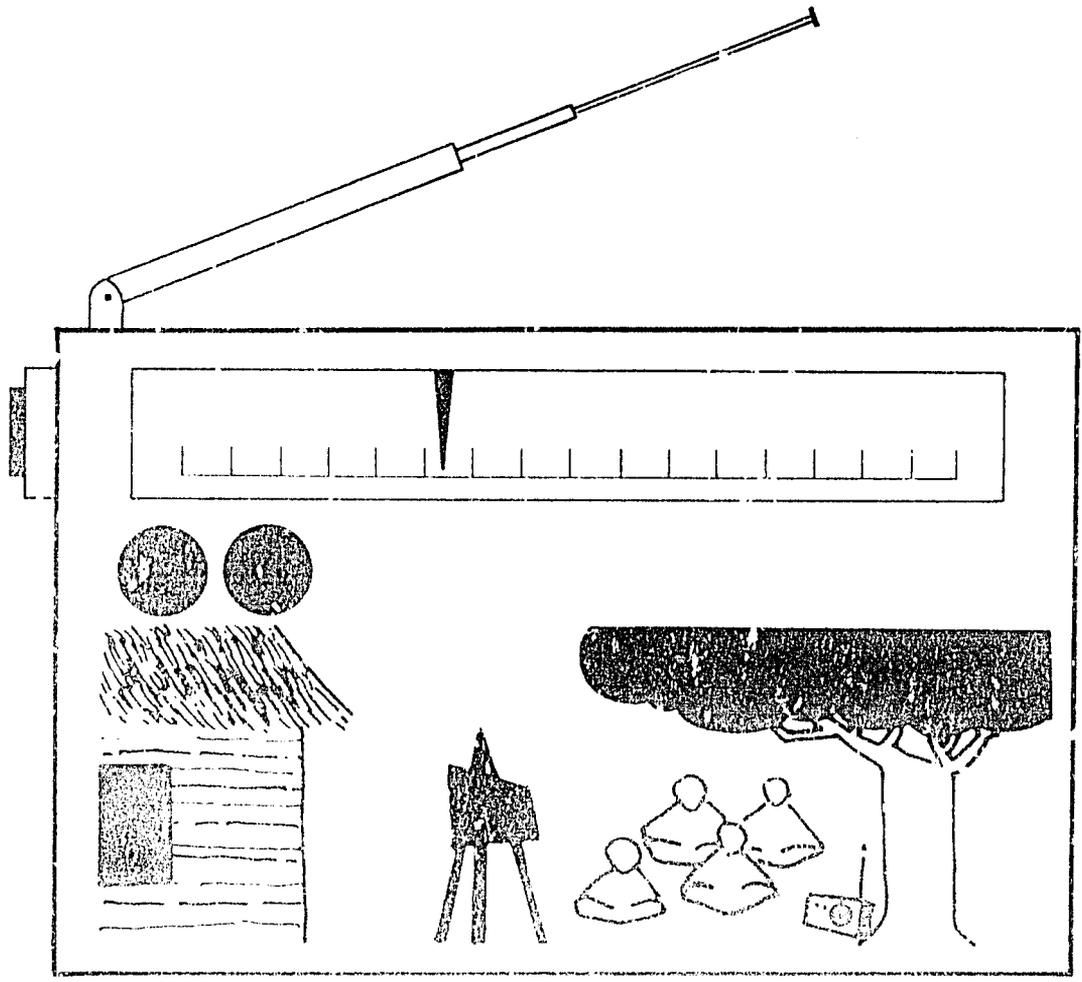


radio COMMUNITY BASIC EDUCATION



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INTERAMERICA RESEARCH ASSOCIATES



RADIO ASSISTED COMMUNITY BASIC EDUCATION
Pilot Project in the Dominican Republic

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RADIO ASSISTED COMMUNITY BASIC EDUCATION

Pilot Project in the Dominican Republic

INTRODUCTION

The Radio Assisted Community Basic Education project, initiated in 1981 in the Dominican Republic, is one of a series of projects funded by the United States Agency for International Development (AID), as part of the long-range plan to assist the developing countries of the world to improve their educational systems and to extend educational opportunities to rural children who are not presently served by the existing conventional school systems.

AID contracted with InterAmerica Research Associates, Inc. (InterAmerica) of Rosslyn, Virginia to provide the technical and financial assistance to the Dominican Republic Secretariat of Education (SEEBAC) in order to develop the project in the Southwest Region, the poorest and least developed region of the country. The project, known as Radioeducativo Comunitario, in Spanish, and commonly called RADECO, was established in the provincial capital of Barahona, a city of 100,000 inhabitants, the economic and political hub of the Southwest Region.

THE PURPOSE

This project, like the Radio Mathematics Project of Nicaragua and the Radio Language Arts Project of Kenya, provides a radio-based system of instruction for children, together with learning activities conducted by a paraprofessional.

However, unlike the Nicaragua and Kenya projects, which aim at improving the quality of in-school instruction, the RADECO project aims at providing basic education via radio, without the need for school buildings and qualified teachers. InterAmerica and SEEBAC have joined together to design, write, record, transmit (teach), and evaluate three basic grade levels of education for children from 7 to 14 years of age.

By October 1985, three grade levels will have been developed and transmitted to approximately 400 students in 20 "schools" and the original first grade level will have been revised and transmitted to approximately 1200 students in 50 schools.

In addition to producing radio lessons, the project also seeks to train Dominican professionals who will be able, at the end of the project, to continue working beyond grades one, two and three to develop the intermediate grades four, five and six. This trained staff will be able to produce new radio lessons and continue expanding the radio school population to a broader segment of the underserved rural children. The staff should also be capable of adapting lesson scripts for use in regular SEEBAC schools to assist teachers.

ORGANIZATION

Each grade level consists of 170 one hour radio lessons. Each lesson is composed of approximately 24 minutes of mathematics, 24 minutes of language, and 10 minutes of social science, natural science and recreational segments.

Children meet from Monday to Friday for an hour and a half each day, in "schools" (lean-tos or sheds) built or provided by the community parents organization. Lessons are scheduled for the late afternoon, when children have finished their daily tasks---most of the rural children work in the coffee and sugarcane harvests, as well as tend to the family chores. During 1983 and 1984, the first and second levels were broadcast to the original 20 schools from 4 to 5 pm. In 1985, the third level and the revised first level will both be broadcast. The class schedule will have the first level broadcast from 3 to 4 pm. and the third level from 4:30 to 5:30 pm.

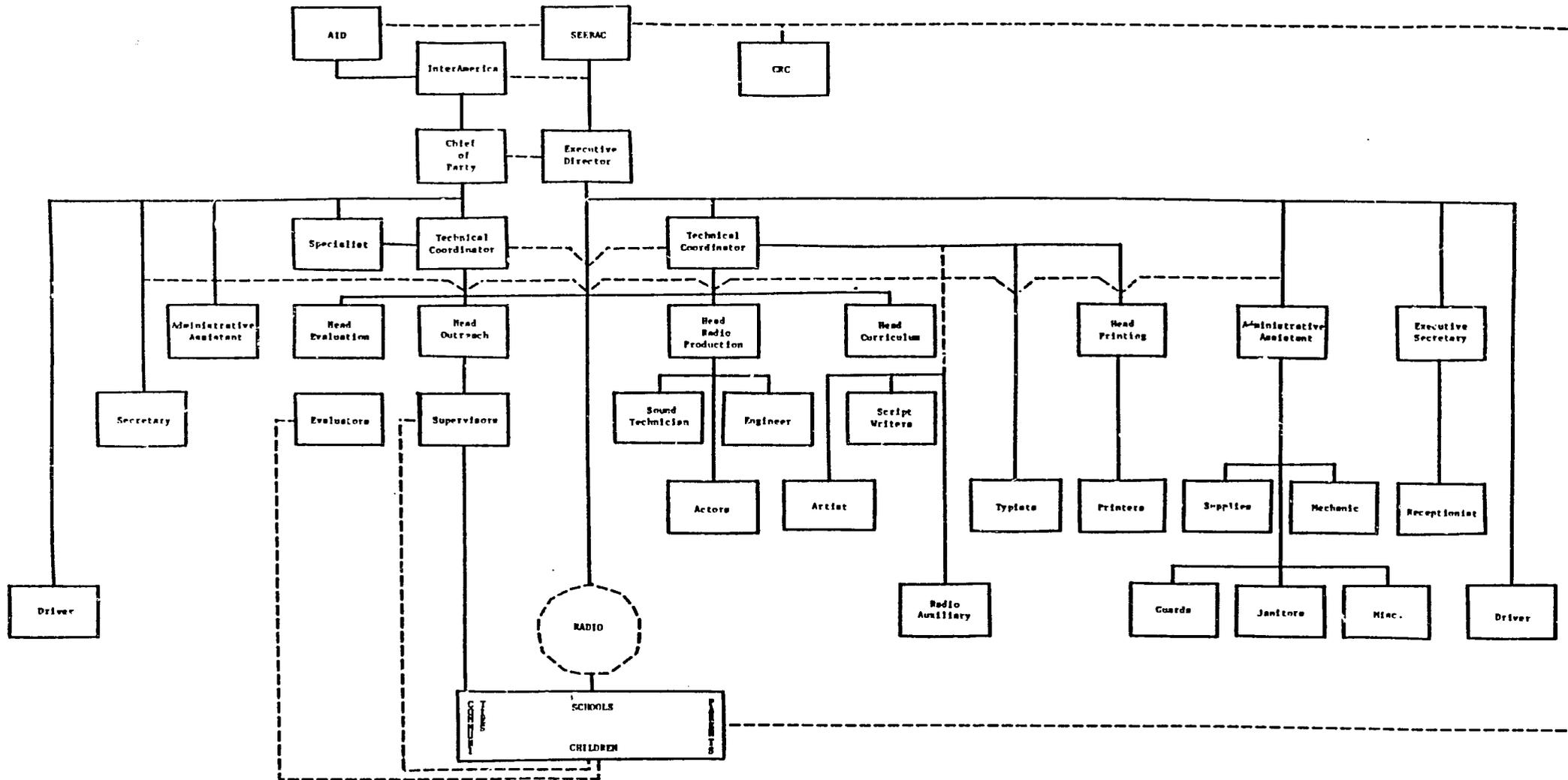
A paraprofessional---a villager who has demonstrated an ability to read and write above the third grade level, and who is respected by the parents and children---is in charge of the radio, blackboard, pencils and clipboards used by the children. This radio auxiliary as he/she is called in the project, also receives and distributes worksheets which are sent to him/her to be used in each lesson, and keeps attendance records. The radio auxiliary also receives a guide with instructions for writing certain assignments on the blackboard prior to the classes, and to enable him/her to work with the students for half an hour after the daily broadcasts to reinforce the daily lesson material.

