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FINAL REPORT:

BOLIVIA RADIO LEARNING PROJECT (8/86 - 9/91)
INTERACTIVE RADIO LEARNING (9/91 - 8/93)

SUBMITTED BY:

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In 1986, Fe y Alegria (FyA), a Bolivian non-governmental organization (NGO), began testing the feasibility of using a powerful instructional methodology called "interactive radio" to improve the quality of primary-school instruction in mathematics. Technical assistance for the pilot was provided through the Education Development Center (EDC) of Newton, Massachusetts, and funding was contributed by the United States Agency for International Development's overseas mission in Bolivia (USAID/B). Throughout the following year, feasibility studies, needs assessments, and pilot implementation activities challenged the appropriateness of the intervention and Fe y Alegria's role as the lead institution in a country-wide initiative. The dramatic improvement in student learning produced by the initial pilot, however, confirmed both children's readiness to "take off" with the radio instruction and FyA's intellectual and institutional capability of continuing management at the national level. Today, six years after FyA's initial pilot, Bolivia's Ministry of Education and Culture (MEC) has assumed primary responsibility for the Project. More than 300,000 primary-school children have learned mathematics and health through Interactive Radio Learning (IRL) and its predecessor Radio Learning Project (RLP). Radio Math has achieved national recognition as "the official mathematics program" of Bolivia.

This report reviews the state of interactive-radio education in Bolivia. Section I presents the interactive-radio methodology. Sections II and III review key activities undertaken by RLP/IRL in chronological fashion and summarize major accomplishments to date. Sections IV, V, and VI discuss IRL outputs, management, and financing during 1994, the final year of EDC's technical assistance (TA) contract. Section VII closes the main body of the report with some reflections on IRL institutionalization. Major technical and financial documents appended to the body of the report include: Annex 1, Evaluation Summary; Annex 2, Detailed Work Plan 1993, 1994; Annex 3, Scopes of Work; and Annex 4, Revised Budget 1991 - 1995.

I. INTERACTIVE RADIO - METHOD AND EVALUATION.

In 1986, Bolivia became the first country in South America to use interactive radio to improve the quality of primary-school instruction. One of the reasons that this methodology has been so successful in Bolivia is because of the rigorous nature of its instructional design which combines the power of popular media with the psychology of cognitive learning and the science of formative evaluation. Casual observation of Bolivia's interactive-radio classes will most certainly leave the viewer with the impression that the students and the "radio teacher" are engaging in a lively two way conversation. Further inquiry, however, will lead one to discover that interactive-radio is actually a tightly sequenced one-way broadcast which combines the strengths of programmed learning with the familiarity of an old technology--the radio. The five driving principals of interactive radio are: active student participation, sequenced learning, distributed practice, immediate reinforcement, rigorous evaluation and monitoring.

Active Student Participation

Interactive radio is based upon the principal that children learn best when they are actively involved in their own education. On the average, interactive-radio children respond to questions and activities posed by the "radio teacher" every 20 seconds. The nature of that "interaction", however, is driven by the creative energy of the scriptwriter. To date, more than 550 Interactive Radio Math and Health lessons have been validated in Bolivia. The programs, which average 25 minutes in length; each contain songs, games, physical exercises, drill and practice, writing, questions, problem solving, object manipulation, exploration, drawing, role plays, demonstrations, and so on. In this manner, a child's sense of participating in and contributing to their own learning is stimulated by the pace of instruction, rather than dampened through routine. rote practice.

Segmented Learning

Another instructional principal at the cornerstone of the interactive radio methodology is "segmented learning". Cognitive science has demonstrated that young children (and in the case of Bolivia, malnourished children), lack the ability to decode large blocks of information. They learn best when challenged by brief, varied doses of instruction. Because of this, each interactive-radio program presents a menu of five or six brief learning segments, and several entertainment segments to stimulate the body as well as the intellect. The average length of each interactive radio segment is about three minutes. In this way, IRL's mix of instruction and entertainment facilitates children's ability to keep-up with the introduction of new ideas.

Distributed Practice

A third element of the interactive-radio instructional design is that of "distributed practice". In order to maintain a specified level of mastery, students must have ample opportunity to apply both new and old skills. As a result, interactive radio programs are

crafted around a blend of "review and practice" which integrate the practice of mastered skills into the learning of new concepts.

