in School A, standard one, with teacher # was administered a post-test based on the Kenyan curriculum and objectives. This will provide the pupil achievement record for the control group. In November, 1982, teacher # will teach a different group of students (Blue) in standard one of the same school using the project radio lessons. The amount of time devoted to English each week will be held constant during 1981-82. This will provide pupil achievement data for the experimental group. Use of the same teacher for both the conventional and radio classrooms will help control the teacher variable, particularly since he or she will not have had any prior experience with the radio language arts lessons.

Also during November, 1982, the Red students will be completing standard two in the conventional classroom with a different teacher (@). The post-test administered will provide the control data for standard two.

During 1983 and 1984, the same pattern will be followed. In summary, the same schools (in the example, School A) will be used for the control and experimental classrooms. Student achievement and other variables will be measured in one year for control purposes and in the subsequent year, after treatment, for experimental purposes. The same control and experimental groups will be followed because we want to measure cumulative results, i.e. three years of radio, three years of conventional teaching. This strategy assures that the match between children in the same school in consecutive years will be closer than the match between children in two different schools. This approach has the added advantage of insuring that the control sample is as good as the experimental sample, qualified by the disadvantage that the control sample will also suffer from whatever biases affect the experimental samples. Another disadvantage is that it assumes that all conditions from one year to the next are alike. This assumption will be investigated, but the student data are not easily available. The use of the additional control group in 1982 (discussed above) should help shed light on this issue, as we will have standard one control groups in both 1981 and 1982.

The broadcasting and testing schedule is shown in Chart V-3.

Another disadvantage of this plan is that pupils in the experimental classrooms will be receiving the treatment simultaneously with the formative evaluation in the observation schools. This should be partially compensated for by the revise-forward system of instructional development used in this project as well as in the Radio Mathematics Project. Based on observation, modifications will be made in radio lessons to be broadcast later.

This compressed evaluation design does present some logistical problems in preparation and distribution. First, it carries with it a concentrated test development and administration component. Note that in November 1982, that in addition to preparing daily broadcasts, teacher and student handouts, preparing and analyzing formative evaluation instruments and interpreting

CHART V-2

SUMMATIVE EVALUATION DESIGN

PILOT SCHOOLS

<u>YEAR</u>	<u>RADIO CLASSROOMS</u>	<u>CONVENTIONAL CLASSROOMS</u>
1981		Classroom No. 1 School A Teacher # Students Red
1982	Classroom No. 1 School A Teacher # Students Blue	Classroom No. 2 School A Teacher @ Students Red
1983	Classroom No. 2 School A Teacher @ Students Blue	Classroom No. 3 School A Teacher * Students Red
1984	Classroom No. 3 School A Teacher * Students Blue	

CHART V-3

BROADCAST AND TEST SCHEDULE

<u>YEAR</u>	<u>PILOT SCHOOLS</u> N=21	
	<u>RADIO</u> <u>CLASSROOMS</u>	<u>CONVENTIONAL</u> <u>CLASSROOMS</u>
1981		Post-test Standard one
1982	Broadcast Standard one	
	Post-test Standard one	Post-test Standard two
1983	Broadcast Standard two	
	Post-test Standard two	Post-test Standard three
1984	Broadcast Standard three	
	Post-test Standard three	

data, the field team must also prepare and pilot test a post-test for standard two and administer post-tests to both standards one and two. Second, all formative and summative materials must be distributed simultaneously.

D. Summative Evaluation Testing

In the summative evaluation of the radio instructional program, the main dependent variable is the English-language achievement of the pupils. Since there are few ready-made instruments in testing children in a second language and none that would be culturally relevant to Kenya, and since pupil achievement must be specifically related to the Kenyan primary curriculum, major effort will go into the tests used in the project.

Portions of test development are well under way. The team has had considerable experience in testing for formative evaluation of lesson segments and pilot lessons developed during the 1981 school year. In addition, a summative evaluation post-test for standard one has been developed, validated, and administered.

Although this is not the place for a thorough discussion of language testing, a brief comment on the differences between the purposes of formative and summative testing is important to an understanding of the implementation plan.

Formative tests, along with direct observation of radio classrooms, are an important tool for instructional lesson development. Although the radio lessons use the Kenyan curriculum as realized in the Progressive Peak materials, there is an understanding and agreement between Kenyan and American team members that radio as a medium must utilize or realize the curriculum content differently than print material. As a result, not only will linguistic content be reordered in radio lessons but pupil participation in the classrooms will be very different from conventional classes. In an effort to engage young children in the learning activities carried by radio, the focus on active language patterns will be stressed early in the broadcasts. Formative tests of these activities and pupil proficiency will differ from a print-oriented curriculum.

Children starting with zero English-language ability will be tested quite differently from those who have achieved some overall mastery of the language. Formative tests initially will by necessity check on discrete items taught by radio. Summative tests, even at the end of standard one, will have to test not only discrete points but an appropriate level of integration of linguistic items.

The Kenyan objectives for teaching English are very general and broadly stated, as they are in most language programs. These goals do not specify the curriculum. Either a print curriculum or a radio curriculum should lead to achievement of the goals. The formative tests of the radio lessons must test the content and behaviors chosen for the radio lessons at each step toward the overall objectives of the curriculum. A number of intermediate objectives will be tested that may not be appropriate to the print curriculum nor to the summative evaluation, but which are important for formative evaluation purposes.

Summative evaluation tests will be developed for standards one, two, and three. Standard one was the most difficult and provided perhaps the least dependable data on pupil performance. Students who are beginning reading in their mother-tongues, perhaps receiving instruction in a mixed-language situation, receiving English instruction of approximately three and one-half hours per week, cannot be expected to make great strides in English-language learning. The most significant summative evaluation will measure the cumulative progress of students who receive all three years of radio lessons.

The summative evaluation post-test for standard one is a pencil-and-paper test with directions given orally in the mother-tongue. The test is in four parts, two for listening comprehension, one for reading comprehension, and one which integrates listening and reading comprehension. All listening tests are administered by the observers, not by the classroom teachers. The classroom teachers will not be allowed to see the post-test at all, and details of post-test results for standard one conventional classrooms will be withheld from both teachers and the field team until the conclusion of standard one broadcasts.

The 80-item test, with items selected from a 140-item pilot test, has only one form, but administration is being carefully monitored.* It is possible that tests for standards two and three may use alternate forms if the situation for group testing warrants the additional resources and time for such test development. The project staff will also gather data indicating teacher evaluation of individual student English abilities. These data can be used to check the validity of the post-test.

E. Attitudes Assessment

The project was interested in measuring teachers' and headmasters' attitudes toward 1) radio as a medium of instruction, perhaps the advantages and disadvantages as a major medium and a support medium, 2) different modes of presentation by radio, e.g., story line, songs, games, drills, 3) radio to help some educational development problems in Kenya, and 4) radio in their classrooms and schools in particular. The sociolinguistics survey indicated very positive attitudes toward radio at present. Therefore, the formative and summative evaluation will measure attitudes to the RLAP lesson in particular.

These issues, which are important to both the short-term and long-term effectiveness of the project, will require careful and sensitive assessment. The Kenyan team members will have to assume major responsibility for developing instruments which are culturally sensitive but which elicit honest responses from teachers, headmasters, pupils, and parents.

F. Validity and Generalizability

Validity of the evaluation design addresses the question of whether the differences found between control and experimental pupil achievement can be attributed to the treatment (the radio lessons) applied. Generalizability

* Described in a separate report by Grant Henning. See Annual Report September 26, 1980, to September 25, 1981.

addresses the question of whether this treatment will produce similar results in other schools.

Random selection of schools within a pre-selected linguistic sample representing major population groups within Kenya should compensate for differences within the sampled population. Within project schools, headmasters have agreed to keep the same pupils assigned to a classroom as stable as possible. We do not know at present to what extent student loss will be a problem. This is one reason we decided to work with all standard one streams in project schools rather than a single stream.

The most troublesome problem is the extent to which radio classroom pupils have an advantage over control pupils because of their greater experience in pencil-and-paper activities and exercises. The method of responding to the radio lessons will provide daily practice in kinds of test-taking that will be used in evaluation. It will be difficult to determine if increased scores, assuming they occur, are a result of English-language achievement or test-taking skills. However, as indicated above in the discussion on the use of the additional 21 control schools, we will get an idea of the magnitude of this effect in the control schools.

Generalizability will be further guaranteed by continuing study of the representativeness of our school sample. The sociolinguistic survey and the school selection process relied on some statistics from the Central Bureau of Statistics which compares teacher qualifications across schools and results on the CPE across schools. Additional demographic data collected during the next school year will provide additional data. These data will also be used to study the problem of which student level, classroom level, and school level variables are important in determining post-test scores. Another problem that may be partly solved with these data is that of determining for which type of student, classroom, or school the radio lessons prove to be the most effective. Multiple regression analyses of the data will help to answer these problems.

The evaluation design, by separating the formative evaluation schools from the summative evaluation schools, reduces the risks of the Hawthorne effect--improved achievement as a result of participating in a new or innovative educational project. Experimental classes will not be observed as formative schools will be. However, the presence of the experiment in a school, plus the interest of teachers and headmasters, are factors to be considered. We hope that by the time we reach the summative evaluation of standard three that this effect will have dissipated. There is perhaps some advantage in this regard to having the control and experimental classrooms in the same schools.

G. Cost-Effectiveness Evaluation

The preceding discussion describes the major design for determining the pedagogical effectiveness of an instructional radio system in teaching an English-language arts curriculum in Kenya. In addition, a cost-analysis of radio instruction versus conventional instruction is necessary for:

1. The Kenyan Ministry of Basic Education in order to make decisions

concerning whether and how to implement radio-based instruction at the primary levels.

2. Other developing countries in order to make decisions concerning whether and how to implement radio-based language instruction in the formal school systems.

The cost-effectiveness analysis must consider the following interrelated areas at least:

3. A comparison of costs in delivering a radio-based instruction versus conventional instruction. In Kenya, conventional instruction at present is print oriented, with a common text and supplementary materials for each standard.
4. A comparison of costs in relation to student performance. In the Radio Mathematics Project this was studied largely as the relation between student retention at the standard level, poor achievement, drop-out rates, budget levels.

The cost-effectiveness model for the project has not yet been developed. We expect to use a model very similar to the Radio Mathematics model, depending on the availability of information on the Kenyan education system and the appropriateness of the model to educational practice.

The approach outlined in the Radio Mathematics Project is one of successive approximations. First they attempted an analysis in an approximate way, then--using improved information on costs, pedagogical effectiveness, drop-outs, and repetitions--they provided successive refinements to the model. We expect to follow this process in developing the cost-effectiveness model beginning in February 1982.

SECTION VI

IMPLEMENTATION SCHEDULE

The implementation schedule for the project is illustrated in Charts VI-1 through VI-5. This schedule is a substantial revision from the preliminary implementation schedule of the proposal and the five project phases delineated in the contract. There are two major reasons for these changes: 1) the project agreement between the governments of Kenya and the United States was not signed until 11 months after the signing of the contract. This meant that Phase I and Phase II had passed before the field team was in place; and 2) the Kenyan school year runs on a calendar year. Broadcasts are delayed until January 1982. In order to evaluate three full years of radio-based instruction it is necessary to plan the project--at minimum--through the school year of 1984. This is three months beyond the scheduled termination of the project.

On the basis of the above factors, we propose the redelineation of the project phases.

- Phase I: September 1, 1979, to September 30, 1980.
This includes the period of the project before the field in place.
- Phase II: October 1, 1980, to December 31, 1981.
This includes the period of the project in which pre-broadcast activities took place.
- Phase III: January 1, 1982, to December 31, 1982.
First year of broadcasts.
- Phase IV: January 1, 1983, to December 1983.
Second year of broadcasts.
- Phase V: January 1, 1984, to December 31, 1984..
Third year of broadcasts.

This schedule does not incorporate dissemination activities as originally proposed. Such activities would have to take place after the completion of the third broadcast year and would require an additional three to nine months beyond December 31, 1984.