The basic program format consists of several very specific steps to insure the development of a sound educational program. A master plan is developed first. The master plan used for mathematics is the one developed in Nicaragua, with modifications made to incorporate the Dominican curriculum. Friend Dialogues of Mountain View, California was sub-contracted to develop the master plan for language lessons and to train script writers and advise on the teaching process.

SEEBAC provides the technical and support personnel for the project. A Dominican Executive Director is responsible for the operation in the country. Figure 1 shows the organizational chart of the project. A Revisory and Coordinating Committee (CRC) was established and is comprised of SEEBAC Directors of Curriculum, Primary Education, Training, International Projects and Educational Media, and headed by the Under Secretary for Education. The CRC also includes local USAID Education representatives, and the InterAmerica Chief of Party. This Committee interprets policy and recommends solutions for problems regarding personnel, logistics and support. The Secretary of Education, of course, makes or ratifies all decisions.

FIGURE 1

RADECO PROJECT



The project is jointly managed by the Dominican Executive Director and the InterAmerica Chief of Party. Production is supervised by two Technical Coordinators; one appointed by SEEBAC and the other who acts as an advisor in curriculum and evaluation, is employed by InterAmerica.

The "technical" area is formed by four departments: curriculum (script writing), radio production, evaluation and outreach (supervision). This area has two principal activities: production and what can generally be called "teaching." Production is carried out in the Santo Domingo center, while the teaching activities are undertaken in Barahona. The evaluation and outreach departments are located in Barahona. Because of the importance of the field operation, the teaching process, the Executive Director has his office in Barahona. He is responsible for organizing and operating the RADECO schools and for the radio transmission. He also coordinates the work of the supervisors and the evaluators.

The Executive Director and the Chief of Party work closely to supervise the operation of the project. The project was entirely located in Barahona from its inception in late 1981, until recently. In July 1984, however, the production and teaching activities were separated, and the former was moved to the capital city of Santo Domingo. The move was made for two reasons: to integrate the project within the mainstream development programs of SEEBAC, and because it has been impossible to recruit and employ a full complement of qualified script writers and radio production personnel in Barahona.

A team of seven script writers turn the master plans into lesson scripts. Actually, the writers prepare segments which are later edited. Daily lesson scripts are put together by the script department head and the technical coordinators who oversee the entire production process. The scripts are typed, and proofed again by the technical coordinators and turned over to the radio production department. Local actors are used to record the lessons in the project studio. InterAmerica provides an international expert in educational radio production, and a locally hired and trained sound technician.

Once the lessons are taped and ready for broadcast, they are auditioned by the evaluation team. This team regularly visits 10 control schools to observe what goes on in the classroom during the lesson broadcast, paying particular attention to how and what the students are learning, or not learning. Once a week, tests are administered in the control schools. The feedback is recorded and reported to the technical coordinators and the script writers. Items which have been learned are eliminated from the lessons, and those presenting difficulties are reinforced. Of course, this process requires that the time element from writing to recording to broadcasting and observing, to making the optimum use of the feedback, be minimal. It is not possible to obtain much leadtime between script writing and broadcasting as the effect of the feedback will diminish.

THE PRODUCTION CYCLE

It has taken more than a year to work out a methodology for producing a one hour radio lesson every day for 170 days. A series of steps must be carefully developed and synchronized. Variables such as staffing, equipment, support services, electricity, size of the target audience, the broadcast radius, distance to the schools, type of formative evaluation, etc., all influence the operation of the production cycle.

Basically, the following steps make up the production cycle:

1. Lesson outlines are made following the master plan.
2. Script segments are written.
3. Script segments are edited.
4. Segments are compiled into a lesson.
5. Worksheet mock-up is prepared.
6. Lesson is edited: Continuity is assured.
7. Worksheet art work is completed and revised.
8. Lesson scripts are typed.
9. Worksheets are reproduced, packaged, sent to the "school" sites.
10. Pre radio production; preparation begins (voice actors study scripts.)
11. Radio production of lessons begins; (actual recording of lessons.)
12. Post radio production -- product/lesson is assessed.
13. Lessons are broadcast -- field observations undertaken.
14. Field testing of students is undertaken.
15. Feedback: formative evaluation recommendations are made.

Because of the formative evaluation---reliance on feedback---the lead time lapse between steps 1 and 13 must be as short as possible. In seven working days the lessons are written and produced. It is not possible to put anymore lessons "in the can" ahead of this schedule if the best use of evaluation data is to be made. If production falls behind, it causes serious problems for delivery of materials to the field.

Staffing

The staff of the RADECO project has never been constant. A major problem experienced with the production center in Barahona was the high turnover and resultant need to constantly train new people. However, a basic core staff is needed in order to assure an efficient and effective production process. The following production staff of 13 people is recommended.

1. Technical Coordinator: This person acts as executive producer and supervisor of the entire production process. He/she should be adept at editing and writing continuity. This person must also be skilled in supervising and administration of personnel.
2. Script Manager: The script manager acts as coordinator of the script writing department and should be skilled in writing and

editing. He/she will have responsibility for producing lesson outlines and compiling each daily lesson, including the preparation of the worksheet mockups.

3. Script Writers: At least three trained script writers are required to produce a one hour lesson. One good writer can adapt the Nicaragua (or, in the future, Dominican Republic) math scripts, while two good writers can write the language segments. The team can share responsibilities for writing social science, natural science and recreation segments. Script writers need to know the mechanics of writing, as well as be creative and sensitive to the needs, interests and problems of rural children.

4. Artist: The artist must be creative and skilled in lettering, graphics and space management. It is wise to train another staff member who has an interest in art in order to have a back-up person in case the artist becomes ill or takes vacation.

5. Print Shop: A team of people to print the worksheets and organize and package them for each school is required. Two people would be adequate for this task, depending on the equipment.

6. Secretarial Pool: At least three good typists should be available, able to type well, and follow all script conventions and formats.

7. Radio Producer: This person must have the technical knowhow to produce high quality radio programs. He or she should also have an educational background and be sensitive to the needs, interests and problems of rural children.

8. Sound Technician: The sound technician must know how to handle the most up-to-date recording equipment, as well as how to edit tapes and follow the producer. It is also wise to have a back-up person available in case of illness or vacation.

All staff members need training; how much depends on several factors: type and level of skills required, prior experience, general ability, time pressure, training materials, availability of trainers, etc. It has been estimated that a good script writer can be trained in about six months of on-the-job training, if he or she has a university degree in education, teaching experience, and a good command of the language.

The artist, the script typists and the sound technician will require from two to four months of time in order to become proficient in their jobs, depending on their abilities, previous experience and interest.

Equipment

Good professional quality equipment is needed in order to produce a one-hour radio lesson. Basic office fixtures such as desks,

chairs, cabinets, electric typewriters, and lamps must be procured.

Besides the basic furniture and equipment, the script writing department has about two dozen wire baskets or letter stackers for organizing segments by strand (a strand is a topic classification listing), a cassette recorder, a radio and several stop watches for timing segments. The department also has a small library which contains the basic official primary level materials, as well as many other materials and books on primary education and on writing for children.

The artist is equipped with an easel and professional quality drawing equipment and materials. The print shop was originally equipped with two mimeograph machines and an electronic stencil maker, but later a table model offset machine was acquired. A Xerox machine capable of reducing the artist's renderings to letter size paper should be rented.

The RADECO project has a completely equipped radio recording studio. A Tascam M-15 eight track Audio Mixer is the nucleus, and is linked to an Orban parametric equalizer, an Orban dual reverberator, two Urei LA-4 compressor limiters, three Crown D1508 amplifiers, two Technics SL1200MK2 turntables, six Otari MX5050 reel tape recorders, two Tascam 122 cassette recorders, five JBL 4411 speakers and 16 Dynamic microphones. Two Marantz and two Sony cassette recorders are used for outside recording. Several different types of radios have been used in the schools to receive the daily broadcasts. However, the General Electric Super Radio, Model 7-2885 has proven the most effective.

RADECO also has a micro computer and printer which are necessary for making lesson outlines. The computer has many other useful project applications. It is used for programming and updating the project budgets and for providing accurate monthly financial statements. In addition, the computer is used for the preparation of monthly logs and project documents and provides a link between backstopping and field operations.

The Operation of the Production Cycle

The 15 steps of the cycle are organized to assure the most efficient production of the lessons. Each step is a prerequisite of the next one.

1. Lesson Outlines: Topic outlines, which sketch out the whole process of how to teach a particular topic in the number of segments considered necessary, are made from information provided from the master plan. Figure 2 shows a typical topic outline. It includes all coding information, explanation of the topic and what will appear on the worksheet, as well as guidelines for writers and any necessary explanations.

FIGURE 2

Topic Outline

RW-18.1 Read the word "easy"

Instructions: Direct their attention to the box, read each word and point out the syllables that compose them.
(note: same as RW-19.1 and RW-20.1)

easy
busy
ready

RV-18.2 Read the word "easy"

Instructions: Direct their attention to the box and ask them to read each word, syllable by syllable. Then read them the whole word.
(note: same as RW-19.2 and RW-20.2)

easy
busy
ready

RW-18.3 Read the word "easy"

Instructions: They should read each word in the box. Reinforce their reading by reading after them.
(note: same as RW19.3 and RW20.3)

easy
busy
ready

2. Script segments are written: Script writers are assigned topic outlines to write. In order to assure greater continuity, it is recommended that the same writer be assigned outlines from the same strand. Writers should strive to create an interesting, solid segment within the constraints of the format. This is not an easy balance to strike. Writers must have excellent writing mechanics, a firm grasp of what is being taught, and a creative mind capable of linking their image of the children in the RADECO classroom and the voices of the actors. Writers should try out segments on each other, listen to the studio actors during recording sessions, and consult other members of the production staff about what they write.

Segments must be timed after they are written. The writers should use stop watches or cassette recorders, taking care to make pauses long enough for the students to render the response, but not too long, as minds might wander or hands get involved in other things.

3. Script segments are edited: When a writer finishes a segment, he/she submits the handwritten version to the department head for editing. The department head will review it and return it for any rewriting needed. A checklist for the editors has been prepared and is included in Figure 3.