Immediate Reinforcement

All interactive radio programs apply the principle of "immediate reinforcement" or positive modeling to enrich the learning process. Every time the radio teacher presents a question, there follows a precisely timed pause for the students to respond before the radio teacher provides the correct answer. If, by chance, the student responded incorrectly, positive modeling enables the child to reassess their answer and correct their error. Without the immediacy of positive reinforcement, simple errors can become compounded and lead to difficulty in the mastery of more complex algorithms. By the same token, children who answer a question correctly have a right to be rewarded through positive reinforcement. In this way, interactive radio contributes to development of students' sense of achievement and well-being.

Evaluation and Monitoring

IRL has developed an extensive formative evaluation strategy to assess the broadcast quality and content of each lesson. In theory, lessons are pretested to provide the curriculum team with guidelines for adjusting the script prior to the final recording. However in practice, IRL/RLP has not always had the luxury of sufficient time to complete this preliminary step. Once the lesson is produced, a cassette is sent to all participating radio stations, and the actual broadcast is observed by trained supervisors in schools throughout the country. The observations, which are faxed into the central office on a daily basis, provide the curriculum team with valuable insight into student comprehension and teacher management of the methodology. This information, in turn, is used to modify the content of future lessons and to revise the original production at the end of the year.

Short tests are administered on a biweekly basis in mathematics and every six weeks in health to develop a baseline of children's understanding of those key concepts to be introduced in upcoming weeks, to assess children's comprehension of concepts taught over the past evaluation period, and to test children's retention of messages presented over the past three months. The results of these tests are also used to fine-tune the master lesson plan.

Both mathematics and health employ a summative evaluation strategy based upon longitudinal assessment. In mathematics, second-grade children who entered IRL in 1988 were traced through the completion of fifth grade, 1991; and in health, third-grade children who joined IRL in 1993 will be traced through the close of the 1994 school year. In addition, the MEC is evaluating the impact of the revised mathematics programs in La Paz.[1] Significant improvements in student learning of mathematics using

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[1] Original 2nd grade evaluation was conducted in 1988 in the urban centers of Cochabamba, Santa Cruz, and Trinidad, and in rural Kami.

IRL have been demonstrated at every grade level (Annex 1); but results of the summative evaluation of the health intervention will not be available until early 1994.

In order to determine whether the health concepts learned in school result in positive attitudinal and behavioral changes, local staff are undergoing training in qualitative research methods. Extensive baseline data has been collected reflecting children's understanding and application of key content; and a strategy for a tracer study assessing changes in practices at both the individual and household levels is now being implemented. Training in qualitative research will continue over the course of the next year using an additional 1.5 PM of international TA.

II. INTERACTIVE RADIO INSTRUCTION IN BOLIVIA - A CHRONOLOGY OF EVENTS.

Radio Learning Project: 1986 - 1991.

1986

- Comisión Episcopal de Educación (CEE) reviews the state of Bolivian primary education and recommends that mathematics be improved at all levels. Interactive radio is identified as a potential intervention to address this need.

- At the invitation of USAID/B, EDC conducts a feasibility study to assess the potential of using IRI in Bolivian public schools.

- FyA and EDC receive an USAID/B grant to pilot the use of interactive radio over a three-month period.

1987

- Training of FyA staff participating in second-grade pilot.

- Pilot implemented in FyA schools. Radio intervention significantly increases children's understanding (64% pretest, 90% posttest) of basic concepts taught.[2]

- FyA and EDC collaborate on the design of Radio Learning Project.

- Pretest second-grade control group to establish baseline for future curriculum development activities.

1988

- FyA and EDC contract with PL 480 and USAID/B to provide local and international technical services under RLP. The objectives of the project include: (1) develop and validate a comprehensive interactive-radio mathematics curriculum for lower-primary school; and (2) pilot a first-grade radio-based spanish-language program.

- RLP develops 130 half-hour interactive-radio lessons for daily transmission of second grade mathematics. The series is validated in the Departments of Santa Cruz, Cochabamba, and the Beni. Summative evaluation supports the impact of the radio intervention. (Posttest mean scores: 46% control, 66% experimental.).[3]

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[2] Fryer M (1987). ***Bolivia Mathematics Pilot.*** Radio Learning Project Report, Education Development Center, Newton, MA.