Chart No. VI-1

RADIO LANGUAGE ARTS PROJECT

PHASE I SCHEDULE: September 1, 1979 - September 30, 1980

PROJECT TASKS	QUARTERS	9/79 - 12/79	1/80 - 3/80	4/80 - 6/80	7/80 - 9/80
<p><u>Pre-Contract Phase</u></p> <ul style="list-style-type: none"> ● Prepare and submit proposal (August 15, 1979) ● Negotiate and sign contract (September 28, 1979) <p><u>Phase I: Preparation for Operational Development</u></p> <ul style="list-style-type: none"> ● Visit sites and prepare site selection report. ● Negotiate project agreement with host government. ● Arrange approval of subcontracts with AID contract office. ● Confirm selection of final field team. ● Prepare plans for cultural linguistic survey. ● Conduct review of relevant language arts/radio programs. ● Hold orientation advisory council and key staff seminar. ● Send field team to site. ● Establish working relationship with host country officials, project representatives, and teachers. ● Conduct research on reading and radio. 					

RADIO LANGUAGE ARTS PROJECT

PHASE II SCHEDULE: October 1, 1980 - December 31, 1981

PROJECT TASKS	QUARTERS	10/80 - 12/80	1/81 - 3/81	4/81 - 6/81	7/81 - 9/81	10/81 - 12/81
<ul style="list-style-type: none"> ● Establish working relationship with host country officials, project representatives, and teachers. 						
<ul style="list-style-type: none"> ● Conduct sociolinguistics survey. 						
<ul style="list-style-type: none"> ● Prepare detailed implementation plan including: 						
<ul style="list-style-type: none"> ▲ identify project classrooms 						
<ul style="list-style-type: none"> ▲ identify/select host country personnel 						
<ul style="list-style-type: none"> ▲ review and analyze national language arts curriculum 						
<ul style="list-style-type: none"> ▲ prepare tentative outline of radio instructional materials for complete primary language program 						
<ul style="list-style-type: none"> ▲ specify procedures for securing and maintaining facilities and equipment 						
<ul style="list-style-type: none"> ▲ specify anticipated role for consultant personnel 						
<ul style="list-style-type: none"> ▲ specify host country and contractor staff roles 						
<ul style="list-style-type: none"> ▲ specify procedures for developing instructional components, data collection, and formative and summative evaluation 						
<ul style="list-style-type: none"> ● Review Implementation Plan with AID/USAID and host country representatives; revise as necessary. 						
<ul style="list-style-type: none"> ● Prepare, pilot test, and revise material for level I Program, audiotape and print material. 						
<ul style="list-style-type: none"> ● Determine and prepare (with testing) materials for support activities for in-service teacher training and for parent and community involvement. 						

RADIO LANGUAGE ARTS PROJECT

PHASE II SCHEDULE: October 1, 1980 - December 31, 1981

PROJECT TASKS	QUARTERS	10/80 - 12/80	1/81 - 3/81	4/81 - 6/81	7/81 - 9/81	10/81 - 12/81
<ul style="list-style-type: none"> ● Design detailed lesson plans and produce scripts, radio programs, worksheets, and other materials--Level 1. ● Establish working relationship (and train as necessary) host country observers. ● Develop instruments and evaluation strategies for formative evaluation. ● Establish system for classroom observation by writers and producers. ● Continue lesson/materials production, evaluation, in-service training. ● Establish system to ensure all materials are culturally appropriate ● Prepare Scheme of Work based on Kenyan curriculum, standard 1. ● Prepare pilot post-test and validate items for post-test, standard 1. ● Prepare and administer post-test, standard 1. ● Analyze post-test data. ● Test and organize systems for delivery systems including radio broadcasting, instructional materials for students and teachers and for ongoing data collection and feedback (include test or trial runs). ● Collect and analyze baseline data on target population concerning general scholastic achievement, language arts achievement levels, grade repetition and dropout rates, socio-economic status. ● Conduct teacher orientation workshops and develop schedule and procedures for ongoing technical support and feedback. ● Develop detailed student profiles and project profiles for other students in the country. 						

RADIO LANGUAGE ARTS PROJECT

PHASE III: January 1, 1982 - December 31, 1982

PROJECT TASKS	QUARTERS: 1/82 - 3/82	4/82 - 6/82	7/82 - 9/82	10/82 - 12/82
<ul style="list-style-type: none"> ● Prepare Scheme of Work, standard 2. 				
<ul style="list-style-type: none"> ● Prepare Scheme of Work, standard 3. 				
<ul style="list-style-type: none"> ● Prepare pilot post-test and validate items for post-test. 				
<ul style="list-style-type: none"> ● Prepare and administer post-test, standard 2. 				
<ul style="list-style-type: none"> ● Analyze post-test data, standard 1. 				
<ul style="list-style-type: none"> ● Analyze post-test data, standard 2. 				
<ul style="list-style-type: none"> ● Design detailed lesson plans and produce scripts, radio programs, worksheets, and other materials--standard 2. 				
<ul style="list-style-type: none"> ● Prepare systematic plan for developing local staff expertise for eventual (Phase V) project operation responsibility. 				
<ul style="list-style-type: none"> ● Continue lesson/materials production, evaluation, in-service training. 				
<ul style="list-style-type: none"> ● Establish methodology and develop data record for cost/benefit studies. 				
<ul style="list-style-type: none"> ● Collect and analyze baseline data on target population concerning general scholastic achievement, language arts achievement levels, grade repetition and dropout rates, socio-economic status. 				
<ul style="list-style-type: none"> ● Conduct teacher orientation workshops and develop schedule and procedures for ongoing technical support and feedback. 				
<ul style="list-style-type: none"> ● Produce and distribute teachers' handbook. 				
<ul style="list-style-type: none"> ● Begin development of level II materials. 				
<ul style="list-style-type: none"> ● Broadcast 195 radio lessons - standard I 				
<ul style="list-style-type: none"> ● Collect formative evaluation data, analyze and communicate to writers. 				

Chart No. VI-4

RADIO LANGUAGE ARTS

PHASE IV: January, 1, 1983 - December 31, 1983

PROJECT TASKS	QUARTERS	1/83 - 3/83	4/83 - 6/83	7/83 - 9/83	10/83 - 12/83
<ul style="list-style-type: none"> ● Continue lesson/materials production, evaluation, in-service training. 					
<ul style="list-style-type: none"> ● Prepare pilot post-test and validate items for post-test, standard 3. 					
<ul style="list-style-type: none"> ● Prepare and administer post-test, standard 3, 2. 					
<ul style="list-style-type: none"> ● Analyze post-test data, standard 2. 					
<ul style="list-style-type: none"> ● Produce and distribute teachers' handbook. 					
<ul style="list-style-type: none"> ● Continue collection of performance data. 					
<ul style="list-style-type: none"> ● Conduct in-depth project review. 					
<ul style="list-style-type: none"> ● Continue to conduct evaluation with emphasis on cost-effectiveness. 					
<ul style="list-style-type: none"> ● Continue to transfer responsibility for project evaluations to host country staff for host country leadership by end of Phase V. 					
<ul style="list-style-type: none"> ● Broadcast 195 radio lessons - standard 2. 					
<ul style="list-style-type: none"> ● Collect formative evaluation data, analyze and communicate to writers. 					

Chart No. VI-5

RADIO LANGUAGE ARTS PROJECT

PHASE V: January 1, 1984 - December 31, 1984

<u>PROJECT TASKS</u>	<u>QUARTERS</u>	<u>1/84 - 3/84</u>	<u>4/84 - 6/84</u>	<u>7/84 - 9/84</u>	<u>10/84 - 12/84</u>
<ul style="list-style-type: none">• Continue lesson/materials production, evaluation, in-service training.• Administer post-test, standard 3.• Analyze post-test data, standard 3, 2.• Analyze post-test data, standard 3.• Produce and distribute teachers' handbook.• Continue collection of performance data.• Continue to transfer responsibility for project evaluations to host country staff for host country leadership by end of Phase V.					

• Contract ends.

SECTION VII

PROCEDURES FOR SECURING AND MAINTAINING EQUIPMENT

A. Purchase

All equipment for the project has been purchased and is in place in Nairobi. Additional equipment, mainly some supplementary broadcast studio equipment necessary to augment the Voice of Kenya facilities and equipment and to serve the project until the studio facilities, now several months behind schedule are completed at KIE, are also in place. Additional production equipment, mainly two additional typewriters, was also added to the project. A photocopier was also added to the production facilities when it became clear that neither KIE nor other local services were adequate for the project. The purchase of one project vehicle was initially delayed to determine if it was absolutely necessary for the distribution system of the project. Once schools were selected, and visits to the schools made during the rainy season, it was clear that the additional vehicle, a four-wheel-drive Land Rover, was vital. Since this is a locally purchased vehicle, it is expected that it will be available to the project by the beginning of the school year in 1982.

B. Security and Maintenance

In relation to security and maintenance, the three major areas of concern are the project office and the equipment it contains, equipment for use outside the office, and project vehicles.

The project office is located inside the Kenya Institute of Education compound, which is fenced and guarded 24 hours per day. The building itself is locked when not in use, and only project staff members have keys to the outside door. All non-expendable equipment has been inventoried. High-value items (except for typewriters and furniture) are kept either in a locked storeroom or a locked office; only the field coordinator and his executive secretary have keys to these rooms. The building itself is maintained by KIE. Appropriate office equipment is under service contract.

Some project equipment, notably radios, will be loaned to the project schools. Headmasters will be instructed to store such equipment securely and to monitor its use. Schools normally have an operational radio or radios in addition to the project radio. Project radios will be returned as necessary to Nairobi for maintenance, being replaced by a similar model from the project's reserve supply within one to five days. During radio breakdown classes will be doubled up. Other project equipment is kept at the Voice of Kenya studios where the RLAP lessons are recorded. To supplement normal VOK security measures, including 24-hour guard service, the RLAP equipment is kept in a locked cupboard in the studio itself.

All project vehicles have been fitted with two anti-theft devices. Every trip in a project vehicle is logged, and the logs are reviewed by the field coordinator to ensure proper vehicle use. Every attempt is made to park the vehicles in the most secure areas possible, especially overnight. Vehicles

are checked daily for theft, damage, and proper servicing. Regular maintenance is carried out following the manufacturer's recommendations.

C. Ownership

The project holds possession and ownership of project equipment for the life of the project. At completion of the project, ownership will be transferred to the Kenya Institute of Education. Household equipment, for American team members' quarters, will be transferred to AID/Kenya.

APPENDIX A

JOB DESCRIPTIONS

APPENDIX A

1. Language Arts Specialist (Formal Segment Writer, Curriculum Analyst)

John Muitungu, Kenyan

Formal Segment Writer

- Consult with the other formal segment writer to assign responsibility for specific formal instructional segment sequences from specific frames of the Scheme of Work.
- Write all formal instructional segments within the assigned segment sequences in accordance with the relevant objectives from the Scheme of Work and the methodology indicated by the methodologist. Any changes to the proposed methodology should be discussed with the methodologist concerned ahead of time, and the record-keeper should be informed of any changes to the proposed number of segments.
- Accurately time these formal instructional segments.
- Insure that these segments conform to the approved format, and proofread the final typed draft.
- Make adjustments as required by the review and evaluation processes in the length, content, and methodology of these segments.
- Indicate to the scriptwriter those areas where informal instructional segments are specifically needed to carry part of the formal instructional message.
- Observe in the field regularly.

Curriculum Analyst

- As required, assist in the development and revisions of the Scheme of Work for each year.

2. Language Arts Specialist (Reading and Writing Methodologist, Formal Segment Writer, Curriculum Analyst, Distribution Supervisor)

Morris Cutler, American

Reading and writing methodologist

- For each reading/writing objective and related patterns (if any) in a frame, suggest the number of segments (both initial teaching segments and maintenance segments), the best teaching strategies for helping pupils meet and reach that objective, the best sequence for employing these strategies, and any prerequisites for employing those strategies (expressed in terms of the number of a segment within a particular frame which must be presented before the methodology is used).

- Insure that these methodologies conform to the approved format.
- Insure that methodologies are written in strict accordance with the established timeline.
- Observe in the field regularly.

Formal Segment Writer

- Consult with the other formal segment writer to assign responsibility for specific formal instructional segment sequences from specific frames of the Scheme of Work.
- Write all formal instructional segments within the assigned segment sequence in accordance with the relevant objectives from the Scheme of Work and the methodology indicated by the methodologist. Any changes to the proposed methodology should be discussed with the methodologist concerned ahead of time, and the record-keeper should be informed of any changes to the proposed number of segments.
- Accurately time these formal instructional segments.
- Insure that these segments conform to the approved format, and proofread the final typed draft.
- Make adjustments as required by the review and evaluation processes in the length, content, or methodology of these segments.
- Indicate to the script writer those areas where informal instructional segments are specifically needed to carry part of the formal instructional message.