FIGURE 3

SCRIPT EDITOR CHECKLIST

- 1 ___ Are the page headings correct?
- 2 ___ Do instructions follow the outlines?
- 3 ___ Do instructions agree with the worksheet?
- 4 ___ Does the language sound natural?
- 5 ___ Are instructions to the producer and sound technician correct and clear?
- 6 ___ Are there proper pauses for student responses?
- 7 ___ Is the form of the questions correct?
- 8 ___ Are there enough exercises in the segments?
- 9 ___ Is there a transition between segments?
- 10 ___ Are instructions for introducing new topics clear?
- 11 ___ Are the instructions for use of materials clear?
- 12 ___ Do verbs agree with nouns, pronouns with antecedents?
- 13 ___ Are instructions given in proper order?
- 14 ___ Are there proper instructions regarding standing or sitting before and after exercises?

4. Lesson is compiled: The curriculum department head will select approved segments and compile the daily lessons. He/she must consider essential prerequisites for certain topics, follow the stipulated presentation order, not overcrowd the worksheet, attempt to balance and vary activities, control the total lesson time, follow lesson formats and insure the optimum educational value.

Two forms are used to help the compilation process. The first, shown in Figure 4, is an outline scratch form which is used to help organize all the special factors to be considered. The second, shown in Figure 5, is the lesson cover sheet. This sheet contains the basic information about each lesson and serves as a guide for the radio production people, as it indicates the actors required and other supporting devices. A special notation calls the radio producer's and evaluation department's attention to new topics which require special emphasis and must be tested.

5. Worksheet mockup is prepared: Once the lesson is compiled, a rough draft of the student worksheet is designed by the curriculum department head.

FIGURE 4

Scratch Outline Form

Lesson: 20
Grade: 2

Date: June 25, 1984
Done by: John Jones

Seg. No.	Topic	Description	Materials	run time	total time
1		Introduction	0	0:30	0:30
2	OV2-20.1	Oral Vocab.	0	2:45	3:15
3	WLI-18.1	Write Let.	PA-P-WS	3:00	6:15
4	WLI-17.2	Write Let.	PA-P-WS	3:12	9:27
5	WS-20.4	Write Syll.	PA-P-WS	3:32	12:59
6	WS-21.3	Write Syll.	PA-P-WS	2:47	15:46
7	WW-14.1	Write Words	PA-P	3:10	18:56
8	RW-18.2	Read Words	WS	1:40	20:36
9	RS-5.1	Read Sent.	WS	1:30	22:06
10	RS-4.3	Read Sent.	WS	1:27	23:33
11	RE-40	Phys. Exer.	0	1:00	24:33
12	RE-58	Song	0	4:00	28:33
13		Conclusion	0	0:30	29:03

* Key to abbreviations

0 = oral PA paper P = pencil WS = worksheet

FIGURE 5

Lesson Cover Sheet

Grade: 2

Lesson: 20
Subject: language

Production date:
Broadcast date:

P.	Blk	Seg	Type	Code	Description	run time	total time
1	A				Introduction	0:30	0:30
3	B	1	I	OV2-20.1	Oral Vocab.	2:45	3:15
3	C	1	I	WL1-18.1	Write Let.	3:00	6:15
3		2	M	WL1-17.2	Write Let.	3:12	9:27
3		4	M	WS-20.4	Write Syll.	3:32	12:59
2		3	M	WS-21.3	Write Syll.	2:47	15:46
2	D	1	I	WW-14.1	Write Words	3:10	18:56
1	E	2	M	RW-18.2	Read Words	1:40	20:36
1		1	I	RS-5.1	Read Sent.	1:30	22:06
1		3	M	RS-4.3	Read Sent.	1:27	23:33
1	F		R	RE-40	Phys. Exer.	1:00	24:33
2			R	RE-58	Song	4:00	28:33
1	G				Conclusion	0:30	29:03

Production time: 29:40

- Cast
- (x) Richard
 - (x) Lucy
 - (x) Musician
 - () Chorus
 - () other _____

New topics
OV2-20, WL1-18, WW-14, RS-5

Number of WS: 1
Number of guide sheets: 0

Technical approval: _____

Executive approval: _____

6. Lesson is edited to assure continuity: The Technical Coordinators review the lesson to make sure that the diverse segments fit together or "flow smoothly". They add the opening remarks and transition statements which take the students from language to recreation and on to mathematics, and so forth. They may also recommend the use of sound effects.

7. Worksheets are completed and revised: The artist renders the worksheet students will use after the mockup is approved by the Technical Coordinators. His/her work is checked by the Technical Coordinators. A photocopy of the worksheet should be given to the typists to allow them to check script-worksheet concordance.

8. Lesson scripts are typed: Once the entire lesson is completed, to the satisfaction of the Technical Coordinators, it is sent to the secretarial pool to be typed in final form.

9. Worksheets are reproduced, packaged, and sent to the "shcool" sites: The worksheets are reproduced and packages are prepared for each of the RADECO schools. As the production cycle is geared to run at least seven school days ahead of broadcasts, the packages contain all the worksheets for a full week (five days) of classes. The packets are sent to Barahona so that they can be distributed on the Friday preceeding the week in which they are to be used.

The typed script is photocopied, and a copy is given to the production advisor, the producer, the sound technician and each actor.

10. Pre radio production: The production advisor and producer review the scripts in order to decide on the use of songs, musical transitions and sound effects. The sound technician makes up a production tape containing the music and sound effects. This enables the recording session to proceed more quickly and smoothly and reduces editing work.

The actors should review the scripts and practice their parts. A rehearsal of the complete script should be held prior to recording.

11. Radio production of lessons: If the preproduction has been done properly, it will take about three hours to produce a one hour radio program. The actual time it will take depends not only on the preproduction activities, but on the experience of the actors and sound technician and their ability to work under pressure.

12. Post radio production: After the lesson has been recorded and edited, a script writer should listen to the lesson with a script and worksheet in hand to check for errors. The entire evaluation department should also listen to the lessons to make up the observation form to be used to monitor the lesson in the field.

13. Broadcast - Observation: At the time the lesson is broadcast, observers will be in the formative evaluation sample classrooms. They will observe the process of each lesson and make detailed notes of student behavior. The data will be collated and compiled into reports which will be used, along with test results, to make any necessary changes in format, methodology, scripting conventions, length of pauses, music, voices or sound effects, etc.

14. Field testing: The head of the evaluation department makes up weekly tests which are administered in the formative evaluation sample schools in the week following broadcasts.

15. Feedback: The weekly formative testing provides data about student learning which forms the basis for deciding either to continue teaching a topic or to eliminate it--consider the topic learned. While the evaluation department provides systematically gathered data, the outreach personnel can provide incidental information. They are in contact with the radio auxiliaries, the parents and the students, and continually bring back important tips which help the production people improve scripts and radio production. They also monitor the radio transmissions, and keep tabs on the radio sets in each school.

From the preceding description of the production cycle, it is easy to see that there is no clear division between the "production" and the "teaching" or field areas. In order to continue production, the script writers are dependent on feedback from the classroom.

THE FIELD OPERATION

Evaluation

The field office in Barahona houses the Executive Director, the evaluation and outreach departments. There are four evaluators and a department head in the evaluation department. One of the evaluators also serves as data analyst. The department head prepares the weekly tests, and makes up the weekly report for the Santo Domingo office. The evaluators visit control schools everyday to observe classes. This means that each of the formative evaluation sample schools is observed twice weekly by different evaluators.

Summative evaluation is also carried out. A group of SEEBAC schools participate. Since the SEEBAC schools in the "coffee areas" and those in the "sugarcane areas" operate on different school calendars, the summative tests are administered at different times of the year in the different areas. The data is forwarded to Friend Dialogues for computer analysis.

Outreach

The outreach department has five supervisors and a department head. They, as well as the evaluators, have been issued

motorcycles, and they too constantly visit schools to distribute worksheets, pencils, chalk and batteries for the radios. They also provide encouragement to the radio auxiliaries and check on attendance, as well as meet with parents organizations to discuss with them their feelings about how well the school is progressing and how well the radio auxiliary performs his/her duties. They also monitor radio reception to verify the clarity of the transmissions.

As the first grade program will be completely revised, reproduced and rebroadcast in November 1984, it was decided to expand the number of schools from 20 to approximately 50. Since March of 1984, the outreach staff has been investigating and organizing new school sites, as well as carrying out a census in present communities to determine the potential first level enrollment. The present communities are all located within a radius of 50 kilometers of Barahona. Some are difficult to get to--an arduous jeep or Honda XL 125 climb up a stony path, followed by two or three kilometers, on foot, up a mule trail--but a supervisor can get there and back before dark. The new sites, however, will extend the radius of operation to about 100 kilometers. It is obvious that a new approach to supervision must be obtained. Whereas the present, "experimental" schools have been intensely supervised, a different tactic must be developed for administering and supervising these new schools. Radio auxiliaries will have to be trained well before transmissions begin, using the wealth of information obtained in the first two years of working with the radio auxiliaries in the 20 present schools. It is proposed that a small number of new schools receive no supervisor visits, another small group only occasionally (e.g. once every six weeks), and the rest no more than once a month.

The Radio Auxiliaries

The radio auxiliaries who presently serve the 20 RADECO schools are chosen on the basis of recommendations from among the parents of the children. They must be able to read and write. Most have above a fourth grade education; some are even secondary school graduates. They are community "volunteers", but they receive a small stipend of fifty pesos (equal to about US\$20) from the project. The original project budget did not contemplate this expense; and it is not possible to raise the stipend. However, there is some inconformity among the radio auxiliaries, as they would like to receive more. Regular classroom teachers earn between 175 and 225 pesos for a five-hour teaching shift. The RADECO radio auxiliaries do not have the educational preparation of a classroom teacher, nor can they be considered as teachers. Therefore, if the number of hours per day spent "in the classroom" is compared to the time a regular teacher devotes to the classroom, the remuneration is about right.

In order to backstop the supervision effort, it has also been proposed to utilize such people as regular school district supervisors, Southwest Development Authority promoters, health

officials who travel constantly to the remote communities, and Peace Corps Volunteers stationed in the region. These rural development people can serve as links with the schools and thus integrate their work with that of RADECO.

The School Setting

The typical RADECO school is a thatched roof structure mounted on thin posts and open on all sides. The blackboard, a painted piece of plywood about 125 cm. X 80 cm. hangs from a nail on one of the posts. The radio is usually hung from the same nail above the blackboard. Children arrive just before the transmission and, in most places, bring their own tin lard cans or homemade stools on which to sit.