[3] Fryer M (1989). ***First Year Summative Evaluation: Second Grade Mathematics, Bolivia 1987-1988.*** Radio Learning Project Monograph. Washington, D.C.: Agency for International Development.

- Teachers request that RLP continue Radio Math through the last year of primary school, fifth grade--even at the cost of sacrificing language to do so. AID modifies RLP's SOW.

1989

- 2nd grade math series is revised using formative and summative evaluation results. New version is broadcast.

- 130 3rd grade Radio Math programs produced and validated using lapped-year design. In addition, cohorts from the Santa Cruz and Cochabamba regions were selected for inclusion in a four-year tracer study. Experimental cohort continues to outscore the control group by nearly a half. (Grade 3 year-end mean scores: 37% control, 55% experimental.) [4] Sucre and Tarija join RLP bringing the total number of participating Departments to five.

- In response to teachers' requests, a three month pilot is undertaken to test the potential of teaching set-theory by interactive-radio. Summative results do not substantiate significant learning gains in students. RLP stands by original decision to include modern math as a teacher-led post-broadcast activity rather than as a "radio" subject.

- Six month pilot initiated to test the feasibility of applying interactive-radio to the teaching of preventive-health care. Funding for this activity was received through a separate USAID/B grant. Summative evaluation indicates highly significant levels of student comprehension as well as implied practice. This pilot is the first effort to teach health by radio anywhere in the world. The results were published in an international journal.[5]

1990

- 3rd grade math series revised using formative and summative evaluation data. The revised series is broadcast in all participating Departments.

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[4] Jamison DT, Fryer M, Barron de Luna B, Oros Mendez E (1991). ***El Proyecto de Educacion por Radio en Bolivia: Evaluacion de Costo-Efectividad.*** Paper presented at the Comparative International Education Society Annual Conference, Pittsburgh, PA.

[5] Fryer M (1991). ***Health Education through Interactive Radio: A Child-to-Child Project in Bolivia.*** Health Education Quarterly, Vol. 18(1), Spring 1991. New York: John Wiley & Sons.

- The 4th grade series, consisting of 135 lessons, is validated using year-long formative, summative, and longitudinal methodologies. Results produce outstanding gains. Experimental cohort's scores nearly double those of children taught by traditional methods.[6] This is the first successful effort of any country to teach upper-primary school mathematics by interactive radio.

- The Ministry of Education and Culture signs a Memorandum of Understanding with RLP to broadcast the 2nd, 3rd, and 4th grade programs in six Departments, including Pando. The MEC conducts a separate assessment of their own institutional capability to integrate and supervise interactive radio as part of the official Bolivian curriculum.

- An external cost-effectiveness study of RLP concludes that the annual recurrent cost of using interactive-radio is just $0.81 per student, and the incremental gain in learning equal to 1 1/2 times that of traditional instruction.[7]

1991

- Bolivia becomes the first country in the world to develop a fifth-grade mathematics curriculum using interactive radio.

- The complete series of 135 lessons is validated through a regimen of bi-weekly testing and through summative and formative measures. Summative evaluation data indicate that radio students have greater dominion of basic mathematics principles than non-radio students. (Standardized posttest mean scores: 40% control, 55% experimental). In addition, the project demonstrated that children who had the benefit of all four years of radio instruction have an even greater advantage in mathematics than children who have three years or less (71%).[8]

- Formative and summative evaluation results used to revise the 4th grade math series. The revised programs are broadcast in six Departments along with the updated 2nd and 3rd grade curricula, and the new fifth-grade programs.

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[6] See Annex 1.

[7] Jamison DT, Fryer M, Barron de Luna B, Oros Mendez E (1991)

[8] See Annex 1.

Interactive Radio Learning: 1991 - 1996.

1991

- USAID, EDC, the MEC, and the Ministry of Health (MOH) sign a bilateral agreement to implement Interactive Radio Learning (IRL). The objectives of this landmark initiative are to: (1) integrate Radio Math into the Bolivian curriculum, and extend its diffusion to all 9 Bolivian Departments; (2) develop and pilot a complete "Radio Health" curriculum for children in grades 3 - 5; and (3) strengthen the MEC's ability to manage continued implementation of IRL upon termination of USAID/B funding.