Curriculum Analyst

- As required, assist in the development and revisions of the Scheme of Work for each year.

Distribution Supervisor

- Using the services of the project field assistant, the project driver, observers, and private transport firms, ensure proper distribution to project schools of all ancillary print materials, formative evaluation instruments, supplies, and equipment in strict accordance with the established timeline.
- Ensure that final drafts for all written materials associated with each lesson (including final production script, teachers' notes, pupil worksheets, other teaching aids, and formative evaluation instruments) are given to clerical staff and properly filed.

3. Language Arts Specialist (Oral Language Methodologist, Curriculum Analyst, Congruence Reviewer, Linguist)

Philip Sedlak, American

Oral Language Methodologist

- For each oral language objective and related patterns in a frame, suggest the number of segments (both initial teaching segments and maintenance segments), the best teaching strategies for helping pupils meet and reach that objective, the best sequence for employing these strategies, and any prerequisites for employing those strategies (expressed in terms of the number of segments within a particular frame which must be presented before the methodology is used).
- Insure that these methodologies conform to the approved format.
- Insure that methodologies are written in strict accordance with the established timeline.
- Observe in the field regularly.

Curriculum Analyst

- As required, assist in the development and revisions of the Scheme of Work for each year.

Congruence Reviewer

- In strict accordance with the established timeline, review finished scripts, along with related print materials and formative evaluation instruments, to ensure their congruence with the objectives and content specified in the Scheme of Work, suggesting alternatives when necessary to the appropriate team members or to the field coordinator.
- Plan and monitor the number of objectives and vocabulary words being taught in the formal instructional segments to ensure that the content specified in the the Scheme of Work for each year is thoroughly covered following the specified ratios of initial instructional segments to maintenance segments and of formal instructional segments to informal instructional segments.
- Maintain complete accurate records showing when each objective and each vocabulary word is taught during each year of the project, ensuring that this information is made available to all writers.

Linguist

- Develop formative evaluation tests, in strict accordance with the established timeline, and assist the feedback coordinator as required in the development of other formative instruments.
- Undertake, as necessary, linguistic research relevant to the project and its implications.

4. Language Arts Specialist (Print Materials Developer, Curriculum Analyst, Production Coordinator)

Mary Karue, Kenyan

Print Materials Developer

- Develop teachers' notes for all lessons, including pre- and post-broadcast lesson activities, student activity sheets, and all other ancillary print materials, following methodologies and scripts.
- Develop components of the teachers' handbooks (general information and guidance for all cooperating teachers) and other teacher-training materials, as required.
- Plan inservice teacher-training programs.
- Liaise with the graphic artists.
- Ensure that all print materials are produced in strict accordance with the established timeline.
- Observe in the field regularly.

Curriculum Analyst

- As required, assist in the development and revisions of the Scheme of Work.

Production Coordinator

- Check script for accurate program length.
- Prepare lists of sound effects and music, in order of requirement, for each lesson.
- When possible, notify musicians ahead of the production date with details of music required in each program.
- Assist in locating and preparing the most appropriate sound effects for each lesson.
- Check the music scratch tape to ensure that any new music is suitable for Kenyan children.
- Provide effects lists, music lists, scripts, and music scratch tapes to studio personnel.
- Ensure that finished tapes have been postedited, labeled, and filed in accordance with agreed upon standards and format.
- Ensure that all production-related tasks listed above are in accordance with agreed upon standards and format.

5. Educational Broadcast Specialist (Scriptwriter)

Pamela Brooke, American

Scriptwriter

- Plan each lesson's script, including the allocation of formal educational segments to specific lessons and locations within lessons following any guidelines set down by the formal segment writers, so that each lesson contains an effective mixture of segments which conforms to the established ratio of formal to informal instruction and initial teaching segments to maintenance segments, and at least one "throw-away" segment which can be replaced at the last minute if formative evaluation results so require.
- Write informal instructional segments to prepare for, enhance, or maintain formal instruction, and to enhance radio listening and response skills. This responsibility includes:
 - creating necessary stories, games, rhymes, and physical activities;
 - creating or supplying necessary songs and music and, when required, providing a "scratch tape" to indicate to the producer the tune, rhythm, speed, etc;
 - accurately time all informal instructional segments;
 - plan the total lesson so that it will run to the required length, indicating at least two optional cuts which the producer can make if necessary to shorten the lesson;
 - insure that the entire script conforms to the approved format;
 - make adjustments as required by the review and evaluation processes in the length, content, or style of total lessons or informal instructional segments;
 - ensure that scripts are written and revised in strict accordance with the established timeline; and
 - observe in the field regularly.

6. Educational Broadcast Specialist (Producer, Production Reviewer)

Margaret Ojuando, Kenyan

Producer

- Undertake studio production of all lessons, including supervision or pre- and post-production.
- Ensure that all aspects of production are completed in strict accordance with the established timeline.

- Maintain highest possible quality with lowest reasonable costs for all aspects of technical production.
- Supervise technical operator and artists.
- Maintain program library.
- Liaise with Educational Media Services and the Voice of Kenya to ensure that radio lessons are broadcast on schedule.
- Observe in the field regularly.

Production Reviewer

- In strict accordance with the established timeline, review suitability of scripts for production, suggesting alternatives to writers, or the field coordinator, when necessary.
- Check scripts for suitability of all music rhymes and games to Kenyan children.

7. Feedback Coordinator

Greg Owino, Kenyan

- Assisted by other team members as necessary, develop formative evaluation instruments each week, including pupil achievement tests, classroom observation guides, and teacher and pupil interview protocols.
- Receive completed formative evaluation instruments, analyze the results, maintain systematic records of these results (including detailed information about pupil performance levels on every instructional objective and vocabulary word tested), and keep the team informed of these results and their implications.
- Recruit, train, and supervise all field observers, ensuring that their work is regular and satisfactory, and (if desirable) arranging for their occasional participation in the team's work in Nairobi.
- Coordinate regular field observation by all team members, including himself.
- Ensure that all formative evaluation tasks are completed in strict accordance with the established timeline.
- Assist in the development and implementation of the summative evaluation system.
- As required, coordinate the development of each year's summative evaluation instruments, organize and supervise their administration, and arrange for the data to be coded and analyzed.

- Assist the field coordinator in liaising with project schools and districts.

8. Field Coordinator (Instructional Systems Designer)

Philip Christensen, American

Instructional Systems Designer

- Serve as executive producer for the radio lessons, ensuring that all tasks are completed in strict accordance with the established timeline, suggesting necessary changes to the appropriate team members and assuming final responsibility for the content of all radio lessons and related materials.
- Coordinate, direct, and assist other team members in all research and development activities, including the following areas: curriculum analysis, Scheme of Work, radio instructional methodology, radio production, and formative and summative evaluation, ensuring that these activities are completed in a timely and satisfactory manner.
- Integrate project consultants into the field work to ensure that the team is provided with the necessary technical assistance and training.
- Observe in the field regularly.
- Undertake short- and medium-range planning to ensure the timely and satisfactory completion of all project objectives.
- Supervise all professional staff reporting as necessary to the project director and the Kenya Institute of Education.
- Hire and supervise all field support staff.
- Control all project funds in the field, ensure that they are expended according to the relevant regulations and that all necessary records are properly maintained and submitted on time.
- Obtain, coordinate, and monitor all equipment, supplies, and services necessary to the proper completion of project field tasks.
- Liaise as necessary with Washington, the Ministry of Basic Education, the Kenya Institute of Education, and all project schools and districts.
- Prepare and submit on time all necessary reports and documents.

Support Staff

The host country support staff hired by the project are:

- Technical operator, Reuben Karobia Kiromo
- Executive secretary, Julia Amayo

- Clerk typist, Lina Okiro
- Audio typist, Ericah Agala
- Field assistant, George Rege
- Driver, James Ogola

In addition, there are part-time actors, musicians, and graphic artists.

Brief resumes of the professional staff are appended.

APPENDIX B

**BRIEF RESUMES OF
PROFESSIONAL STAFF**

APPENDIX B

1. Pamela Brooke, educational broadcaster, began work in media in 1967 as a writer and later as the executive producer of the D.C. Schools Radio Project in Washington, D.C., producing language arts broadcasts for children in urban preschools and primary schools. These programs won nine national awards for their innovative curriculum design and technical use of the media. In 1975 she joined the Smithsonian Institution as a museum teacher specializing in classes that integrated science, art, music, and language arts for children. Magazine articles describing her work with children and in the humanities have appeared in Scholastic Teacher, Smithsonian Art to Zoo, Forcast FM, Humanities.
2. Philip R. Christensen, field coordinator, holds a B.A. from Harvard University, where he majored in social psychology and worked extra-curricularly as an announcer and studio engineer at Cambridge radio station WHRB. In 1972 he was awarded an Ed.D. from the University of Massachusetts after concentrating in curriculum and instruction and international education. Prior to joining the Radio Language Arts Project, he was the Instructional Development Specialist for St. Lawrence College in Ontario, where he provided bilingual services in the areas of curriculum development, staff development, and program evaluation, and managed the Teaching Resource Center, including library and media services.
3. Morris Cutler, language arts specialist, holds a M.S. degree from the University of Southern California. For the Los Angeles Unified Schools he has served as a teacher, administrator, and curriculum specialist, and as an administrative consultant for early childhood education. His prior overseas experience was as an associate in international education, Teachers College, Columbia University in Afghanistan where he served as an advisor to the Ministry of Education on language arts textbooks, teachers guides for grades 1 through 6, and as co-editor of 12 books. Additionally, he has been a lecturer for Pepperdine University and served as a member of the Board of Directors of the California Reading Association.
4. Maurice Imhoof, project director, has an Ed.D. degree from Teachers College, Columbia University. He is an applied linguist by training, and a specialist in cross-cultural education and adaptation of teaching techniques and materials to meet the needs of students with a native language other than English. He has worked in English language and language-teacher training programs in Afghanistan, Egypt, and Jordan as well as the United States. He has served as administrator in a number of programs, including director of the applied linguistics programs at Indiana University and the American University in Cairo. He has served as editor of the TESOL Quarterly, and has co-authored two textbooks on composition, and contributed to numerous other books and journals.
5. Mary Muthoni Karue, language arts specialist, taught for 10 years prior to obtaining her B.A. degree with honors in education at the University of Nairobi. During this period she taught secondary school, and at two different primary teachers training colleges, and a secondary teachers training college. After graduation she taught in and was head of the

English department at the Kenya Science Teachers College. In 1980 she graduated from Kenyatta University College with an M.Ed. in Primary Education, specializing in language arts and education administration.

6. John Njenga Muitungu, language arts specialist, has a B.Ed. degree with Upper Second Class Honors from the University of Nairobi. He taught first as an untrained teacher briefly before entering the university. After graduation he taught for three years and served as head of the English department in a secondary girls school. He completed his studies for a masters degree in primary education at Kenyatta College in November 1980 and taught at Highridge Teachers College before joining the project at the end of August.
7. Margaret Achieng' Ojuando, educational broadcaster, has a B.A. degree with honors in English from the University of Nairobi and a Certificate of Educational Radio Production from KIE. She taught secondary school English for five years before joining the Educational Media Services at KIE as a Media Specialist. Radio production work at KIE has included work on audio programs and materials for standard three, Progressive Peak course book; programs for standard 7 geography; Literature in English, forms 3 and 4, and others. She is a member of a number of panels on primary education and English literature.
8. Greg A. Owino, feedback coordinator, has a B.A. degree in education from the University of Ibadan, Nigeria. He taught for two years and then joined the Ministry of Education as an Education Officer seconded to the Education Media Service at KIE. From September 1978 until joining the RLAP he was Head of the Research and Evaluation section of KIE. He has worked closely with the Primary Education Section of KIE as an evaluation specialist and coordinated the International Year of the Child research on Kenyan children sponsored by UNICEF.
9. Philip Sedlak, language arts specialist, has studied at Pennsylvania state University, Yale University, and the Free University in West Berlin. He received his Ph.D. in linguistics from Stanford University in 1975, specializing in various areas of applied linguistics, with an emphasis on Kenyan languages. He developed and wrote a series of textbooks in African language instruction for the Peace Corps. His other areas of publication include theoretical linguistics, sociolinguistics, English as a second language, and African languages. He has had experience in materials development and instruction in ESL at a number of levels in different countries, including longer periods in Togo and Taiwan. He is a fluent speaker of Swahili.