The children are issued plywood clipboards and the daily worksheet and pencils (see Annex A for a sample worksheet). They copy their math exercises on the worksheet (second and third grades), before the transmission begins. During the hour of transmission, it is exciting to watch the dedication and enthusiasm of the children as they react to the radio voices, follow the instructions, and learn.

The lesson ends with the national anthem. One of the objectives of the SEEBAC primary program is to foster national identity. Many of the RADECO children are first generation Dominicans. Their parents immigrated from Haiti, and their home language is Creole. Not only does the project seek to help these children identify with their country, but it also helps them learn (and grow up using) the national language.

The RADECO schools are located in two distinct regions: the mountainous coffee growing area and the lowlands, where sugarcane is the principal crop. Both of these agricultural industries are labor intensive. The children work, along with the adults, from dawn until the hottest time of day. After mid-day the children eat (most are undernourished, however), rest and then go to school.

The formal SEEBAC schools hold classes in morning or afternoon sessions of five hours' duration. Children must wear shoes and uniforms. Parents of RADECO children are happy with the late afternoon class schedule, as well as the fact that there are no dress codes.

The experiment has proven that children can learn to read and write as well as learn mathematics from the radio. Preliminary summary evaluation data reveal that not only do they learn, but the amount learned and rate of learning compare favorably to children in regular schools. The RADECO schools depend on community collaboration. Parents must finance and build the "schools" and cooperate in selecting and supporting the radio auxiliary.

A cost effectiveness study has yet to be carried out. However, based on preliminary data it certainly does seem that a radio education program such as the RADECO project is cost effective as well as academically sound.

ANNEX A
SAMPLE LESSON AND WORKSHEET

	2 b <u>e</u> so	3 b <u>e</u> ca	4 ro <u>b</u> e
5 ma <u>j</u> e	6 mo <u>j</u> e	7 ba <u>j</u> e	8 de <u>j</u> a
9 mi <u>d</u> e	10 pi <u>d</u> e	11 van sen	12 san ten
13 tan ven	14 ros tas	15 las ni <u>ñ</u> a	
16 ni <u>ñ</u> o	17 ni <u>d</u> o	18 fi <u>j</u> a	19 fi <u>j</u> o
20 fi <u>l</u> a	21 pa <u>v</u> o a	22 ca <u>j</u> a ha <u>g</u> o mi en es al	23 va da
24 en es al	25 El codo está roto. El dedo está roto. 		
26 La cama no está rota. El codo está roto. 		27 La mano no está rota. La cama no está rota. 	

1 	2 rosas copa cola	3 pavo votos tapa	4 lana ropa palas
5 to <u>m</u> e	6 co <u>m</u> e	7 me <u>s</u> a	8 to <u>p</u> e
9 to <u>p</u> e	10 pe <u>s</u> a	11 pa <u>s</u> e	12 to <u>s</u> e
13 se <u>p</u> a	14 po <u>t</u> e	15 no <u>t</u> e	16 te <u>m</u> a
17 1. patas 2. casas 3. cosas 4. toda 5. cosa 6. rosas	18 va da pa <u>v</u> o a	19 en es al va da	20 toda cosa rosas
21 ca <u>j</u> a ha <u>g</u> o mi en es al	22 La mano está rota. La pala está rota		
23 El codo está roto. El dedo está roto.			
24 La mano está rota. La cama no está rota.			

RADECO

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National Secretary of Education, Fine Arts and
Religion

Apartado Postal No. 57
Barahona, Dominican Republic

TYPE OF PROJECT See the attached description

TITLE Lesson No. 77, Second level of elementary
education

AUTHORS OF TEXT **LANGUAGE:** Jesús Piña
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Miriam Risk
Riselda Perdomo

MATHEMATICS:
Máximo Feliz

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Magazine

RADECO

Educational Level 2nd

Lesson 77
Section Language

Date of Production 5/10/84

Date of Broadcast 5/11/84

Pp.	Units	Segments	Type	Key	Description	No. of Segments	Unit Time	Total Time
					Standard Introduction	1	0:30	0:30
		1	1	VO2-4	Oral Vocabulary		0:28	0:53
		2	M	ELI-8p.	Writing Letters		4:04	5:02
			M	ELI-11p. 12p	Writing Letters		4:00	9:02
				ES 14 14	Reading Syllables		0:35	9:37
				LS142	Reading Syllables		0:35	10:12
				LS1. 43	Reading Syllables		1:03	11:15
				ES-1-4.5	Writing Syllables		2:46	13:01
				EPI.44	Writing Words		3:00	16:01
				EPI.7.3	Writing Words		2:50	18:51
				LO-5.3	Reading Sentences		4:10	24:01
				RF	Marching Song	1	3:10	26:21
					Conclusion-farewell		:30	

CAST

- () Ricardo () _____
- () Lucia () _____
- () Juan () _____
- () Julia () _____
- () Chorus () _____

Technical approval _____

Executive approval _____

PRODUCTION TIME 31:26

NEW TOPICS

Language _____

No. of worksheets: Lang. 1
Math. _____

No. of guidesheets _____

WRITER: Jesús Piña
KEY:
TOPICS: Introduction
TYPE: () I () M () R

DATE:

GRADE: 2nd
LESSON: 77
UNIT: Language SEGMENT: 1
PAGE: 1 OF: 24

Segment Time: 0:30
Segment: 1 of: 12
Page: 1 of: 1

1. LANGUAGE MUSIC: 10
2. RICARDO Hello, students, how are you?
3. P:2
4. LUCIA Listen, Ricardo, the students are fine.
5. RICARDO Yes, they are fine and learning more each day.
6. SP. EFFECTS: 3 (SOUND OF THUNDER)
7. LUCIA Listen, Ricardo, there is thunder!
8. RICARDO UGH!! It just started raining.
9. SP. EFFECTS: 3 (SOUND OF RAIN)
10. RICARDO But we are not getting wet because we are in school now.
11. LUCIA Look, look, Ricardo, a man standing in the rain, but he's not getting wet!
12. RICARDO Oh, yes! He's not getting wet, and I will explain to the children why that man is not getting wet.

WRITER: Riselda P.
KEY: VO2-A
TOPICS:
TYPE: () I () M () R

DATE:

GRADE: 2nd
LESSON: 77
UNIT: Language SEGMENT: 3
PAGE: 2 OF: 24

Segment Time: 0:28
Segment: 2 of: 12
Page: 1 of: 2

1. RICARDO Students, sometimes we see people walking in the rain wearing long wide clothes over their shoulders, and even over their head. The clothes under these garments do not get wet because those garments are made of plastic, like plastic covers; they are rain capes.

Capes are long wide sleeveless garments worn over the shoulders to protect us from the cold and the rain.
2. TRANSITION MUSIC
3. LUCIA How would you like it, Ricardo, if we start writing letters?
4. RICARDO That's a good idea, Maria, let's start. You should have your worksheets and a pencil ready because we are going to write letters.

LETTERS THEME

WRITER: Riselda P.
KEY: ELI-8P.9P and 10P
TOPICS: Writing Letters
TYPE: () I () M () R

DATE: 4/27/84

GRADE: 2nd
LESSON: 77
UNIT: Language SEGMENT: 3
PAGE: 3 OF: 24

Segment Time: 4:01
Segment: 3 of: 12
Page: 1 of: 2

1. LUCIA Students, turn the page over to picture number one.
2. P:3
3. LUCIA There you have three letters. You are going to practice writing those letters as the picture tells you. Each letter should be written between the two lines. Now look at the first drawing of letter d.
4. P:3 See that the pencil starts on the line above and goes down to the line below, making a standing line. Then the pencil goes up to the middle of the standing line and makes a little balloon beside the line. The little balloon ends on the line below, touching the standing line.
5. P:3 Find the first blank line in your sheet and practice writing the letter d, the same as in the drawing.

Write along the entire line
6. M:45 Now look at the other drawing of the letter s. The pencil makes a half-balloon, and at the end of the first half-balloon starts another half-balloon which ends on the line below. It looks like a small snake. Now find the blank line in your sheet.

WRITER: Riselda P.
 KEY: ELI-8P.9P and 10P
 TOPICS:
 TYPE: () I () M () R

DATE: 4/27/84

GRADE: 2nd
 LESSON: 77
 UNIT: Language SEGMENT: 3
 PAGE: 4 OF: 24

Segment Time: 4:01
 Segment: 3 of: 12
 Page: 2 of: 2

1. M:5 Practice writing the letter s as in the drawing.
 Write a whole line of this letter.

2. M:40 Look at the other drawing with the letter a.

3. P:2 The pencil starts in the middle of the space between the two lines and turns to the side, going down to the line below and making a little balloon. Then, the pencil goes slightly above the beginning of the little balloon and goes down to the line below, making a standing line in front of the balloon. Find the first blank line in your sheet.

- P:2 Now you can practice writing the letter a, as in the drawing.
 Write a whole line of this letter.

WRITER: Riselda F. DATE:
 KEY: L1-11, 12P, 13P
 TOPICS: Practice writing Letters: n, b, e
 TYPE: () I () M () R

GRADE: 2nd
 LESSON: ' '
 UNIT: Language SEGMENT: 4
 PAGE: 5 OF: 24

Segment Time: 4:40
 Segment: 4 of: 12
 Page: 1 of: 2

1. RICARDO Let's continue practicing letters.

 Let's see picture number two.
2. P:3
3. RICARDO You have some letters there. You are going to practice writing those letters as indicated in the drawing. Remember that each letter should be written between the two lines.

 Let's have a look at the first drawing with the letter n.
4. P:4
5. RICARDO The pencil starts in the middle of the space between the two lines and goes down to the line below making a standing line. Then the pencil goes up and makes a short line at the side that goes down to the line below.
6. P:3
7. LUCIA Find the first blank line in your sheet.

 P:2 Practice writing the letter as indicated in the drawing. Make a whole line.
8. M:40
9. LUCIA Look again at the picture.
10. P:2
11. LUCIA Look at the second drawing of the letter b. See that the pencil starts almost in the line above and goes down to the other line, making a standing line. Then the pencil starts in the middle of the standing line and makes a little balloon in front of the standing line.

WRITER: Riselda P.
KEY: ELI-11p, 12p, 13p
TOPICS:
TYPE: () I () M () R

DATE:

GRADE: 2nd
LESSON: 77
UNIT: Language SEGMENT: 4
PAGE: 6 OF: 24

Segment Time: 4:40
Segment: 4 of: 12
Page: 2 of: 2

1. LUCIA Now practice writing the letter b, just as in the drawing. On the first blank line in your sheet, make a whole row of the letter.
2. M:45
3. LUCIA Now, look at the last drawing with the letter e; it looks as if we were going to make a little balloon, but we close it almost in the middle.