- MEC assumes national supervision of IRL and passes a Ministerial Resolution declaring interactive radio the "official mathematics program" of Bolivia.

- La Paz becomes the 7th Department to join IRL. All four grades of validated mathematics curriculum is broadcast.

- A KAP survey is conducted to establish a baseline for Radio Health curriculum development. A pilot module on cholera is broadcast and evaluated in the Departments of La Paz, Cochabamba, and Santa Cruz. Results of the evaluation confirm the power of using interactive radio to teach basic health concepts and to motivate behavior change.[9]

1993

- The complete mathematics curriculum is disseminated throughout all 9 Departments in Bolivia.

- The complete 3rd and 4th grade Radio Health series is produced and, as of this writing, under validation. Demand for Radio Health is tenfold more than anticipated!

- Michelle Fryer resigns as Chief of Party. IRL's management plan is restructured.

- An international congress promoting Bolivia's pioneering efforts in mathematics and health will be held in Santa Cruz, October 1993.

1994 - 1996

- MEC assumes full implementation responsibility for IRL. Project is integrated into the National Education Reform Act.

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[9] See Annex 1.

III. RLP/IRL SUMMARY OUTPUTS: 1986 - 1993

In 1993, Interactive Radio Learning reached several milestones in its development. These achievements include...

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QUANTITATIVE INDICATOR/OUTPUT	EOP PLANNED	ACHIEVED TO DATE[1]	% COMPLETE
RADIO MATH USAGE IN ALL 9 DEPARTMENTS	9 DPTOS	9 DPTOS	100%
RADIO HEALTH CURRICULUM VALIDATED IN 20 SCHOOLS IN 3 DEPARTMENTS	3 DPTOS 20 SCHLS	4 DPTOS 200 SCHLS	133% 1000%
NATIONAL INFRASTRUCTURE OF TRAINED TEACHERS, SCHOOL DIRECTORS, AND SUPERVISORS	7,500 TRAINED	8,000 TRAINED	107%
MATH STUDENTS (CUMULATIVE)	150,000	300,000	207%
HEALTH STUDENTS (CUMULATIVE)	50,000	60,000	120%
TEACHERS GUIDES - MATH	4 GRADES	4 GRADES	100%
TEACHERS GUIDES - HEALTH	3 GRADES	2 GRADES	66%
MATH LESSONS PRODUCED/REVISED	540	540	100%
HEALTH LESSONS DEVELOPED			
CHOLERA PILOT - 1992	10	10	100%
GRADE 3 - 1993	30	30	100%
GRADE 4 - 1993	30	30	100%
GRADE 5 - 1994	30		0%
CUENTOS FOR SCHOOL BREAK	20	11	55%
BILINGUAL PILOT - 1994	10		0%
BOLIVIAN TECHNICIANS TRAINED	20	40	200%
PROMOTIONAL VIDEO TAPES	5	1	20%

[1] ESTIMATE, SUBJECT TO MODIFICATION.

IV. PLANNED OUTPUTS: FY94

In terms of the EOP Indicators and Outputs proposed by the Mission to assess IRL progress, major activities to be concluded during FY94 include:

Radio Health: Develop and Validate Fifth-Grade Curriculum and Corresponding Teachers' Guide. (August 1993 -December 1994)

Ann Fitzgerald, IRL's Health Educator, is presently working with PARI's curriculum team to identify content for the fifth-grade curriculum. Articulation of the corresponding master plan will follow. Both tasks should be complete by October 1993, and actual script writing will follow, beginning November. If the curriculum teams are able to maintain the rhythm that they have established in developing the 3rd and 4th grade series this year (20 weeks per team per series), development of the fifth-grade program will take one team through March, 1994. At the same time, the second team will engineer the revision of the 3rd and 4th grade curricula now being piloted. Validation of the newly developed fifth-grade curriculum and of the revised third and fourth grade curricula will be ongoing throughout the 1994 school year.