APPENDIX C

**SCHEME OF WORK
RADIO LANGUAGE ARTS PROJECT**

SCHEME OF WORK

Definition. The Scheme of Work (Scheme) outlines the sequence of oral language and reading objectives and the appropriate linguistic content to achieve these objectives. The Scheme is not a curriculum, syllabus, nor weekly lesson plan. It is a planning document to aid in the development of daily radio lessons.

Audience. The Scheme guides the work of daily lesson writing and production.

1. Most directly it aids the methodologists and formal segment writers in the planning and writing of formal instructional segments--the basic component of the radio lessons.

2. Indirectly, it guides the informal segment writer in indicating at any one point what linguistic material the pupils have covered in the formal segments. Informal segments reinforce, integrate, and expand the language of the formal segments in addition to providing games, songs, stories and other motivational material.

3. Less directly, it informs the content and direction of the teachers notes and handbook, although most of the specific orientation materials come from the daily radio lessons.

4. It also guides the formative and summative evaluation system by providing the objectives and content of the program on which tests are based.

Kenyan Primary English Syllabus. The Scheme is a "translation" of the Kenyan Primary English Syllabus, Ministry of Basic Education. The Syllabus is realized in the Progressive Peak series of textbooks for primary standards (grades) and in supplementary readers. The structures and vocabulary of the Scheme are taken from the Syllabus. Structures are sequenced with particular attention to teaching by radio, and supplementary vocabulary necessary to the radio medium has been added. The "translation" then is in the methodology, rather than in the content. Its purpose is to enable the project team to convey the same content, but utilize a different teaching methodology required by radio.

Organization of the Scheme of Work. The Scheme is organized into seventy frames which display 1) an objective or set of objectives which state the expected pupil behavior, 2) a statement of language function which states the communication situation in real life in which

pupils would likely need the behavior or skill specified, 3) oral language content stated as sentence structures, 4) vocabulary used in the Scheme, and 5) written language content stated as pre-reading, reading, and writing activities.

1. Objectives. The Scheme objectives are stated as terminal objectives for the individual frames. There are, of course, several interim objectives for a particular pattern appropriately developed into teaching activities by the writers. Interim objectives lead to the terminal objectives which should be kept in mind throughout all segments covering the frame.

Objectives intend to lead to the overall goal of the first three standards which is communication skills in English adequate as an instructional medium. Achieving the overall goal depends on the cumulative results of achieving goals for each frame.

2. Functions. The functions indicate a somewhat broader communications context than the behavioral objectives. To the extent possible with such limited language proficiency, they suggest a social situation in which speakers use the designated language pattern. They attempt to relate the oral language to the real world use of the patterns. Since the curriculum takes a somewhat conservative view of language use for academic purposes, the functions emphasize classroom use of language. In the standard 1 Scheme, functions often relate to the business of learning language rather than the broader contexts of commerce, travel, social intercourse, and so on, which might feature in lessons for older students and adults.

Informal segments, for which a Scheme has not been specified, emphasize the use of language for play, perhaps the most motivating function of language for primary students.

3. Oral language. The sentence structures are most often stated as pairs of related sentences--question-statement; question-short answer; affirmative-negative; and so on. The purpose is to suggest to the writers a minimal communication situation. The use of question-answer in a frame is not meant to suggest the only means of speaking are through questions and answers or statements and follow-up questions. The language patterns are cumulative. Each new pattern should be used in a context with old patterns to build up discourse. Pupils need not produce this kind of discourse immediately, but they should hear it spoken by Rosa and Jumi (or other characters). For example, after Frame 4 the following discourse could be produced from formal segments.

Good morning. My name is Jumi. I am a man.
Put up your hand. Touch your head. Put down
your hand.

Not very exciting--but it is connected ideas making use of patterns which the pupils know. It is important to build larger and larger language contexts leading to more and more natural situations. No language pattern should be completely dropped after it is introduced formally. If it was worth introducing, it must be worth using in further lessons.

Scheme - 3

4. Vocabulary. The Scheme does not attempt to sequence vocabulary. The vocabulary listed is that used in the oral language patterns and is for illustrative purposes only. The writers will select appropriate vocabulary for lessons from the syllabus for standard 1 plus additional words necessary for radio lessons, keeping in mind the pupils' language proficiency at that stage. Vocabulary intended for mastery and for summative testing should be selected from the syllabus.

5. Reading and writing. The standard 1 Scheme takes pupils from pre-reading, aural-oral and visual activities to reading individual words and words in sentence contexts. It does not go on to connected discourse.

Since we have little specific evidence of levels of mastery in mother-tongue, the English reading activities are sequenced much as first language instruction. The sequence is intended to follow directly on the introduction of mother-tongue reading and writing activities and to build on them. They should be effective, however, even without mother-tongue skills. The specific nature and quantity of English reading activities will be modified on the basis of formative feedback.

The English alphabet is introduced in order (a, b, c, d, etc.) since children have already learned their mother-tongue alphabet and practiced writing it. The English alphabet will be introduced by songs and games as well as in the written form.

Individual words for reading activity are grouped by initial consonants in the order of frequency of initial consonants in the first year vocabulary. During the third term, pupils read individual words in meaningful relation to pictures and finally words in sentence contexts. All words are taught as whole "sight" words, with focus on sound-letter correspondence restricted to initial consonants.

SUMMARY OF LANGUAGE FUNCTIONS

Reading. Almost all functions related to reading segments are readiness functions, that is acquiring the skills associated with reading rather than genuine reading activity.

Oral Language. The following are intended to give a general idea of the major uses of oral language in the Standard 1 curriculum. Within individual frames, functions are specified somewhat more narrowly than these summary functions.

1. Following instructions, directions, commands, usually resulting in some physical response or action.

2. Making polite requests.

3. Exchanging greetings.

4. Exchanging names.

5. Asking about / identifying roles of individuals.

6. Asking about / identifying items of the immediate environment.

7. Asking for descriptions / describing items of the immediate environment with respect to colour, size, location, and number.

8. Identifying objects or persons and their locations in terms of their proximity to the speaker.

9. Asking about / identifying possessions.

10. Indicating days of the week.

11. Discussing / describing the actions of others at the moment of speaking.

12. Talking about when actions are to occur.

13. Asking about / talking about likes and dislikes of items and their characteristics.

14. Asking about / talking about abilities or skills of individuals.

15. Asking about / expressing wants or needs.

VOCABULARY LIST

Numbers in parentheses refer to frame number in which item is originally introduced.

<u>a</u>	<u>c</u>	<u>f</u>	<u>j</u>	<u>o</u>
a (4)	circle (11)	floor (26)	jumping (30)	of (39)
again (1)	clapping (5)	foot (19)		on (10)
am (4)	clean (64)	four (2)		one (2)
and (23)	close (54)	Friday (14)	<u>k</u>	onions (28)
are (4)	colour (24)			or (62)
at (3)	corner (48)			oranges (28)
	cow (10)	<u>g</u>	<u>l</u>	ours (57)
	cup (16)			
<u>b</u>	cupboard (48)	girl (4)	laugh (26)	<u>p</u>
bag (39)		goat (10)	left (19)	
bananas (28)	<u>d</u>	going (48)	like (16)	packet (40)
barking (30)		good (4)	line (10)	paper (6)
basket (42)	day (14)	green (22)	listen (36)	pen (17)
bells (30)	desk (44)		little (42)	pencil (12)
bicycle (35)	dirty (64)	<u>h</u>	look (6)	pick (54)
big (25)	do (16)	hand (3)	lorry (62)	pictures (53)
black (21)	does (16)	has (35)		piece (40)
blackboard (6)	doing (14)	have (33)	<u>m</u>	please (16)
blue (22)	dog (10)	he (8)		point (3)
book (12)	door (3)	hear (36)	man (4)	potatoes (18)
bottle (40)	down (1)	here (11)	many (36)	put (3)
boy (4)	draw (10)	hers (42)	matches (39)	
box (11)	dress (11)	his (42)	milk (38)	<u>q</u>
bread (40)	drinking (40)	holding (31)	mine (57)	
brown (21)		home (50)	Monday (14)	<u>r</u>
	<u>e</u>	house (25)	morning (1)	
		how (36)	my (2)	
<u>c</u>	eating (40)			radio (46)
cake (40)	eight (2)	<u>i</u>	<u>n</u>	read (27)
can (26)	eyes (54)			red (22)
car (13)		I (4)	name (2)	right (19)
carrots (28)	<u>f</u>	ink (11)	need (41)	room (58)
cat (10)		is (2)	new (58)	ruler (56)
ceiling (26)	finger (3)	it (10)	nine (2)	running (9)
chalk (11)	five (2)		no (4)	
children (52)			nose (3)	
			not (5)	

Vocabulary List - 2

s

same (11)
 Saturday (17)
 say (1)
 school (58)
 seven (2)
 she (8)
 shirt (23)
 short (65)
 show (55)
 singing (14)
 sit (1)
 six (2)
 small (25)
 snapping (5)
 soda (40)
 some (41)
 stamping (5)
 stand (1)
 stones (36)
 store (50)
 Sunday (23)

t

table (44)
 tall (65)
 tea (38)
 their (59)
 ten (2)
 thank (16)
 that (3)
 the (3)
 them (55)
 there (11)
 these (28)
 they (11)
 this (10)
 those (28)
 three (2)
 Thursday (14)
 tick (11)

t

tin (31)
 to (48)
 today (14)
 tomorrow (17)
 too (42)
 touch (3)
 Tuesday (14)
 two (2)

u

up (1)

v

w

walking (9)
 wall (27)
 want (34)
 water (38)
 we (53)
 Wednesday (14)
 what (2)
 when (49)
 where (12)
 which (13)
 white (21)
 who (8)
 whose (43)
 with (68)
 woman (4)
 word (55)
 write (27)

x

x

y

yellow (23)
 yes (4)
 yesterday (23)
 you (4)
 your (2)
 yours (37)

z

STRUCTURE LIST

CONTENTS

- I. Imperatives
- II. Statements with BE
- III. Statements in Present Possessive
- IV. Statements with like, need, want, have
- V. YES/NO Questions with BE
- VI. YES/NO Questions in Present Progressive
- VII. YES/NO Questions with DO
- VIII. YES/NO Questions with CAN
- IX. WH Questions
- X. Short Answers

I. Imperatives

1. VERB

Listen.

2. VERB + ADVERB

Stand up.

3. VERB + POSSESSIVE + NOUN

Touch your hand.

4. VERB + POSSESSIVE + ADJECTIVE + NOUN

Touch your left foot.

5. VERB + POSSESSIVE + NOUN + ADVERB

Put your book here.

6. VERB + ADVERB + ARTICLE + NOUN

Point at the door.

7. VERB + ADVERB + POSSESSIVE + NOUN

Put up your hand.

8. AUXILIARY + NEGATIVE + VERB + POSSESSIVE + NOUN

Don't open your eyes.

9. AUXILIARY + NEGATIVE + VERB + POSSESSIVE + NOUN + ADVERB

Don't open your book up.

II. Statements with BE

10. POSSESSIVE + NOUN + BE + NOUN

My name is Juma.

11. DEMONSTRATIVE + BE + { NOUN
ARTICLE + NOUN }

That is { Juma
a finger }.

Those are bananas.

12. DEM + NOUN + BE + { POSSESSIVE
ARTICLE + NOUN }

That one is { yours
a book }.

13. DEM + BE + POSS + NOUN

This is Juma's book.

14. PRONOUN + BE + { ARTICLE + NOUN
NOUN }

You are a girl.

These are goats.

15. PRONOUN + BE + ADVERB

It is there.

16. PRONOUN + BE + PREPOSITION + ARTICLE + NOUN

It is on the table.

17. PRONOUN + BE + PRONOUN + NOUN + ADVERB

It is his pencil, too.

18. PRONOUN + BE + PRONOUN + ADVERB

It is hers, too.

19. DEMONSTRATIVE + NOUN + BE + ADJECTIVE

This cow is brown.

20. { NOUN
PRONOUN } + BE + ADJECTIVE

Juma is tall.

It is brown.

21. NOUN + CONJ + NOUN + BE + ADJECTIVE

Adam and Henry are tall.

22. PRONOUN + BE + POSSESSIVE

It is mine.

23. ARTICLE + ADJECTIVE + NOUN + BE + POSSESSIVE

The big room is ours.