The pencil starts in the middle of the space between two lines. It draws a line to the side, goes up, it turns a little and goes down, touching the line where it started and finishes by turning over the line below.
4. P:3
5. LUCIA Find the first blank line in your sheet and practice writing the letter e as shown in the drawing.

Make a whole row of the letter.
6. M:45
7. RICARDO Now we are going to read syllables.

WRITER: M. Matuk DATE: 3/21/84
 KEY: LS1-41.4
 TOPICS: Reading the syllable "na"
 TYPE: () I () M () R

GRADE: 2nd
 LESSON: 77
 UNIT: Language SEGMENT: 5
 PAGE: 7 OF: 24

Segment Time: :35
 Segment: 5 of: 12
 Page: 1 of: 1

1. LUCIA Turn over the page to picture number three.
2. P:3
3. RICARDO See the underlined syllable.
4. P:2
5. LUCIA Read it.
6. P:2
7. RICARDO Na. You find the syllable na in the word cana.*
8. LUCIA Turn over the page to the picture number four.
9. P:3
10. RICARDO Read the underlined syllable.
11. P:2
12. RICARDO Na. You find the syllable na in the word dana.
13. LUCIA See the picture number five.
14. P:3
15. RICARDO Read the underlined syllable.
16. P:2
17. RICARDO Na. You will find the syllable na in the word name.

*In this exercise, the syllables and Spanish words have been kept in their original form.

WRITER: M. Matuk DATE: 3/21/84
 KEY: LS1-42.4
 TOPICS: Reading the syllable "fo"
 TYPE: () I (x) M () R

GRADE: 2nd
 LESSON: 77
 UNIT: Language SEGMENT: ()
 PAGE: 8 OF: 24

Segment Time: :35
 Segment: 6 of: 12
 Page: 1 of: 1

1. LUCIA Students, go ahead to picture number six.
2. P:3
3. LUCIA That word has a syllable which is underlined.
4. P:2
5. RICARDO Read that syllable
6. P:2
7. LUCIA Fo. The syllable fo is part of the word rifo.
8. LUCIA Go ahead to picture number seven.
9. P:3
10. RICARDO Read the second syllable.
11. P:2
12. RICARDO Fo.

Go ahead to picture number eight.
13. P:3
14. LUCIA Read the first syllable.
15. P:2
16. RICARDO Fo.
17. LUCIA Let's go ahead, but now we will write the syllables; have your pencil ready.

WRITER: José M. Fleury
 KEY: LSI-43.3
 TOPICS:
 TYPE: () I () M () R

DATE:

GRADE: 2nd
 LESSON: 77
 UNIT: Language SEGMENT: 7
 PAGE: 9 OF: 24

Segment Time: 1:03
 Segment: 7 of: 12
 Page: 1 of: 2

1. RICARDO Students, find picture number nine.
2. M:3
3. RICARDO On your sheets, copy the syllable ño.
4. LUCIA That syllable reads as ño.
5. RICARDO On your sheets, copy the syllable ño.
6. M:8
7. LUCIA Which letters did you use when you wrote the syllable ño.
8. P:4
9. RICARDO Ene - o. The syllable ño is part of word daño.
10. LUCIA Now, picture number ten.
11. P:3
12. LUCIA See the second syllable of the word.
P:2
13. RICARDO It reads as ño.
14. LUCIA Copy it.
15. M:8
16. RICARDO How did you write it?
17. P:4
18. LUCIA Ene - o. Niño is written with ño.
19. RICARDO Picture eleven.
20. P:3
21. RICARDO Look at the second syllable of the word.

WRITER: José M. Fleury
 KEY: LS1-43.3
 TOPICS:
 TYPE: () I () M () R

DATE:

GRADE: 2nd
 LESSON: 77
 UNIT: Language SEGMENT: 7
 PAGE: 10 OF: 24

Segment Time: 1:03
 Segment: 7 of: 12
 Page: 2 of: 2

1. LUCIA It reads as ño.
2. RICARDO Copy it.
3. M:8
4. LUCIA How did you write it?
5. P:4
6. RICARDO Eñe - o.

The syllable ño is part of the word puño.
7. And now let's complete the words.

XILO 1

WRITER: Riselda P. DATE:4/5/84
 KEY: ES1-4.5
 TOPICS: Writing syllables to, no, do
 TYPE: () I () M () R

GRADE: 2nd
 LESSON: 77
 UNII: Language SEGMENT: 8
 PAGE: 11 OF: 24

Segment Time: 2:46
 Segment: 8 of: 12
 Page: 1 of: 3

1. RICARDO Students, look at picture number twelve.
2. P:3
3. RICARDO There you have a syllable. On the next blank line of your sheet, copy that syllable.
4. M:8
5. RICARDO Now, very close to that syllable, write the syllable to.
6. M:8
7. RICARDO You have written a word. That word reads as pato.
8. LUCIA Look at picture thirteen
9. P:2
10. LUCIA On your sheet, copy that syllable.
11. M:8
12. LUCIA Next to the syllable, write the syllable do.
13. M:3
14. LUCIA That word reads as todo
15. RICARDO Look at picture fourteen.
16. P:2
17. RICARDO Copy that syllable.
18. M:8

WRITER: Riselda P. DATE: 4/5/84
KEY: ES1-4.5
TOPICS: Writing syllables to, no, do
TYPE: () I () M () R

GRADE: 2nd
LESSON: 77
UNIT: Language SEGMENT: 8
PAGE: 12 OF: 24

Segment Time: 2:46
Segment: 8 of: 12
Page: 2 of: 3

1. RICARDO Next, write the syllable no.
2. M:8
3. RICARDO You have written the word mono.
4. LUCIA Look at picture fifteen.
Copy that syllable.
5. M:8
6. LUCIA Next to that syllable, write the syllable to.
7. M:8
8. LUCIA That word reads as rato.
9. RICARDO Look at picture sixteen.
10. P:2
11. RICARDO Copy that syllable.
12. M:8
13. RICARDO Next to that syllable, write the syllable no.
14. M:8
15. RICARDO That words reads as mano.
16. RICARDO Look at picture seventeen.
17. P:2

WRITER: Riselda P. DATE: 4/5/84
KEY: ES1-4.5
TOPICS: Writing syllables to, no, do
TYPE: () I () M () R

GRADE: 2nd
LESSON: 77
UNIT: Language SEGMENT: 8
PAGE: 13 OF: 24

Segment Time: 2:46
Segment: 8 of: 12
Page: 3 of: 3

1. RICARDO Copy that syllable.
2. M:8
3. RICARDO Next to that syllable, write do.
4. M:8
5. RICARDO You have written the word lodo.
6. TRANSITION MUSIC TO DICTATION

WRITER: Néstor R.

DATE: 4/18/84

KEY: EP1-4.4

TOPICS:

TYPE: () I () M () R

GRADE: 2nd

LESSON: 77

UNIT: Language SEGMENT: 9

PAGE: 14 OF: 24

Segment Time: 3:00

Segment: 9 of: 12

Page: 1 of: 2

-
1. LUCIA We are going to write words, so please have your paper and pencil ready.
 2. M:5
Look for the first blank line on your paper.
 3. RICARDO On your sheets, write the word pato, pa-to.
 4. M:14
 5. RICARDO What letters did you use when you wrote pato?
 6. P:6
 7. LUCIA pe, a, te, o.
 8. RICARDO Leave a space, and on the same line write the word mano, ma-no.
 9. M:14
 10. RICARDO How did you write that word?
 11. M:6
 12. LUCIA Ene, a, ene, o.
 13. RICARDO Now write the word todo.
 14. M:14
 15. RICARDO How did you write it?
 16. P:6
 17. LUCIA Te, o, de, o.
 18. RICARDO Find the next line and write mata, ma-ta.
- 11)

WRITER: Néstor R.
KEY: EP1-4.4
TOPICS:
TYPE: () I () M () R

DATE:

GRADE: 2nd
LESSON: 77
UNIT: Language SEGMENT: 10
PAGE: 15 OF: 24

Segment Time: 3:00
Segment: 10 of: 12
Page: 2 of: 2

1. M:14
2. RICARDO How did you write it?
3. P:5
4. LUCIA Eme, ā, te, a.
5. RICARDO Leave a space, and on the same line write tapa, ta-pa.
6. M:14
7. RICARDO How did you write it?
8. P:6
9. LUCIA Te, a, pe, a.
10. RICARDO Now write the word pata, pa-ta.
11. M:14
12. RICARDO How did you write it?
13. P:6
14. LUCIA Pe, a, te, a.
15. RICARDO We will go on dictating words, but now we'll dictate syllable by syllable.

WRITER: Néstor R. DATE:
 KEY: EP1-7.3
 TOPICS: Writing the words mono, pala, lata
 TYPE: () I () M () R

GRADE: 2nd
 LESSON: 77
 UNIT: Language SEGMENT: 10
 PAGE: 16 OF: 24

Segment Time: 2:50
 Segment: 10 of: 12
 Page: 1 of: 3

1. RICARDO Find the next blank line on your sheets and write the syllable mo.
2. M:8
3. RICARDO How did you write it?
4. P:3
5. LUCIA Eme, o.
6. RICARDO Very close to the syllable mo, write the syllable no.
7. M:8
8. RICARDO How did you write it?
9. P:3
10. LUCIA Ene, o.
11. LUCIA Write the word mono.
P:3
12. RICARDO On the same line, leave a space, and write the syllable pa.
13. M:8
14. RICARDO How did you write it?
15. P:3
16. LUCIA Pe, a.
17. RICARDO Very close to pa, write la.
18. M:8
19. RICARDO How did you write it?
20. P:3

WRITER: Néstor R.
KEY: EP1
TOPICS:
TYPE: () I () M () R

DATE: 4/24/84

GRADE: 2nd
LESSON: 77
UNIT: Language SEGMENT: 1
PAGE: 17 OF: 24

Segment Time: 2:50
Segment: 10 of: 12
Page: 2 of: 3

1. LUCIA Ele, a.
2. LUCIA You wrote the word pala.
3. RICARDO Leave a space and write la.
4. M:8
5. RICARDO How did you write it?
6. P:3
7. LUCIA Ele, a.
8. RICARDO Very close to la, write ta.
9. M:8
10. RICARDO How did you write it?
11. P:3
12. LUCIA Te, a.
13. LUCIA Write the word lata.
- P:10
14. RICARDO Now write lo.
15. P:3
16. LUCIA Ele, o.
17. RICARDO Very close to lo, write do.
18. M:8
19. RICARDO How did you write it?