Radio Health: Community Application. (March 1994 - October 1994)

In response to parents' interest in Radio Health, EDC's Chief of Party and key Project staff will collaborate informally with local PVOs working in community health to identify ways that community-health promoters might integrate the existing interactive-radio health curriculum into ongoing educational outreach activities for adults and out-of-school youth. The impact of the materials and the appropriateness of using children's programming for community education will be assessed by the collaborating PVOs using an evaluation instrument developed jointly with IRL.

Public Relations: Media Production. (September 1993 - April 1994)

Four videos of between 10 and 20 minutes each will be competed and subcontracted with a local production house. Two of the videos will be of broadcast quality and provide adult viewers (parents) with an overview of how interactive radio is used to teach mathematics and health in the classroom. They will also present suggestions on how parents can work with their children at home to reinforce the instructional messages. A third video will target international authorities in education and health and provide them with the information that they need to make policy-level decisions about national investments in interactive radio. The fourth video will be a customized training piece that can be used to reinforce role-play and provoke problem solving in future IRL teacher training events.

Radio Math: Revision of the Mathematics Teachers' Guides. (September 1993 -February 1994)

In February 1992, the first cohort to complete the four-year primary-school Radio Math curriculum entered intermediate school. Although IRL does not trace graduates

of the program, feedback gleaned from informal discussions with teachers indicates that while secondary teachers are generally satisfied with the level of mastery achieved by interactive-radio students in the four basic operations of addition, subtraction, multiplication, and division; but they are concerned about their dominion of modern math (set-theory). In addition, apprehension was also expressed about both interactive radio and traditional students' comprehension in the more abstract areas of geometry and fractions. As mentioned earlier in this report, modern math is not targeted by IRL for inclusion in the daily half-hour radio class. Neither is the more complex topic of geometry. Both of these subjects are left to the discretion of the classroom teacher for inclusion during the 15 minute post-broadcast session; and modules for presenting and intensifying these topics are included in IRL's teachers' guide. Fractions, on the otherhand, are taught largely through the radio.

For some time, IRL has been concerned about teachers' commitment to completing suggested post-broadcast activities. In the past, when IRL observers have asked teachers to identify obstacles to carrying-out the post-broadcast session, they have responded: (1) modern math is not a priority; (2) the (geometry) modules are hard to use; (3) their students respond so well to the radio that there is no need to engage in post-broadcast activities; and (4) they cannot put any more time into math given the competing priorities of a limited (four-hour) school day.

In response to the above, IRL plans to revise all math teachers' guides for reprint and distribution in 1994. Post-broadcast content will not be included in the teachers' guides as separate modules, but rather integrated into the guide's daily lesson plans. A master plan for modern math will now be developed and suggestions for specific teacher-led activities will also be included in the daily lesson plans. The existing master plan for fractions will be reviewed, as will the post-broadcast design for numeration and decimals.

Although revision of the Radio Mathematics teachers' guide was not originally included in EDC's TA budget, it is of priority importance and can be managed by an internal, no-cost adjustment. Furthermore, given the fact that these criticisms are beginning to surface in different Departments, we must take immediate action to improve the Ministry's position prior to start of the 1994 school year. If this is not done, what is now a minor flaw in the overall package could potentially undermine future MEC efforts to consolidate wide-spread teacher support for integrating IRL into the national education reform package. On the other hand, if we are able to strengthen teacher acceptance of IRL through the revision of existing print materials, then IRL will contribute to long-term MEC management.

NRECA Solar Energy Collaboration. (October 1992 - June 1994)

In FY 1993, with previous Mission approval, EDC and PER entered into a collaborative agreement with the National Rural Electrification Cooperative Association (NRECA) to assess the potential cost-effectiveness of using renewable energy to power classroom radios as an alternative to electricity and conventional throw-away batteries. Under the terms of the signed Memorandum of Understanding, NRECA is responsible

for the design, procurement, and installation of an appropriate solar-charged system; and IRL is responsible for monitoring usage of the installed panels. Unfortunately, delays associated with the design and procurement of a system matching IRL needs have contributed to a late start-up. As of this writing, NRECA anticipates receipt of the prototype units in September, 1993. Once in country, all units will be reviewed and inventoried by NRECA prior to delivery and installation in IRL schools. Given the projected October closing of the present school year, it is recommended that installation of the pilot solar units be scheduled to coincide with the start of the 1994 school year (February 1994). If this is agreed upon, NRECA and IRL could then collaborate in a preliminary cost-effectiveness study to assess potential future expansion of the pilot system mid-year, June 1994. If the system is found to be in good working order by NRECA's technicians and perceived to be of value by participating IRL teachers, NRECA will contemplate installation of small renewable systems in all remaining Project schools (approximately 3500) under a separate grant agreement with PER.