24. POSSESSIVE + NOUN + BE + ADJECTIVE

Rosa's car is red.

25. POSS + NOUN + BE + ADJECTIVE + CONJ + ADJECTIVE

Rosa's dress is blue and green.

26. DEM + BE + NEGATIVE + POSSESSIVE + NOUN

This is not Juma's bicycle.

27. ADVERB + BE + ARTICLE + NOUN

Here is a word.

28. THERE + BE + ARTICLE + NOUN + PREP + ARTICLE + NOUN

There is a book on the table.

29. PRONOUN + BE + PREP + ARTICLE + NOUN

It is on the table.

30. PRONOUN + BE + PREP + POSS + NOUN

It is on her table.

III. Statements in Present Progressive

31. { PRONOUN } + BE + VERBing
 { NOUN }

{ I am
 Juma is } clapping.

32. { PRONOUN } + BE + VERBing + { ARTICLE + NOUN }
 { NOUN }

{ I am
 Rosa is } drawing { a line
 pictures }.

33. { PRONOUN } + BE + VERBing + ADVERB
 { NOUN }

{ I am
 Juma is } sitting down.

34. { PRONOUN } + BE + VERBing + PREP + NOUN
 { NOUN }

{ I am
 Rosa is } going with Juma.

35. { PRONOUN } + BE + VERB + PREP + ARTICLE + NOUN
 { NOUN }

{ I am
 Rosa is } going to the corner.

36. POSSESSIVE + NOUN + BE + VERBing
 His goats are jumping.

37. { PRONOUN } + BE + VERBing + ADJECTIVE + NOUN
 { NOUN }

{ She
 Juma } is holding two tins.

IV. Statements with like, need, want, have

38. PRONOUN + VERB + PRONOUN

I need it.

39. PRONOUN + VERB + NOUN

I like blue.

40. PRONOUN + VERB + NOUN + CONJ + NOUN

I like bananas and oranges.

41. PRONOUN + VERB + ARTICLE + NOUN

I have a pencil.

42. PRONOUN + VERB + ARTICLE + ADJECTIVE + NOUN

I like the blue shirt.

43. PRONOUN + VERB + ADJECTIVE + NOUN + PREP + NOUN

I have six pieces of paper.

44. PRONOUN + AUXILIARY + NEGATIVE + VERB + NOUN

I don't like carrots.

45. PRONOUN + AUXILIARY + NEGATIVE + VERB + ARTICLE + NOUN

I don't have a pen.

46. PRONOUN + MODAL + VERB + ARTICLE + NOUN

I can touch the floor

47. PRONOUN + MODAL + VERB + ART + NOUN + CONJ + ART + NOUN

I can touch the wall and the floor.

V. YES/NO Questions with BE

48. BE + PRONOUN + ARTICLE + NOUN
Am I a man?
49. BE + DEMONSTRATIVE + ARTICLE + NOUN
Is that a goat?
50. BE + DEM + ARTICLE + NOUN + CONJ + ARTICLE + NOUN
Is this a car or a lorry.
51. BE + DEMONSTRATIVE + NOUN + ADJECTIVE
Is that cow brown?
52. BE + POSSESSIVE + NOUN + ADJECTIVE
Is Rosa's car red?
53. BE + DEM + NOUN + ADJECTIVE + CONJ + ADJECTIVE
Is that car blue or black?
54. BE + PRONOUN + POSSESSIVE + NOUN
Are they Juma's cows?
55. BE + NOUN + ADJECTIVE + ADVERB
Is Henry tall, too?
56. BE + PRONOUN + CONJ + PRONOUN + ADJECTIVE + ADVERB
Are George and Adam tall, too?

VI. YES/NO Questions in Present Progressive

57. BE + { NOUN
PRONOUN } + VERBing
Is { Juma
he } running?

58. BE + PRONOUN + VERBing + ARTICLE + NOUN + PREP + NOUN
Is Rosa drinking a cup of tea?
59. BE + THERE + ADJECTIVE + NOUN + PREP + ARTICLE + NOUN
Are there any books on the table?
60. BE + PRONOUN + VERBing + PREP + ARTICLE + NOUN
Are you going to the corner?

VII. YES/NO Questions with DO

61. AUXILIARY + PRONOUN + VERB + NOUN
Do you like milk?
62. AUXILIARY + PRONOUN + VERB + VERBAL
Do you like running?
63. AUXILIARY + PRONOUN + VERB + ARTICLE + NOUN
Do you have a pencil?
64. AUXILIARY + NOUN + VERB + ARTICLE + NOUN + PREP + NOUN
Does Rosa have a bag of potatoes?

VIII. YES/NO Questions with CAN

65. MODAL + PRONOUN + VERB + { PRONOUN
ARTICLE + NOUN }
- Can you hear { it
the bells }?

IX. WH Questions

66. WHAT + BE + DEMONSTRATIVE

What are these?

67. WHAT + BE + POSSESSIVE + NOUN

What's your name?

68. WHAT + BE + DEMONSTRATIVE + POSSESSIVE + NOUN

What is this boy's name?

69. WHAT + NOUN + BE + NOUN

What day is today?

70. WHAT + BE + PRONOUN + VERBing

What are you doing?

71. WHAT + BE + POSSESSIVE + NOUN + VERBing

What are his goats doing?

72. WHICH + NOUN + BE + { POSSESSIVE
ARTICLE + NOUN }

Which one is { yours }
{ a bus } ?

73. WHICH + NOUN + BE + ADJECTIVE

Which house is big?

74. WHICH + NOUN + AUXILIARY + PRONOUN + VERB

Which colour do you like?

75. WHO + BE + DEMONSTRATIVE

Who is that?

76. WHOSE + NOUN + BE + DEMONSTRATIVE
Whose bag is that?
77. WHERE + BE + NOUN
Where is Rosa?
78. WHERE + BE + POSSESSIVE + NOUN
Where is ^{Rosa's}
my pencil?
79. WHERE + BE + ARTICLE + ADJ(size) + ADJ(colour) + NOUN
Where is the big, white basket?
80. WHERE + BE + PRONOUN + VERBing
Where are you going?
81. WHEN + BE + PRONOUN + VERBing
When are you going?
82. WHEN + BE + PRONOUN + VERBing + PREP + ARTICLE + NOUN
When are you going to the store?
83. HOW MANY + NOUN + AUXILIARY + PRONOUN + VERB
How many bells do you hear?

X. Short Answers

Yes.

No.

Juma.

Tomorrow.

Wednesday.

Yes, I am.

No, I'm not.

Yes, you are.

No, you aren't.

Yes, I do.

Yes, we do.

Yes, they do.

No, I don't.

No, we don't.

No, they don't.

Yes, he does.

Yes, she does.

Yes, it does.

No, he doesn't.

No, she doesn't.

No, it doesn't.

Yes, I can.

No, I can't.

Yes, there is.

No, there isn't.

Yes, there are.

No, there aren't.

FRAME 1

CONTENT

<u>Oral Language</u>	A. Good morning. B. Say. . . C. Again. D. Stand up. E. Sit down.
<u>Reading</u>	F. Following oral directions: say, again, stand up, sit down.
<u>Vocabulary</u>	good morning, say, again, stand up, sit down

OBJECTIVES

- | | |
|----------------------|---|
| <u>Oral Language</u> | 1. Repeat good morning and respond to greeting of radio characters and classroom teacher.
<u>Function:</u> Exchanging morning greetings. |
| | 2. Respond orally or physically to imperative.
<u>Function:</u> Responding appropriately to simple classroom commands. |
| <u>Reading</u> | 3. Understand and respond to oral directions of the radio characters or classroom teacher.
<u>Function:</u> Readiness. |

FRAME 2

CONTENT

Oral Language

- A. What's your name?
- B. My name is _____

Reading

- C. Recognizes own name.
- D. Counting 1 - 10 orally.

Vocabulary

what, is, your, my, name, one, two, three, four, five, six, seven, eight, nine, ten

OBJECTIVES

Oral Language

- 1. Ask and answer WHAT + BE + name and POSS + N + BE + name using his or her own name.

Function: Exchanging names.

Reading

- 2. Recognize own name when spoken by another speaker.
- 3. Counts orally from 1 to 10.

Function: Readiness

FRAME 3

CONTENT

Oral Language

- A. That's a hand / finger / nose.
- B. What's that?
- C. Touch your hand / finger.
- D. Put up your hand.
- F. Put down your hand.
- F. Point at the door.

Reading

Review

Vocabulary

that, what, touch, hand, finger, nose, put,
point at, the, door

OBJECTIVES

Oral Language

1. Repeat statement DEM + BE + N and ask and answer question WHAT + BE + DEM.
Function: Identifying parts of the body in response to questions.
2. Respond to commands with appropriate actions.
Function: Review

Reading

Review

FRAME 4

CONTENT

Oral Language

- A. I am a boy / man/Juma.
- B. You are a girl / woman / Rosa.
- C. Am I a boy / man / Juma?
- D. Are you a girl / woman / Rosa?
- E. Yes.
- F. No.

Reading

Review

Vocabulary

a, am, are, I, no, boy, girl, yes, you, man, woman

OBJECTIVES

Oral Language

1. Repeat statements PN + BE + ART + N and ask and answer YES/NO questions BE + PN + ART + N with simple Yes/No responses with sex-identification nouns boy, girl, man, woman.

Function: Identifying their sex and the sex of Juma and Rosa.

Reading

2. Understand and respond to oral questions.

Function: Readiness

FRAME 5

CONTENT

Oral Language

- A. I am clapping / stamping / snapping.
- B. You are clapping / stamping / snapping.
- C. Am I clapping?
- D. Are you clapping?
- E. Yes, I am.
- F. No, I'm not.
- G. Yes, you are.
- H. No, you aren't.

Reading

Review

Vocabulary

clapping, stamping, snapping, not, (I'm),
(aren't)

OBJECTIVES

Oral Language

1. Repeat statements PN + BE + Ving and ask and answer YES/NO questions BE + PN + Ving with full Yes/No answers.

Function: Expressing actions being performed.

Reading

Review

FRAME 6

CONTENT

Oral Language

A. Look at the paper / the blackboard.

Reading

B. Following oral directions.

C. Analyzing pictures for meaning and indicating meaning by pointing at appropriate picture for action verbs learned orally, i.e. clapping, standing, running, kicking, etc.

Vocabulary

look, paper, blackboard

OBJECTIVES

Oral Language

1. Follow oral commands with appropriate actions.

Reading

2. Demonstrating understanding of a spoken word by pointing to an appropriate picture

Function: confirming meaning of vocabulary

701

FRAME 7

CONTENT

Oral Language

A. Juma / Rosa is clapping.

Reading

Review

Vocabulary

OBJECTIVES

Oral Language

1. Repeat sentences N + BE + Ving using familiar names as subject.
2. Identify an action performed by another person and make a statement using the other person's name plus present continuous tense.

Function: Describing what someone is doing at the moment of speaking.

Reading

Review

CONTENT

Oral Language A. That is Juma. He is a man.
 B. That is Rosa. She is a woman.*
 C. Who is that ?

Reading Review

Vocabulary he, she, who

OBJECTIVES

- Oral Language
1. Understand and repeat statements
 DEM + BE + N to indicate a person.
 2. Understand and repeat statements
 PN + BE + N referring to man and woman,
 Rosa and Juma.
 Function: Demonstrating understanding of
 vocabulary he, she, man, woman.
 3. Given a set of pictures will produce
 appropriately he or she.
 4. Understand question WHO + BE + DEM and
 respond with single name utterance or
 DEM + BE + name.
 Function: Identifying by aural or visual
 cues and naming people or animal characters.

Reading Review

*This pattern might be used in informal segments to introduce animal characters with appropriate additional vocabulary.

FRAME 9

CONTENT

Oral Language

- A. Is Rosa walking?
- B. Yes, she is.
- C. No, she isn't. She is running.
- D. Is Juma running?
- E. Yes, he is.
- F. No, he isn't. He is walking.

Reading

Review

Vocabulary

(isn't), running, walking

OBJECTIVES

Oral Language

- 1. Ask and answer questions BE + name + Ving with masculine and feminine name and pronouns.

Function: Describing actions of another person at the moment of speaking.

Reading

Review

FRAME 10

CONTENT

Oral Language

- A. This is a cow.
- B. That is a goat.
- C. Is this a cat?
- D. Is that a goat?
- E. Yes, it is.
- F. No, it isn't. It's a goat.
- G. Draw a line on. . .