2/2

WRITER: Néstor P.
KEY: EPI
TOPICS:
TYPE: () I () M () R

DATE: 4/24/84

GRADE: 2nd
LESSON: 77
UNIT: Language SEGMENT: 10
PAGE: 18 OF: 24

Segment Time: 2:50
Segmen' . 10 of: 12
Page: 3 of: 3

1. P:3

2. LUCIA De, o.

3. LUCIA Write lado.

P:10

4. LUCIA And we finish writing words and syllables.

TRANSITION 01

WRITER: Riselda P. DATE:
 KEY: LO-5.3
 TOPICS: Reading the sentences: El sapo nada.
 TYPE: () I () M () R

GRADE: 2nd
 LESSON: 77
 UNIT: Language SEGMENT: 11
 PAGE: 19 OF: 24

Segment Time: 4:10
 Segment: 11 of: 12
 Page: 1 of: 4

1. M:3 Introduction to a story.
2. SP. EFF.: 3 (In the countryside, light wind, river, voices.)
3. STORYTELLER It's a day in the countryside; Susana and Pepe, each with their pet frog and pet toad are having a great time. In the field where they are playing, there is a wide deep river.
4. SP. EFF.: 5 (Of the running waters in the river) (ripples.)
5. STORYTELLER When Susana sees the river, she says it would be a good idea to go into the water.
6. SP. EFF.: 3 (Of running water.)
7. STORYTELLER Susana says that she will enjoy going into the water because she swims.
8. SP. EFF.: 3 (River; Susana and Pepe laughing.)
9. STORYTELLER Then, Susana takes her frog to the bank and dives into the water.
10. SP. EFF.: DIVING SOUND
11. STORYTELLER The frog swims and it also goes into the water.
12. SP. EFF.: SMALL SPLASHING SOUND
 STORYTELLER But Pepe and his toad remain on the river bank.
13. STORYTELLER Pepe swims very little. The toad swims very little. They's why they stay on the river bank.

WRITER: Riselda P.
 KEY: LO-5.3
 TOPICS:
 TYPE: () I () M () R

DATE:

GRADE: 2nd
 LESSON: 77
 UNIT: Language SEGMENT: 11
 PAGE: 20 OF: 24

Segment Time: 4:10
 Segment: 11 of: 12
 Page: 2 of: 4

1. SP. EFF.: GUITAR
2. STORYTELLER Students, look at picture eighteen.
3. M:5
4. See Susana, who is in the water, in the river.
5. SP. EFF. (Susana's strokes; Splashing.)
6. SP. EFF.: GUITAR
7. What is Susana doing?
8. P:3
9. She swims.
 Look at the first sentence next to the picture.
10. P:2
11. Read it.
12. P:3
 Susana swims.
13. M:3 (Follow-up.)
14. STORYTELLER Students, we were saying that Susana and her frog were going to swim.
 In the picture, we saw Susana swimming.
 There is a little animal swimming too.
15. P:2
16. STORYTELLER The frog is in the water.

WRITER: Riselda P.
 KEY: LO-5.3
 TOPICS:
 TYPE: () I () M () R

DATE:

GRADE: 2nd
 LESSON: 77
 UNIT: Language SEGMENT: 11
 PAGE: 21 OF: 24

Segment Time: 4:10
 Segment: 11 of: 12
 Page: 3 of: 4

1. SP. EFF.: 3 (Frog swimming, splashing.)
2. SP. EFF.: GUITAR
 What is the frog doing?
3. P:3
4. It swims. The frog swims.
 Look at sentence number two.
5. P:2
6. What does it say?
7. P:5
8. The frog swims.
9. M:3 (Follow-up.)
10. STORYTELLER Look: while Susana and her frog swim, Pepe and his toad
 are on the river bank because Pepe swims very little and
 the toad does not swim either.
11. STORYTELLER Look once again at the picture.
P:2
 Pepe and the toad are on the river bank.
12. P:2
 Look at sentence number three. Read it.
13. P:5
14. Pepe swims very little.
 Now, look at the last sentence.
15. P:3
16. Read it.
17. P:3 The toad swims very little.

WRITER: Riselda P.
KEY: LO-5.3
TOPICS:
TYPE: () I () M () R

DATE:

GRADE: 2nd
LESSON: 77
UNIT: Language SEGMENT: 11
PAGE: 22 OF: 24

Segment Time: 4:10
Segment: 11 of: 12
Page: 4 of: 4

1. RICARDO Lucia, how would you like it if we now teach a song to the students?
2. LUCIA Great idea, Ricardo! Let Julia teach us a song.

WRITER: Riselda P.

DATE:

KEY:

TOPICS: A song

TYPE: () I () M () R

GRADE: 2nd

LESSON: 77

UNIT: Language

SEGMENT: 12

PAGE: 23

OF: 24

Segment Time: 3:10

Segment: 12

of: 12

Page: 1

of: 2

-
1. RICARDO Now, students, put away your paper and pencils.
 2. SP. EFF.: XILO
M:5
 3. RICARDO Let us listen to the entire song.
 4. M:14 SONG
 5. LUCIA Students, the song that we have just heard is called a "march." We are going to learn that march.
 6. M:14 SONG
 7. LUCIA Now, listen to the first line (without music).
"One man shall mow my meadow"
 8. P:4
 9. LUCIA Now listen to it with music.
 10. M:2 (THE SONG'S BACKGROUND MUSIC)
 11. LUCIA Repeat and sing with me.
 12. M:4 (ONE MAN SHALL MOW MY MEADOW)
 13. LUCIA Now listen to the second line:
"Two men shall gather it together." Repeat this.
 14. P:4
 15. LUCIA Listen to the music.
 16. M:4
 17. LUCIA "Two men shall gather it together." (Music)
Let us sing all together:
 18. M: ("TWO MEN SHALL GATHER IT TOGETHER." MUSIC)

WRITER: Piselda P.
 KEY:
 TOPICS:
 TYPE: () I () M () R

DATE:

GRADE: 2nd
 LESSON: 77
 UNIT: Language SEGMENT: 12
 PAGE: 24 OF: 24

Segment Time: 3:10
 Segment: 12 of: 12
 Page: 2 of: 2

1. LUCIA Let us listen to the next line: "Three men shall mow my meadow" (Without music) Once again.
2. LUCIA Listen to the song with music.
3. M. "THREE MEN SHALL MOW MY MEADOW" (WITH MUSIC).
4. LUCIA Let us sing it together.
5. M. "THREE MEN SHALL MOW MY MEADOW." (WITH MUSIC).
6. LUCIA And now, the last line:
 "Four men shall gather it together."
 Repeat.
7. M: THE LAST VERSE
 "Four men shall gather it together."
 Listen to it with music.
8. M: "FOUR MEN SHALL GATHER IT TOGETHER." (WITH MUSIC).
9. M: Let's listen to the entire song.
10. M: (Song with accompaniment).
 Let us sing it all together:
11. M: (The song again).
12. RICARDO And with this song we have finished the language lesson.
13. LUCIA
 AND RICARDO Good-bye students.
14. MUSIC FOR LANGUAGE.

Lección 63

<p>1</p> <p>c c o o d d d</p> <p>c c s s s s</p> <p>c c o o a a a</p>		
<p>2</p> <p>n n n n</p> <p>c c o o b b</p> <p>c c e e e e</p>		
3 caña	4 daña	5 ñame
6 rifo	7 tifo	8 foto
9 daño	10 niño	11 puño
12 pa_____	13 to_____	14 mo_____
15 ra_____	16 ma_____	17 lo_____
<p>18</p> <p>1. Susana nada.</p> <p>2. La rana nada.</p> <p>3. Pepe nada poco.</p> <p>4. El sapo nada poco.</p>		

RADECO
Educational Level 2nd

Lesson 77
Section Mathematics

Date of Production 5/8/84
Date of Broadcast 5/14/84

Pp.	Units	Segments	Type	Key	Description	No. of Segments	Unit Time	Total Time
		1		MO4	Oral Multiplication		1:05	1:05
		2		SO6	Oral Subtraction		1:08	2:13
		3		RE	Rule-rule		1:00	3:13
		4		NM4	Telling which number is smaller		1:18	4:31
		5		SV5	Vertical Subtraction		5:38	10:09
		6		MO2	Oral Multiplication Blackboard		2:53	13:03
		7		FR3	Fractions		7:00	20:03
		8		RE	Relaxation		1:00	21:03
		9			National anthem		1:40	22:43
					Conclusion-farewell		:30	23:13

CAST

() Ricardo () _____
 () Lucia () _____
 () Juan () _____
 () Julia () _____
 () Chorus () _____

Technical approval _____

Executive approval _____

PRODUCTION TIME 24:14

NEW TOPICS

Language _____

No. of worksheets: Lang. _____
 Math. _____

No. of guidesheets _____

WRITER: Máximo Feliz

DATE:

KEY: MO4

GRADE: 2nd

TOPICS:

LESSON: 77

TYPE: () I () M () R

UNIT: Math

SEGMENT:

PAGE: 1

OF: 19

Segment Time: 1:05

Segment: 1 of: 6

Page: 1 of: 2

1. MATH MUSIC 05
2. JUAN Students, this is the math class. Let's start with oral multiplication.
3. JULIA Let's start with the multiplication table of five.
One times five . . .
4. CHORUS Five.
5. JUAN Five.
6. JULIA Two times five . . .
7. CHORUS Ten.
8. JUAN Ten.
9. JULIA Three times five . . .
10. CHORUS Fifteen.
11. JUAN Fifteen.
12. JULIA Four times five . . .
13. CHORUS Twenty.
14. JUAN Twenty.
15. JULIA Five times five . . .
16. CHORUS Twenty-five.
17. JUAN Twenty-five.

WRITER: Máximo Feliz

DATE:

KEY: MO4

TOPICS:

TYPE: () I () M () R

GRADE: 2nd

LESSON: 77

UNIT: Math

PAGE: 2

SEGMENT:

OF: 19

Segment Time: 1:05

Segment: 1 of: 6

Page: 2 of: 2

1. JULIA Let's go over what we learned.
One times five.
2. CHORUS Five.
3. JUAN Five.
4. JULIA Two times five.
5. CHORUS Ten.
6. JUAN Ten.
7. JULIA Three times five.
8. CHORUS Fifteen.
9. JUAN Fifteen.
10. JULIA Four times five.
11. CHORUS Twenty.
12. JUAN Twenty.
13. JULIA Five times five.
14. CHORUS Twenty-five.
15. JUAN Twenty-five. We are finished with oral multiplication.