Reading

- H. Identifying environmental sounds with radio sounds.
- I. Matching radio sounds with pictures.
- J. Marking responses on worksheet (by drawing a line on the picture).

Vocabulary

cow, dog, goat, cat, draw, line, on, it, this

OBJECTIVES

Oral Language

- 1. Produce statements, YES/NO questions and answers using this and that.

Function: Identifying objects and their location in terms of proximity to the speaker. This is largely a pedagogical function.

Reading

- 2. Identify and differentiate environmental sounds on the radio.

Function: Sound discrimination.

- 3. Demonstrate understanding of radio sounds by marking the appropriate picture.

Function: Associate meaning with sounds and pictures. Marking the picture is also a pedagogical function, but with more real life function than this / that distinction.

FRAME 11

CONTENT

Oral Language

- A. Put your book here.
- B. Put your pencil there.
- C. Put the chalk here.
- D. Put the ink there.
- E. Is this the same?
- F. Yes, it is.
- G. No, it isn't.

Reading

- I. Recognizing own name.
- J. Matching objects and shapes.

Vocabulary

here, there, chalk, ink, they, same
circle, box, X, tick (✓)

OBJECTIVES

Oral Language

- 1. Respond physically to commands using:
V + POSS + N + ADV (place)
V + ART + N + ADV (place)
Function: Indicating, with commands, where objects should be placed.
- 2. Understand concept of "same or different" with aural examples.
- 3. Repeat statement: PN (plural) + BE + ART + same.
- 4. Respond to aural cues and question
BE + PN (plural) + ART + same with YES/NO.

Function: Identifying aural discrimination verbally. This is a pedagogical function.

Reading

- 5. Recognize first name in print.
- 6. Discriminate same or different in shapes and objects.

Function: Visual discrimination in whole familiar words and shapes and objects. This is a pedagogical function.

11

FRAME 12

CONTENT

Oral Language

- A. Where is Rosa's pencil?
- B. It is here.
- C. Where is Rosa's book?
- D. It is there.
- E. Where is your pencil?
- F. It is here.
- G. Where is your book?
- H. It is there.

Reading

Review

Vocabulary

where, pencil, book

OBJECTIVES

Oral Language

- 1. Ask question WHERE + BE + POSS + N
and answer with PN + BE + ADV (place).

Function: Inquiring about the location
of someone's possession.

Reading

Review

FRAME 13

CONTENT

- Oral Language
- A. What is this?
 - B. It is a car.
 - C. What is that?
 - D. It is a bus.
 - E. Which one is a bus?
 - F. This one is a bus.

Reading Review

Vocabulary car, bus, which

OBJECTIVES

- Oral Language
- 1. Respond to questions WHAT + BE + this/that with answer it + BE + N.
Function: Identifying objects and their location in terms of proximity to the speaker. This is largely a pedagogical function.
 - 2. Identify correct object or picture in answer to WHICH + one + BE + N with statement it + BE + N.
Function: Identifying objects with correct names. Pedagogical function.

Reading Review

FRAME 14

CONTENT

Oral Language

- A. What are you doing?
- B. I am sitting down / singing.
- C. Today is Monday.
Tuesday
Wednesday
Thursday
Friday
- D. What day is today?*

Reading

Review

Vocabulary

doing, (sitting), singing, today, Monday, Tuesday, Wednesday, Thursday, Friday, day

OBJECTIVES

Oral Language

- 1. Ask and answer question WHAT + DO in the present progressive, first and second person singular.

Function: Discussing activities of the moment.

- 2. Identify days of the week.

Reading

Review

- *Use on actual day of week only.
- **Use second week of lessons.

FRAME 15

CONTENT

Oral Language

- A. What is he doing?
- B. He is running.
- C. What is she doing?
- D. She is walking.

Reading

- E. Matching letters

Vocabulary

OBJECTIVES

Oral Language

- 1. Ask and answer question WHAT + DO in the present progressive, third person singular.

Function: Discussing activities of the moment.

Reading

- 2. Discriminate visually same or different in written letters: identify a single letter that is different from several others (CCMC); match a given letter with an identical letter among a group of letters (C - MPCRS).

Function: Visual discrimination of individual letters. This is a pedagogical function.

CONTENT

Oral Language

- A. name, give me a cup, please.
- B. Thank you.
- C. Juma / he likes singing.
- D. Do you like running?
- E. Yes, I do.
- F. No, I don't.
- G. Does Juma like singing?
- H. Yes, he does.
- I. No, he doesn't.

Reading

Review

Vocabulary

cup, please, thank, do, does, like

OBJECTIVES

Oral Language

1. Give and respond to the imperative
name + V + PN + N + ADV (please)
Function: Making polite requests.
2. Make statements about radio characters
using name / PN + V (likes) + -ing VBs
3. Answer DO questions with 2nd and 3rd
person subjects in affirmative and
negative.

Function: Expressing likes and dislikes about
common activities.

Reading

Review

FRAME 17

CONTENT

Oral Language

A. Is this your pencil?

B. Is this my pen?

C. Today is Monday. Tomorrow is Tuesday.
Wednesday
Thursday
Friday
Saturday

Reading

Review

Vocabulary

pen, tomorrow, Saturday

OBJECTIVES

Oral Language

1. Ask YES/NO questions with 1st and 2nd person possessives.

Function: Determining possession.

2. Identify days of the week with tomorrow.

Reading

Review

FRAME 18

CONTENT

Oral Language

- A. (Draw a line.)
- B. (What are you doing?)
- C. (I am drawing a line.)
- D. What is he / she drawing?
- E. He / she is drawing a box.

Reading

- F. Matches words.

Vocabulary

OBJECTIVES

Oral Language

- 1. Physically respond to imperative V + N.
- 2. Ask question WHAT + AUX + PN + V and answer using 3rd person singular.

Function: Discussing activities at the moment.

Reading

- 3. Discriminating same or different in written words: identify a single word that is different from several others (boy boy car boy); match a given word with an identical word in a group of words (car - dog cat car boy).

FRAME 19

CONTENT

Oral Language

- A. (Touch your foot.)
- B. Touch your left / right foot.
- C. Put your left / right hand up / down.

Reading

- D. Recognizes left / right distinction.

Vocabulary

left, right, foot

OBJECTIVES

Oral Language

- 1. Respond to commands by indicating physically right or left parts of the body.

Reading

- 2. Distinguishing right from left.

Function: Readiness

FRAME 20

CONTENT

Oral Language

- A. This is Juma's book.
- B. Is this Juma's book?
- C. (Yes, it is.)
- D. (No, it isn't.)

Reading

Review

Vocabulary

OBJECTIVES

Oral Language

- 1. Make statements DEM + BE + POSS + N
and ask and answer questions
BE + DEM + POSS + N.

Function: Giving and receiving
information about possession of an object
by a third person.

Reading

Review

FRAME 21

CONTENT

- Oral Language
- A. This cow is brown.
 - B. That cow is white.
 - C. Is this cow brown?
 - D. Is that cow black?
 - E. (Yes, it is.)
 - F. No, it isn't. It's white.
- Reading
- G. Recognizes and uses colour words.
- Vocabulary
- brown, white, black*

OBJECTIVES

- Oral Language
- Ask and answer YES/NO questions
BE + DEM + N + ADJ (colour)
and make statements with DEM + N + BE +
ADJ (colour).
- Function: Giving and receiving information
about the colour of objects. Largely
pedagogical function.
- Reading
- 2. Recognize colours and their written
names.
- Function: Developing a sight vocabulary
of familiar words.

*Use primary colour words during at least two frames and
add any useful colour words from what children already know.

CONTENT

Oral Language

- A. Rosa's dress is blue and green.
- B. Is Rosa's dress blue and green?
- C. Yes, it is.

- D. Is Juma's shirt blue and green?
- E. No, it isn't. It's brown and yellow.*

- F. Today is Monday. Yesterday was Sunday.
Monday
Tuesday
Wednesday
Thursday

Reading

Review

Vocabulary

dress, shirt, yellow, and, yesterday, Sunday

OBJECTIVES

Oral Language

- 1. Use two colour adjectives joined with and in familiar patterns.
- 2. Identify days of the week with yesterday.

Reading

Review

*Optional pattern. If joining the colour words appears easy for pupils, practice the pattern.

CONTENT

- Oral Language
- A. Rosa's car is green.
 - B. Juma's car is red.
 - C. Is Juma's car red?
 - D. (Yes, it is.)
 - E. Is Rosa's car red?
 - F. No, it isn't. It's green?
 - G. Do you like green?
 - H. (Yes, I do.)
 - I. No, I don't. I like blue.

Reading

Review

Vocabulary

red, green, blue

OBJECTIVES

Oral Language

1. Ask and answer YES/NO questions
BE • POSS • V • N • ADJ (colour)
and make statements with
POSS • N • V • ADJ (colour).
2. Ask and answer YES/NO questions
DO • PN • V • ADJ (colour). With
NO answer, make an alternate statement
PN • V • ADJ (colour).

Function: Talking about colour preferences.

Reading

Review

CONTENT

- Oral Language
- A. Which colour do you like?
 - B. I like blue.
 - C. Which shirt do you like?
 - D. I like the blue shirt.

Reading Review

Vocabulary colour

OBJECTIVES

- Oral Language
- 1. Express colour preferences using
PN + like + ADJ in answer to question
WHICH + ADJ + AUX + PN + like.
 - 2. Express colour preferences using
PN + like + ADJ + N in answer to question +
WHICH + N + AUX + PN + like.
- Function: Expressing likes with
reference to colours.

Reading Review

CONTENT

Oral Language

- A. Juma's house is big.
- B. Is Juma's house big?
- C. (Yes, it is.)
- D. Is Rosa's house big?
- E. No, it isn't. It's small.
- F. Which house is big?
- G. (Juma's house is big.)

Reading

Review

Vocabulary

big, small, house

OBJECTIVES

Oral Language

- 1. Use adjectives to describe previously taught nouns.
Function: Describing familiar objects relative to size.
- 2. Identify items by size in response to question
WHICH • N • BE • ADJ with answer
POSS • N • BE • ADJ.
Function: Indicating possession and characteristics of objects.

Reading

Review

CONTENT

Oral Language

- A. I can touch the floor.
- B. Can you touch the floor?
- C. Yes, I can.

- D. Can you touch the ceiling?
- E. No, I can't.

- F. I can sing.
- G. Can you sing?
- H. No, I can't.

- I. Can you laugh?
- J. Yes, I can.

Reading

- K. Matches spoken words with pictures.

Vocabulary

can (can't), ceiling, floor, laugh

OBJECTIVES

Oral Language

- 1. Make statements PN + MOD + V + N and ask and answer YES/NO questions MOD + PN + V + ART + N and questions MOD + PN + V.

Function: Discussing abilities in first and second person.

Reading

- 2. Match spoken words with pictures.

Function: Increasing sight vocabulary in association with meaning.

FRAME 27

CONTENT

- Oral Language
- A. Can you touch the wall and the floor?
 - B. (Yes, I can.)
 - C. Can you read and write?
 - D. Yes, I can.

Reading Review

Vocabulary wall, read, write

OBJECTIVES

- Oral Language
- 1. Ask and answer YES/NO questions
MOD + PN + V + ART + N + CONJ + ART + N
and MOD + PN + V + CONJ + V.

Function: Discussing abilities relative
to two objects or two actions.

Reading Review

FRAME 28

CONTENT

Oral Language:

- A. These are bananas.
- B. Those are oranges
- C. Are those potatoes?
- D. (Yes, they are.)
- E. Are these onions?
- F. No, they aren't. They are carrots.

Reading

- G. Identifies and names letters a, b, c.
- H. Writes upper and lower case letters from model.

Vocabulary

bananas, oranges, potatoes, carrots, onions, these, those

OBJECTIVES

Oral Language

- 1. Ask and answer YES/NO questions
BE + DEM + N and make statements DEM + BE + N
using plural DEM and plural N.

Function: Talking about plural object and
indicating their proximity to the speaker.

Reading

- 2. Identify, name, and write from a model the
first three letters of the alphabet.

Function: Developing letter recognition and
writing skills.

CONTENT

Oral Language

- A. What are these?
- B. They are goats.
- C. What are those?
- D. They are cows.
- E. Are these Juma's / his goats?
- F. Yes, they are.
- G. Are these Rosa's / her cats?
- H. No, they aren't.