WRITER: Máximo Feliz
KEY: S06
TOPICS:
TYPE: () I () M () R

DATE:

GRADE: 2nd
LESSON: 77
UNIT: Math
PAGE: 3

SEGMENT:
OF: 19

Segment Time: 1:08

Segment: 2 of: 6

Page: 1 of: 2

1. JUAN Now, be ready to answer oral subtractions.
Listen carefully in order not to make mistakes.
2. JULIA How much is six-hundred fifty-six minus fifty-six?
3. CHORUS Six-hundred.
4. JUAN Six-hundred.
5. JULIA And seven-hundred twenty minus twenty?
6. CHORUS Seven-hundred.
7. JUAN Seven-hundred.
8. JULIA And three-hundred ninety-five minus ninety-five?
9. CHORUS Three-hundred.
10. JUAN Three-hundred.
11. JULIA And five-hundred thirty-eight minus thirty-eight?
12. CHORUS Five-hundred.
13. JUAN Five-hundred.
14. JULIA And two-hundred eighty minus eighty?
15. CHORUS Two-hundred.
16. JUAN Two-hundred.

WRITER: Máximo Feliz
KEY: S06
TOPICS:
TYPE: () I () M () R

DATE:

RADECO

GRADE: 2nd
LESSON: 77
UNIT: Math
PAGE: 4

SEGMENT:
OF: 19

Segment Time: 1:08
Segment: 2 of: 6
Page: 2 of: 2

1. JULIA We are finished with the exercises of oral subtraction.
XYLO

WRITER: Máximo Feliz

DATE:

KEY: NM4

GRADE: 2nd

TOPICS:

LESSON: 77

TYPE: () I () M () R

UNIT: Math

SEGMENT:

PAGE: 5

OF: 19

Segment Time: 1:18

Segment: 3

of: 6

Page: 1

of: 2

-
1. JULIA Well...well, students, now we will go ahead with our work. Let's go on with the oral exercises.
- Pay attention, so you can tell which number is smaller.
2. JUAN Which number is smaller: four or sixteen?
3. CHORUS Four.
4. JULIA Four.
5. JUAN Which is smaller: forty-two or eighty-nine?
6. CHORUS Forty-two.
7. JULIA Forty-two.
8. JUAN Which is smaller: forty or forty-one?
9. CHORUS Forty.
10. JULIA Forty.
11. JUAN Which is smaller: thirty-six or sixty-nine?
12. CHORUS Thirty-six.
13. JULIA Thirty-six.
14. JUAN Which number is smaller: fifteen, or ninety-nine?
15. CHORUS Fifteen.
16. JULIA Fifteen.

WRITER: Máximo Feliz
KEY: NM4
TOPICS:
TYPE: () I () M () R

DATE:

RADECO

GRADE: 2nd
LESSON: 77
UNIT: Math
PAGE: 6

SEGMENT:
OF: 19

Segment Time: 1:18
Segment: 3 of: 6
Page: 2 of: 2

1. JUAN Which number is smaller: eighty or thirty?
2. CHORUS Thirty.
3. JULIA Thirty. We are now finished with the exercises about which is the smaller number.

SP. EFFECTS XYLO

WRITER: Máximo Feliz
KEY: SV5
TOPICS:
TYPE: () I () M () R

DATE:

RADECO

GRADE: 2nd
LESSON: 77
UNIT: Math
PAGE: 7

SEGMENT: 4
OF: 19

Segment Time: 5:38
Segment: 4 of: 6
Page: 1 of: 4

1. JUAN Students, we are going to solve the subtractions that you copied from part a on the blackboard. Be ready with your paper.
2. SP. EFF. XYLO
3. JULIA Read the first exercise.
4. CHORUS Forty-five minus forty-one.
5. JUAN First, let us subtract five minus one. How much is it?
6. CHORUS Four.
7. JULIA Four; write this number under the number one.
8. P:4
9. JUAN Now, how much is four minus four?
10. CHORUS Zero.
11. JULIA Zero. Write this number.
12. P:4
13. JUAN Tell me, what numbers did you write under the line?
14. CHORUS Zero, four.

WRITER: Máximo Feliz
KEY: SV5
TOPICS: Vertical Subtractions
TYPE: () I () M () R

DATE:

RADECO

GRADE: 2nd
LESSON: 77
UNIT: Math
PAGE: 8

SEGMENT: 4
OF: 19

Segment Time: 5:38
Segment: 4 of: 6
Page: 2 of: 4

1. JULIA Zero, four. That means zero tens and four units. Now, try to think: if we had to draw zero tens, how many triangles would we draw?
2. CHORUS None.
3. JUAN True. We wouldn't draw any triangles because there are zero tens.

Then, zero, four, can be represented with zero triangles and four marbles. How many marbles are there in total?
4. CHORUS Four.
5. JULIA Four. Then, zero, four, is read as four. Look at the answer again. How do you read it?
6. CHORUS Four.
7. JUAN Four.
8. JULIA Let's see the next exercise, the one that says thirteen minus twelve. Let's start with three minus two. How much is it?
9. CHORUS One.
10. JUAN One. Write that.
11. P:4
12. JULIA What do we have to subtract now?
13. CHORUS One minus one.
14. JUAN One minus one. How much is it?
15. CHORUS Zero.
16. JULIA Zero. Write that.

WRITER: Máximo Feliz
KEY: SV5
TOPICS: Vertical Subtractions
TYPE: () I () M () R

DATE:

RADECO

GRADE: 2nd
LESSON: 77
UNIT: Math
PAGE: 9

SEGMENT: 4
OF: 19

Segment Time: 5:38

Segment: 4 of: 6

Page: 3 of: 4

1. P:4
2. JUAN Look at the complete answer. Did you write zero, one?
3. CHORUS Yes, we wrote that.
4. JULIA And...how does it read?
5. CHORUS As one.
6. JUAN One. Zero followed by one reads as--one.
Students look at the following exercise.
Read it.
7. CHORUS Ninety-nine minus ninety-eight.
8. JULIA Let's start with nine minus eight. How much is it?
9. CHORUS One.
10. JUAN One. Write that.
11. P:4
12. JUAN And now, what do we have to subtract?
13. CHORUS Nine minus nine.
14. JULIA Nine minus nine. How much is it?
15. CHORUS Zero.
16. JUAN Zero. Write that.
17. P:4
18. JULIA Look at the complete answer. Did you write zero, one?
19. CHORUS Yes, we did.
20. JUAN Zero, one, how do you read it?

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WRITER: Máximo Feliz
 KEY: SV5
 TOPICS: Vertical Subtractions
 TYPE: () I () M () R

DATE:

GRADE: 2nd
 LESSON: 77
 UNIT: Math
 PAGE: 10

SEGMENT: 4
 OF: 19

Segment Time: 5:38

Segment: 4 of: 6
 Page: 4 of: 4

1. CHORUS One.
2. JULIA One. The answer is zero tens and one unit; the total is one.
3. JUAN Look at the following exercise. Read it.
4. CHORUS Twenty-six minus twenty.
5. RAMON Try to solve the exercise by yourselves.
6. M:10
7. RAMON Look at the answer. Read it.
8. CHORUS Six.
9. RAMON Six. Zero, six, reads as six.
10. JULIA Now, look at the following exercise. Read it.
11. CHORUS Fifty-four minus fifty-three.
12. JUAN Try to solve it by yourselves.
13. M:10
14. JUAN Look at the answer. Read it.
15. CHORUS One.
16. JULIA One. Write this number. We are finished with the exercises on subtraction.
17. SP. EFFECTS XYLO

WRITER: Máximo Féliz
KEY: MO2
TOPICS: Oral Multiplication
TYPE: () I () M () R

DATE:

RADECO

GRADE: 2nd
LESSON: 77
UNIT: Math
PAGE: 11

SEGMENT: 5
OF: 19

Segment Time: 2:53
Segment: 5 of: 6
Page: 1 of: 3

1. JUAN Students, we are going to do multiplication.
Put away your paper and pencils.
2. SP. EFFECTS XYLO
3. JUAN Look at the blackboard. Look at part b. In that part,
find the letter d.
4. JULIA There is a design there. It's an arrangement of
triangles. Tell me, how many rows of triangles are there?
5. CHORUS Three.
6. JUAN Three.. And, how many are there in each triangle?
7. CHORUS Ten.
8. JULIA Yes, there are ten units. Then, in the first row, how many
are there in total?
9. CHORUS Thirty.
10. JUAN Thirty. And in the second row?
11. CHORUS Thirty.
12. JULIA Thirty. And in the third row?
13. CHORUS Thirty.
14. JUAN Thirty. There are three rows of thirty. That is three
times thirty. If you want to know how much is three times
thirty, count by tens everything you see in the
arrangement.

WRITER: Máximo Féliz
 KEY: MO2
 TOPICS: Oral Multiplication
 TYPE: () I () M () R

DATE:

GRADE: 2nd
 LESSON: 77
 UNIT: Math
 PAGE: 12

SEGMENT: 5
 OF: 19

 Segment Time: 2:53

Segment: 5 of: 6
 Page: 2 of: 3

1. M:9
2. How much?
3. CHORUS Ninety.
4. JULIA Ninety. How much is thirty times three?
5. CHORUS Ninety.
6. JUAN Ninety. Now, look at the other design, under letter d. It is an arrangement of...how many times three?
7. CHORUS Twenty.
8. JULIA Yes, it is twenty times three. If you want to know how much it is, you have to count all you see in the arrangement.
9. M:6
10. JUAN How much?
11. CHORUS Sixty. So, how much is twenty times three?
12. CHORUS Sixty.
13. JUAN Sixty. Look at the arrangement under E. It is....how many times two?
14. CHORUS Twenty.