Reading

Review

Vocabulary

OBJECTIVES

Oral Language

1. Ask and answer questions using
WHAT + BE + DEM.
2. Ask and answer YES/NO questions
BE + DEM + POSS + N using plurals.

Function: Identifying objects and their
location in terms of proximity to the
speaker and indicating possession of these
objects.

Reading

Review

FRAME 30

CONTENT

Oral Language

- A. (What are his goats doing?)
- B. They are jumping.
- C. (What are her dogs doing?)
- D. They are barking.
- E. His goats are jumping.
- F. Her dogs are barking.

Reading

- G. Identifies and names letters d, e, f.
- H. Writes upper and lower case letters from a model.

Vocabulary

jumping, barking

OBJECTIVES

Oral Language

- 1. Make statements PN + BE + V and ask and answer questions WHAT + BE + POSS + N + DO in 3rd person plural progressive.
- 2. Make statements POSS + N + Ving.

Function: Discussing activities of animals and indicating who possess those animals.

Reading

- 3. Identify, name, and write from a model upper and lower case letters d, e, f.

Function: Develop letter recognition and writing skills.

CONTENT

Oral Language

- A. (What's his name?)
- B. (His name is Juma.)
- C. (What is he holding?)
- D. (He is holding a tin.)
- E. (What is her name?)
- F. (Her name is Rosa.)
- G. (What is she holding?)
- H. She is holding two tins.

Reading

Review

Vocabulary

tin (tins),* holding

OBJECTIVES

Oral Language

1. Answer question WHAT + BE + PH + Ving and answer using a number + plural noun.

Function: Talking about two or more objects.

Reading

Review

*An informal segment on phonological contrasts in plurals could come after some plural forms have been introduced.

/s/	/z/	/iz/
shirts	tins	dresses
goats	cars	boxes
cats	cows	noses
cups	bottles	
	boys	
	girls	

FRAME 32

CONTENT

Oral Language

- A. What is this boy's / girl's name?
- B. His / her name is _____.

Reading

- C. Identifies and names letters g, h, i, j.
- D. Writes upper and lower case letters from model.

Vocabulary

OBJECTIVES

Oral Language

- 1. Ask and answer questions
WHAT + BE + DEM + POSS + name.

Function: Asking about a third person's name.

Reading

- 2. Identify, name, and write from a model
upper and lower case letters g, h, i, j.

FRAME 33

CONTENT

Oral Language

- A. I have a pencil.
- B. Do you have a pencil?
- C. Yes, I do.

- D. Do you have a pen?
- E. No, I don't.

- F. I don't have a pen.

Reading

- G. Discriminating aurally initial consonant sounds - b in word contexts.

Vocabulary

(don't), have

OBJECTIVES

Oral Language

- 1. Ask and answer YES/NO questions in the first person using AUX + PN + V + ART + N.

Function: Indicating personal possessions.

Reading

- 2. Associate the sound with the symbol b.

Function: Making sound/symbol correspondences to expand aural perception and sight recognition.

FRAME 34

CONTENT

Oral Language

- A. Do you want a pencil?
- B. (Yes, please.)
- C. Do you want a pen?
- D. No, thank you. I have a pen.

Reading

Review

Vocabulary

want

OBJECTIVES

Oral Language

- 1. Ask and answer YES/NO questions
AUX + PN + V + ART + N.

Function: Offering someone an object or service by asking a question.

Reading

Review

FRAME 35

CONTENT

Oral Language

- A. He has a bicycle.
- B. Does he have a bicycle?
- C. Yes, he does.
- D. Does he have a car?
- E. No, he doesn't.
- F. He doesn't have a car.

Reading

Review

Vocabulary

has, (doesn't), bicycle

OBJECTIVES

Oral Language

1. Ask and answer YES/NO questions in 3rd person singular using AUX + PN + V + ART + N.

Function: Asking about the possessions of a third person.

Reading

Review

FRAME 36

CONTENT

- Oral Language
- A. Listen.
 - B. Can you hear the bells / the stones.*
 - C. How many stones do you hear?
 - D. I hear three stones.

Reading Review

Vocabulary how, many, stones, bells, hear, listen

OBJECTIVES

- Oral Language
- 1. Understand the question CAN + PN + V + ART + N.
 - 2. Respond to question HOW MANY + N + AUX + PN + V with statement PN + V + ADJ (number) + N.

Function: Talking about numbers of things.

Reading Review

*Dropped into water, for example.

FRAME 37

CONTENT

Oral Language

- A. I / you have six books.
- B. She / he has three books.
- C. How many books do you have?
- D. I have two.
- E. How many pencils does she have?
- F. She has three.

Reading

- G. Identifies and names letters k, l, m, n.
- H. Writes upper and lower case letters from model.

Vocabulary

OBJECTIVES

Oral Language

- 1. Ask and answer questions using HOW MANY + ADJ + N + V + PN in 1st, 2nd, 3rd person singular.

Function: Indicating and talking about numbers of things a person possesses.

Reading

- 2. Identify, name, and write from a model upper and lower case k, l, m, n.

CONTENT

- | | |
|----------------------|---|
| <u>Oral Language</u> | A. (What's this?)
B. It's <u>tea</u> .
C. (What's that?)
D. It's <u>water</u> .
E. Do you like <u>milk</u> ?
F. Yes, I do.
G. Do you like <u>tea</u> ?
H. No, I don't. |
|----------------------|---|

<u>Reading</u>	Review
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<u>Vocabulary</u>	tea, milk, water
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OBJECTIVES

- | | |
|----------------------|---|
| <u>Oral Language</u> | 1. Make statements PN + BE + N using mass nouns.
2. Ask and answer questions AUX + PN + V + N with YES/NO. |
|----------------------|---|

Function: Expressing preferences, likes and dislikes.

<u>Reading</u>	Review
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CONTENT

Oral Language

- A. Does Rosa have a bag of potatoes?
- B. Yes, she does.
- C. Do you have a box of matches?
- D. No, I don't.

Reading

- E. Writing letters from dictation.

Vocabulary

bag, box, of, matches

OBJECTIVES

Oral Language

- 1. Ask and answer YES/NO questions in 1st, 2nd, 3rd person singular using DO + PN + ART + N + PREP + N.

Function: Talking about quantities of things and the containers they are carried or stored in.

Reading

- 2. Write letters from dictation.

Function: Developing letter recognition and writing skills.

FRAME 40

CONTENT

Oral Language

- A. Is Rosa drinking a cup of tea?
- B. (Yes, she is.)
- C. Is Juma eating a piece of bread?
- D. (No.) He is eating a piece of cake.
- E. Does Juma have a packet of milk?
- F. Does Rosa have a bottle of soda?

Reading

- G. Recognizing rhyming sounds.

Vocabulary

drinking, eating, piece, bread, cake, soda
packet, bottle

OBJECTIVES

Oral Language

- 1. Ask questions BE + N + Ving + ART + N + PREP + N
with YES/NO and make statements PN + BE + Ving +
APT + N + PREP + N.
- 2. Understand questions DOES + N + V + ART + N + PREP + N.

Function: Talking about mass materials and
the containers they come in. Also talking
about what people do with these materials.

Reading

- 3. Recognizes word endings which rhyme.

Function: Associating sounds which are similar
in preparation for reading those sounds in
words.

FRAME 41

CONTENT

Oral Language

- A. I have six pieces of paper.
- B. He has seven pieces of paper.
- C. How many pieces of paper do you have?
- D. (I have six.)
- E. How many pieces of paper does Juma have?
- F. (He has seven.)
- G. I need some paper.
- H. Do you need some paper?
- I. Yes, I do.
- J. Juma needs some sugar.
- K. Does he need some sugar?
- L. Yes, he does.

Reading

Review

Vocabulary

need, some

OBJECTIVES

Oral Language

- 1. Review count nouns with numbers.
- 2. Make statements IN • V • some • N (mass)
and ask YES/NO questions DO • IN • V • some • N (mass).

Function: Talking about quantities of countable objects and quantities of mass materials. Also expressing needs for those objects or materials.

Reading

Review

FRAME 42

CONTENT

Oral Language

- A. Where is the big, white basket? I need it.
- B. (It is here.)
- C. Where is the little, brown basket? I need it.
- D. (It is there.)

Reading

- E. Identifying and naming letters o, p, q.
- F. Writes upper and lower case letters from model.

Vocabulary

little, basket

OBJECTIVES

Oral Language

- 1. Ask and answer questions, using WHERE + BE + ART + ADJ + ADJ + N, placing adjectives of size and colour in their correct order.
- 2. Making statements PN + V + PN.

Function: Asking the location of items
the speaker is in.

Reading

- 3. Identify, name, and write from a model in upper and lower case the letters o, p, q.

CONTENT

Oral Language

- A. This is Juma's book.
- B. This is his pencil.
- C. It is his pencil, too.
- D. Whose basket is this?
- E. It is Juma's.
- F. Whose pencil is this?
- G. It is his, too.
- H. Whose bag is that?
- I. It is Rosa's.
- J. Whose book is that?
- K. It is hers, too.

Reading

- L. Discriminating aurally initial consonant sound - m.
- M. Writing letters from dictation - a-m.

Vocabulary

whose, hers, too, his

OBJECTIVES

Oral Language

- 1. Ask and answer questions using WHOSE + N + BE + DEM and PN + BE + POSS and PN + BE + POSS + ADV in a series of questions and answers.

Function: Establishing possession.

Reading

- 2. Associate the sound with the symbol m.

Function: Making sound/symbol correspondences to expand aural perception and sight recognition.

FRAME 44

CONTENT

Oral Language

A. There's a book on the table.

B. There are some pencils on the desk.

Reading

C. Identifying and naming letters r, s, t, u.

D. Writing upper and lower case letters from model.

Vocabulary

table, desk

OBJECTIVES

Oral Language

1. Make statements using THERE IS/ARE + N + PREP + ART + N

Function: Indicating location of objects.

Reading

2. Identify, name, and write from a model upper and lower case r, s, t, u.

CONTENT

Oral Language

- A. Are there any books on the table?
- B. Yes, there are.
- C. No, there aren't. there are some pencils on the table.
- D. Is there a pen on the floor?
- E. Yes, there is.
- F. No, there isn't.

Reading

- G. Discriminating aurally initial consonant sound - 1.
- H. Writes letters, upper and lower case, from dictation - a-u.

Vocabulary

OBJECTIVES

Oral Language

- 1. Ask and answer YES/NO questions using BE + THERE + any + N + PREP + ART + N.
- 2. Use some/any in THERE IS/ARE statements and questions.

Function: indicating indefinite quantities and there location.

Reading

- 3. Associate the sound with the symbol 1.

FRAME 16

CONTENT

Oral Language

- A. (Where is the radio?)
- B. It is on the table.
- C. Is the box on the table?
- D. No. It is on the floor.

Reading

- E. Identifying and naming letters v, w, x, y, z.
- F. Writing upper and lower case letters from model.

Vocabulary

radio

OBJECTIVES

Oral Language

- 1. Ask and answer questions using BE + ART + N + PREP + ART + N and PH + BE + PREP + ART + N.

Function: Talking about the location of an object in relation to another object.

Reading

- 2. Identify, name, and write from a model upper and lower case v, w, x, y, z.

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FRAME 47

CONTENT

Oral Language

- A. (Where is your pencil?)
- B. It is on my desk.
- C. (Where is Rosa's book?)
- D. It is on her desk.

Reading

- E. Discriminating aurally initial consonant sound - s.
- F. Writing upper and lower case letters from dictation - a-z.

Vocabulary

OBJECTIVES

Oral Language

- 1. Ask and answer questions using PH + BE + PREP + POSS + N in the answer.

Reading

- 2. Associate sound and symbol s.

FRAME 48

CONTENT

Oral Language

- A. Where are you going?
- B. I am going to the door.
- C. Are you going to the cupboard?
- D. No. I'm going to the corner.

Reading

- E. Writes name independently.

Vocabulary

going, cupboard, corner, to

OBJECTIVES

Oral Language

- 1. Ask and answer questions using WHERE + BE + PN + Ving and BE + PN + Ving + PREP + ART + N and PN + Ving + PREP + ART + N.

Function: Discussing a person's destination.

Reading

- 2. Write their own first names.

Function: Developing writing skills.

CONTENT

Oral Language

- A. I am going to school.
- B. (Where are you going?)
- C. When are you going to school?
- D. Tomorrow / Wednesday.