WRITER: Máximo Feliz
 KEY: MO2
 TOPICS: Oral Multiplication
 TYPE: () I () M () R

DATE:

GRADE: 2nd

LESSON: 77

UNIT: Math

PAGE: 13

SEGMENT: 5

OF: 19

Segment Time: 2:53

Segment: 5 of: 6

Page: 3 of: 3

1. JULIA Yes, twenty times two. If you want to know how much it is, you have to count everything you see in the arrangement.
2. P:4
3. How much?
4. CHORUS Forty?
5. JUAN Forty. How much is twenty times two?
6. CHORUS Forty.
7. JULIA Forty. Look at the last arrangement under the letter E. How much is it?
8. CHORUS Forty times two?
9. JULIA Yes, forty times two. How much is it?
10. M:8
11. JULIA How much?
12. CHORUS Eighty.
13. JUAN Eighty. And how much is forty times two?
14. CHORUS Eighty.
15. JULIA Yes, forty times two, eighty. We are finished with multiplication.
16. MUSICAL TRANSITION SEGMENT: 01

WRITER: Máximo Feliz
KEY: FR3
TOPICS: Fractions
TYPE: () I () M () R

DATE:

GRADE: 2nd
LESSON: 77
UNIT: Math
PAGE: 14

SEGMENT:
OF: 19

Segment Time: 7:00
Segment: 6 of: 6
Page: 1 of: 6

- 1. JULIA Students, look at the first row under c on the blackboard. There are rectangles with the letters d, e, and f. They are divided into numbered pieces.
- 2. JUAN Look at the first rectangle. You know it already. Tell, me, is piece number one a half or a third?
- 3. CHORUS A half.
- 4. JUAN A half. Then, how many halves are there in that figure?
- 5. CHORUS Two.
- 6. JUAN Yes, it has two halves.
- 7. JULIA Now, look at the next rectangle. Tell me, in how many pieces is it divided?
- 8. CHORUS Into three pieces.
- 9. JUAN Yes, it is divided into three pieces. Look at piece number one and piece number two; are they equal in size?

WRITER: Máximo Feliz
KEY: FR3
TOPICS: Fractions
TYPE: () I () M () R

DATE:

RADECO

GRADE: 2nd
LESSON: 77
UNIT: Math
PAGE: 15

SEGMENT:
OF: 19

Segment Time: 7:00
Segment: 6 of: 6
Page: 2 of: 6

1. CHORUS Yes, they are the same size.
2. JULIA Yes, they are equal in size. And what about piece two compared with piece three?
3. CHORUS They are equal in size.
4. JUAN They are also the same size. The three pieces are the same size. This figure is divided into thirds. Piece number one is one third. What is piece number two?
5. CHORUS It is one third.
6. JULIA One third. And what part is piece number three?
7. CHORUS It is one third.
8. JULIA It is also one third. Then, tell me, this rectangle, how many thirds does it have?
9. CHORUS Three.
10. JUAN Yes, it has three thirds.
11. JULIA Now, look at the next rectangle. Tell me, in how many pieces is it divided?

WRITER: Máximo Feliz

DATE:

KEY: FR3

GRADE: 2nd

TOPICS: Fractions

LESSON: 77

TYPE: () I () M () R

UNIT: Math

SEGMENT:

PAGE: 16

OF: 19

Segment Time: 7:00

Segment: 6 of: 6

Page: 3 of: 6

1. CHORUS It's divided into three pieces.
2. JULIA Look at the size of piece one and piece two. Tell me, do they look the same?
3. CHORUS No, they don't.
4. JUAN No, they are not the same. Then, this figure is not divided into thirds. Let's look at the other row. These are circles with the letters g, h, i. Look at the first one. Into how many pieces is it divided?
5. CHORUS It's divided into three pieces.
6. JULIA Three pieces. Look at piece one and two. What do you notice about the size?
7. CHORUS They are the same size.
8. JULIA Yes, they are equal in size. Now, look at number two and number three. What about the size?
9. CHORUS They are the same size.
10. JULIA They are also equal in size. Then, are the three pieces the same size?

WRITER: Máximo Feliz
KEY: FR3
TOPICS: Fractions
TYPE: () I () M () R

DATE:

GRADE: 2nd
LESSON: 77
UNIT: Math
PAGE: 17

SEGMENT:
OF: 19

Segment Time: 7:00

Segment: 6 of: 6

Page: 4 of: 6

1. CHORUS Yes.
2. JUAN It's true. The three pieces are the same size. That's why we say that the figure is divided into thirds. How is this figure divided?
3. CHORUS Into thirds.
4. JULIA Yes, this figure is divided into thirds. Piece number one is one third. Tell me, what is piece number two?
5. CHORUS One third.
6. JULIA One third. Then, that circle, how many thirds does it have?
7. CHORUS Three.
8. JUAN Yes, it has three thirds.
9. JULIA Look now at the other circle. Into how many pieces is it divided?
10. CHORUS Into three pieces.
11. JULIA Observe the sizes of piece one and piece two. Are they the same size?
12. CHORUS No, they are not.

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WRITER: Máximo Feliz
KEY: FR3
TOPICS: Fractions
TYPE: () I () M () R

DATE:

RADECO

GRADE: 2nd
LESSON: 77
UNIT: Math
PAGE: 18

SEGMENT:
OF: 19

Segment Time: 7:00

Segment: 6 of: 6
Page: 5 of: 6

1. JUAN No, those pieces are not the same size. Can you call them thirds?
2. CHORUS No, we cannot.
3. JULIA No, in order to be thirds there should be three pieces of the same size.
4. JUAN Let's look at the last circle. Yu have seen it already. Look at piece one, is it one third or one fourth?
5. CHORUS One fourth.
6. JULIA Yes, you are right. It is one fourth. And piece two, what is it?
7. CHORUS One fourth.
8. JUAN One fourth. And piece three, what is it?
9. CHORUS One fourth.
10. JULIA And piece four?
11. CHORUS One fourth.
12. JUAN One fourth. So then, this circle, how many fourths does it have?

WRITER: Máximo Feliz
KEY: FR3
TOPICS: Fractions
TYPE: () I () M () R

DATE:

RADECO

GRADE: 2nd
LESSON: 77
UNIT: Math
PAGE: 19

SEGMENT:
OF: 19

Segment Time: 7:00
Segment: 6 of: 6
Page: 6 of: 6

1. CHORUS Four.
2. JULIA Yes, it has four fourths. We are finished working with fractions and the math lesson is over.
3. MATHEMATICS THEME
4. SP. EFFECTS: DRUMS
5. PHYSICAL EXERCISE
6. NATIONAL ANTHEM
7. FAREWELL

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Bosquejo de Lección de Matemática

Grado: 2do.

Adaptado: Máximo Feliz

Lección No. 77

1	MO4	5x1, 5x2, 5x3, 5x4, 5x5,	Oral												
2	S06	280-80, 656-56, 720-20, 395-95, 538-38,	Oral												
3	NM4	(15,19), (30,80) (4,16), (42,89), 40,41), (36,69)	Oral												
a) 4	SV5	<table style="margin: auto; border-collapse: collapse;"> <tr> <td style="padding: 0 10px;">45</td> <td style="padding: 0 10px;">13</td> <td style="padding: 0 10px;">99</td> <td style="padding: 0 10px;">26</td> <td style="padding: 0 10px;">54</td> </tr> <tr> <td style="padding: 0 10px;">- 41</td> <td style="padding: 0 10px;">-12</td> <td style="padding: 0 10px;">-98</td> <td style="padding: 0 10px;">- 20</td> <td style="padding: 0 10px;">-53</td> </tr> </table>	45	13	99	26	54	- 41	-12	-98	- 20	-53	Cuaderno Pizarra		
45	13	99	26	54											
- 41	-12	-98	- 20	-53											
b) 5	MO2	multiplicación. Dibujos en la pizarra para explicar	Pizarra Oral												
c) 6	FR3	Fraciones	Oral Pizarra												

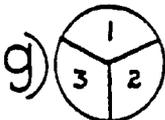
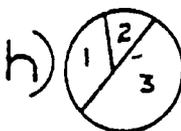
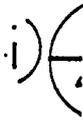
LECCION 77

Guía del Auxiliar

Antes de la transmisión:

Copie las partes a, b y c en la pizarra. Que los iantes solamente copien la parte a.

Antes de la transmisión la pizarra debe estar así

<p>(a) copiar</p> <table style="width: 100%; text-align: center;"> <tr> <td>$\begin{array}{r} -45 \\ -41 \\ \hline 04 \end{array}$</td> <td>$\begin{array}{r} -13 \\ -12 \\ \hline 01 \end{array}$</td> <td>$\begin{array}{r} -99 \\ -98 \\ \hline 01 \end{array}$</td> </tr> <tr> <td>$\begin{array}{r} -26 \\ -20 \\ \hline 06 \end{array}$</td> <td>$\begin{array}{r} -54 \\ -53 \\ \hline 01 \end{array}$</td> <td></td> </tr> </table>	$\begin{array}{r} -45 \\ -41 \\ \hline 04 \end{array}$	$\begin{array}{r} -13 \\ -12 \\ \hline 01 \end{array}$	$\begin{array}{r} -99 \\ -98 \\ \hline 01 \end{array}$	$\begin{array}{r} -26 \\ -20 \\ \hline 06 \end{array}$	$\begin{array}{r} -54 \\ -53 \\ \hline 01 \end{array}$		<p>(b) no copiar</p> <p>d) $\begin{array}{ccc} \nabla & \nabla & \nabla \\ \nabla & \nabla & \nabla \\ \nabla & \nabla & \nabla \end{array}$ ∇</p> <p>e) $\begin{array}{cc} \nabla & \nabla \\ \nabla & \nabla \end{array}$ $\begin{array}{cc} \nabla & \nabla \\ \nabla & \nabla \end{array}$</p>
$\begin{array}{r} -45 \\ -41 \\ \hline 04 \end{array}$	$\begin{array}{r} -13 \\ -12 \\ \hline 01 \end{array}$	$\begin{array}{r} -99 \\ -98 \\ \hline 01 \end{array}$					
$\begin{array}{r} -26 \\ -20 \\ \hline 06 \end{array}$	$\begin{array}{r} -54 \\ -53 \\ \hline 01 \end{array}$						
<p>(c) no copiar</p> <p>d) <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td style="padding: 5px;">1</td><td style="padding: 5px;">2</td></tr></table></p> <p>e) <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td style="padding: 5px;">1</td><td style="padding: 5px;">2</td><td style="padding: 5px;">3</td></tr></table></p> <p>f) <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td style="padding: 5px;">1</td></tr></table></p> <p>g) </p> <p>h) </p> <p>i) </p>		1	2	1	2	3	1
1	2						
1	2	3					
1							

Después de la transmisión:

Siga con actividades de medidas fáciles de conseguir. Utilice la regla para medir: el ancho y el alto de una ventana, el ancho de una ventana, indicarles cuántas veces estendida la regla en el largo de la pizarra, etc..