Reading

- E. Discriminating aurally initial consonant - r.
- F. Recognizing sound-letter relationship in word context - r (run, read).

Vocabulary

when

OBJECTIVES

Oral Language

- 1. Answer WHERE questions using PN + BE + Ving + PREP + N.

Function: Giving information about destinations.

- 2. Ask and answer questions using WHEN + BE + PN + Ving + PREP + N.

Function: Giving information about when an action is to occur.

Reading

- 3. Associate the sound with the symbol - r and recognize and read sight words with initial - r.

Function: Making sound/symbol correspondence and expanding sight reading vocabulary.

FRAME 50

CONTENT

Oral Language

- A. Where is she going?
- B. She is going home.
- C. When is Juma going to the store?
- D. Tomorrow / Saturday.

Reading

- E. Matching written words with pictures.

Vocabulary

home, store

OBJECTIVES

Oral Language

- 1. Ask and answer WHERE and WHEN questions with he and she and names.

Reading

- 2. Understand the meanings of written words by identifying pictures.

FUNCTION: Associating meaning and written words. There is also a pedagogical function for testing purposes.

FRAME 51

CONTENT

Oral Language

- A. (What are those?)
- B. (They are goats.)
- C. Whose goats are they?
- D. They are Juma's.
- E. (They are cows.)
- F. Are they Juma's cows?
- G. No, they aren't. They are Rosa's.

Reading

Review

Vocabulary

OBJECTIVES

Oral Language

1. Ask and answer questions WHOSE + N + BE + PN using PN + BE + POSS in the plural.

Function: Indicating possession of several items.

2. Ask and answer YES/NO questions BE + PN + POSS + N in the plural.

Reading

Review

FRAME 52

CONTENT

Oral Language

- A. What are Rosa and Juma doing?
- B. (They are singing.)
- C. (Look at the children.)
- D. (What are they doing?)
- E. (They are playing.)

Reading

- F. Recognizing sound-letter relationship in word context - b (boy, bell, box).
- G. Writes words from model with initial - b.

Vocabulary

children

OBJECTIVES

Oral Language

- 1. Ask and answer questions using WHAT + BE + N + CONJ + N + Ving.

Function: Largely pedagogical function of compounding nouns. Real life function of listing items or activities.

Reading

- 2. Associate the sound with the symbol - b and recognize and write from model words with initial - b.

FRAME 53

CONTENT

Oral Language

- A. (What are you doing?)
- B. We are writing.
- C. What are you and Juma doing?
- D. We are drawing.
- E. (What are you drawing?)
- F. We are drawing pictures.

Reading

Review

Vocabulary

pictures, we

OBJECTIVES

Oral Language

1. Ask and answer questions using familiar patterns plus WHAT + BE + PN + CONJ + N + Ving and PN + BE + Ving + N.

Function: Discussing activities by a group of people, particularly when the person describing the activities is a member of the group.

Reading

Review

CONTENT

Oral Language

- A. Close your eyes.
- B. Don't open your eyes.
- C. Pick your book up.
- D. Don't pick your book up.
- E. Put your pencil down.
- F. Don't put your book down.

Reading

- G. Recognizing sound-letter relationship in word context - c (cow, car).
- H. Writes words from model with initial - c.

Vocabulary

close, pick, eyes

OBJECTIVES

Oral Language

- 1. Respond physically to commands and negative commands.

Function: Following instructions.

Reading

- 2. Associate the sound with the symbol - c and recognize and write from model words with initial - c.

FRAME 55

CONTENT

Oral Language

- A. Here is a word.
- B. Can you read it?
- C. (Yes, I can.)
- D. Show me.

- E. Here are two words.
- F. Can you read them?
- G. (Yes, I can.)
- H. Show me.

Reading

Review

Vocabulary

show, word, them

OBJECTIVES

Oral Language

1. Makes statements and ask questions using
ADV • BE • ART • N and MOD • PN • V • PN.

Function: Largely pedagogical function
for locating items for identification
purposes.

Reading

Review

FRAME 56

CONTENT

Oral Language

- A. (Is this your basket?)
- B. (No.) My basket is brown.
- C. (Is this your ruler?)
- D. (No.) My ruler is on the table.
- E. (Are these your pencils?)
- F. (No.) My pencils are here.

Reading

Review

Vocabulary

ruler

OBJECTIVES

Oral Language

1. Ask and answer NO questions followed by statements which give the correct information using POSS + N + BE + ADJ; POSS + N + BE + PREP + ART
POSS + N + BE + ADV.

Function: Indicating correct possession with further description of the items in question.

Reading

Review

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FRAME 57

CONTENT

Oral Language

- A. Which book is yours?
- B. This book is mine.
- C. Which room is ours?
- D. This room is ours.
- E. Which desk is mine?
- F. This desk is yours.

Reading

- G. Discriminating aurally initial consonants - d,f.
- H. Recognizing sound-letter relationship in word context - d,f (dog, door; four, five).
- I. Writing letters d,f.
- J. Writing words from model with initial - d,f.

Vocabulary

mine, ours, yours

OBJECTIVES

Oral Language

- 1 Make statements DEM + N + BE + POSS in 1st and 2nd person plural and ask question WHICH + N + BE + POSS.

Function: Indicating possession with pronouns.

Reading

- 2. Discriminate aurally - d,f.
- 3. Associate the sound with the symbol - d,f and read sight words with initial d,f.
- 4. Write letters d, f and from model write words with initial d, f.

FRAME 58

CONTENT

Oral Language

- A. We have a big room.
- B. Which room is ours?
- C. The big room is ours.
- D. Which school is ours?
- E. The new school is ours.

Reading

Review

Vocabulary

new, school, room

OBJECTIVES

Oral Language

1. Ask and answer question WHICH + N + BE + POSS using 2nd person plural POSS.

Function: Indicating possession with pronouns.

Reading

Review

CONTENT

Oral Language

- A. (Where is their radio?)
- B. (It is on the desk.)
- C. (Their books are on the desk.)
- D. (Whose books are on the desk?)

Reading

- E. Writing words using intial - c from model.

Vocabulary

their

OBJECTIVES

Oral Language

- 1. Uses POSS their in familiar patterns.

Reading

- 2. Writes words from model with initial consonant - c.

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CONTENT

Oral Language

- A. What are you doing, Juma?)
- B. I am putting a book in the cupboard.
- C. (What are you doing, Rosa?)
- D. I am putting my basket in the corner.

Reading

- E. Discriminating aurally initial consonants - h, l, t.
- F. Writing letters - h, l, t.
- G. Recognizing sound-letter relationship in word context - h, l, t (home, hand; left, like; ten, t)
- H. Writing words from model with initial - h, l, t.

Vocabulary

OBJECTIVES

Oral Language

- 1. Answer familiar questions using
PN + BE + Ving + ART + N + PREP + ART + N or
PN + BE + Ving + POSS + N + PREP + ART + N.

Function: Indicating actions at the moment of speaking to someone who cannot see or doesn't understand the action.

Reading

- 2. Discriminate aurally - h, l, t.
- 3. Write letters - h, l, t and from model write words with initial - h, l, t.
- 4. Associate the sound with the symbol - h, l, t and read sight words with initial h, l, t.

FRAME 61

CONTENT

Oral Language

- A. This is not Juma's bicycle.
- B. (It is mine.)
- C. This is not their paper.
- D. It is ours.

Reading

- E. Relates meaning of written word in sentence context to pictures (content clues).

Vocabulary

OBJECTIVES

Oral Language

- 1. Make statements using DEM + BE + ADV + POSS + N.
Function: Indicating possession.

Reading

- 2. From sentence context clues, relates meaning of written word to pictures.
Function: Testing word meanings.

FRAME 62

CONTENT

Oral Language

- A. Is this a car or a lorry?
B. (It is a car.)

Reading

Review

Vocabulary

or, lorry

OBJECTIVES

Oral Language

1. Ask and answer questions
BE + DEM + ART + N + CONJ + ART + N.

Function: Discriminating between similar
objects.

Reading

Review

FRAME 63

CONTENT

Oral Language

- A. Is that car black or blue?
- B. (It is blue.)

Reading

- C. Discriminating aurally initial consonant sounds - m, n.
- D. Recognizing sound-letter relationship in word context - m, n (man, mine; nine, new).
- E. Writing letters - m, n.
- F. Writing words from model with initial - m,n.

Vocabulary

OBJECTIVES

Oral Language

- 1. Ask and answer questions using
BE + DEM + N + ADJ + CONJ + ADJ.

Function: Discriminating between two conditions or characteristics of an object.

Reading

- 2. Discriminate aurally - m, n.
- 3. Associate the sound with the symbol - m,n and read sight words with initial m, n.
- 4. Write letters - m,n and from model write words with initial - m, n.

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FRAME 64

CONTENT

Oral Language

- A. Are your hands clean or dirty?
- B. (They are clean.)

Reading

- C. Discriminating aurally initial consonant sounds - g, p
- D. Recognizing sound-letter relationship in word context - g, p (go, girl; pig, put).
- E. Writing letters - g, p.
- F. Writing words from model with initial - g, p.

Vocabulary

clean, dirty

OBJECTIVES

Oral Language

- 1. Ask and answer questions
BE + POSS + N + ADJ + CONJ + ADJ.

Reading

- 2. Discriminate aurally - g, p.
- 3. Associate the sound with the symbol - g, p and read sight words with initial g, p.
- 4. Write letters - g, p and from model write words with initial - g, p.

FRAME 65

CONTENT

Oral Language

- A. Juma is tall.
- B. Is Henry tall, too?
- C. (Yes, he is.)
- D. Adam and George are short.
- E. Are Rosa and Mary short, too?

Reading

- F. Relates meaning of written words to sentence contexts (context clues), e.g.
(The _____ is tall. boy, car, shirt)

Vocabulary

tall, short

OBJECTIVES

Oral Language

- 1. Make statements using
N + BE + ADJ and N + CONJ + N + BE + ADJ
and ask questions
BE + N + ADJ + ADV and BE + N + CONJ + N + ADJ + ADV.

Function: Talking about the characteristics
of people or animals.

Reading

- 2. Uses context clues to determine the meaning
of words in sentences.

FRAME 66

CONTENT

Oral Language

- A. We like bananas and oranges.
- B. Do you like bananas and oranges, too?
- C. (Yes, we do.)
- D. Do we have any milk?
- E. No, we don't. Do you want some water?

Reading

- F. Discriminating aurally initial consonant sounds - r, s
- G. Recognizes sound-letter relationship in word context - r, s (run, red; sit, stand).
- H. Writing letters - r, s.
- I. Writing words from model with initial - r, s.

Vocabulary

OBJECTIVES

Oral Language

- 1. Ask and answer questions
AUX + PN + V + N + CONJ + N + ADV.
- 2. Distinguish between like, want, and have.
Function: Discussing wants and likes.

Reading

- 2. Discriminate aurally - r, s.
- 3. Associate the sound with the symbol - r, s and read sight words with initial r, s.
- 4. Write letters - r, s and from model write words with initial - r, s.

CONTENT

Oral Language

- A. (Do you want a banana?)
- B. (No, thank you.)
- C. I don't like bananas.
- D. (Do you want a piece of cake?)
- E. (Yes, please.) I like cake.

Reading

- F. Discriminating aurally initial consonant sounds - v, w.
- G. Recognizing sound-letter relationship in word context - v, w (? ; walk, wall).
- H. Writing letters - v, w.
- I. Writing words from model with initial - v, w.

Vocabulary

OBJECTIVES

Oral Language

- 1. Ask and answer questions using polite expressions PN + AUX + NEG + V + N.
Function: Offering, accepting offers, and expressing preferences or likes and dislikes.

Reading

- 2. Discriminate aurally - v, w.
- 3. Associate the sound with the symbol - v, w and read sight words with initial - v, w.
- 4. Write letters - v, w and from model write words with initial - v, w.

FRAME 68

CONTENT

Oral Language

- A. Where is Rosa?
- B. She is sitting with Juma.
- C. Where are Adam and George?
- D. They are playing with Tom.

Reading

Review

Vocabulary

with

OBJECTIVES

Oral Language

1. Ask and answer questions
WHERE + BE + N and WHERE + BE + N + CONJ + N
using PN + BE + Ving + PREP + N.

Function: Asking and answering questions about the
Location and actions of other people.

Reading

Review