Bilingual Adaptation of Selected Health Programs. (March 1994 - October 1994)

Once the fifth-grade Radio Health series is complete, the curriculum department will dedicate the remaining school year to developing an appropriate model for adapting the content of a selected health module to the needs and context of indigenous-language speakers. The adapted module will be evaluated to determine whether the bilingual programming produces significantly improved student learning among students whose native language is other than spanish. A second objective is to assess whether indigenous students have the requisite spanish-language capacity in third or fourth grade to comprehend a spanish-language program, given their immersion in spanish-language instruction since first grade. The results of this pilot should prove insightful in determining whether additional investment in developing bilingual programming is justified in terms of cost-benefit. Given the fluency of PARI's Cochabamba staff in Quechua, responsibility for this pilot will most likely be given to the regional office. In addition, EDC will appropriate twelve additional PM of local expertise and two months of international TA to collaborate in development of the bilingual model. Application of the pilot will be by cassette in five to 10 classrooms in the Cochabamba region during the second semester of the 1994 school year. It should also be mentioned that initiation of this effort is dependent upon receipt of the final tranche of TA funding by March 1994.

Master Teacher Training. (April 1994 - June 1994)

Originally, IRL had proposed providing 300 Radio Health teachers with comprehensive first-aid kits and additional training in their use. The objective of this activity was to extend access to basic primary health-care and information to communities that would not otherwise be served. Recent discussions between the MEC and IRL concluded, however, that given competing demands, neither the Ministry of Education nor the Ministry of Health would be able to guarantee continued support for the proposed school-based health promoter model once international donor assistance ended.

As a result, we have changed the focus of Pilot 3 to emphasize the training of Master Teachers (faculty) in Bolivia's Normal Schools. Once the Master Teachers have been trained, they will be expected to integrate the training into the core teacher-training curriculum. In essence, IRL hopes to create a sustainable "teacher training model" that will increase the number of teachers who have basic training in interactive-radio while reducing the burden of future in-service training for the MEC. In addition, we hope that integration of the interactive radio methodology in the Normal school curriculum will promote both legitimacy and acceptance of IRL through formal association--particularly since the lion's share of graduates who specialize in urban primary education will use interactive-radio in their first placement.

Two-Way Radio Pilot: Improving MEC Management (1994)

The two-way radio (TWR) pilot was originally designed to extend educational outreach into the rural sector through an extensive two-way radio network. It is now apparant that the MEC will not be able to continue financing extended TWR diffusion. On the otherhand, a steady reliable avenue of communication such as TWR could greatly enhance Ministry supervision of remote IRL sites. In response to MEC concerns about present and future management of IRL, we have redefined the orientation and output of Pilot 4, as above.

The objective of this pilot is to assess the impact of regular two-way radio communication on the efficiency of overall MEC administration and supervision of IRL. Under this pilot, 20 of the Ministry's most isolated supervisors will be provided with TWRs and trained in their use and maintenance. Call times will be established for weekly and emergency communication between the central office and the field sites, as well as among the supervisors themselves. Overall impact will be evaluated through user logs in four functional categories--management, administration, overall morale, and education/information.

V. *PROJECT MANAGEMENT: FY94*

Given my September departure, IRL's achievements to date, and our present challenges, I see not only a shift in personnel, but a redefinition of management responsibilities as follows:

- Ann Fitzgerald's promotion to COP, responsible for the technical direction of Radio Health, overall Project administration including management of EDC's local subcontracts, coordination of international TA, and donor coordination.

- Emilio Oros's promotion to Executive Director of PARI, responsible for managing implementation all IRL components, directing IRL's institutionalization effort, supervising IRL's regional offices, coordinating field implementation, and managing local TA.

  - Creation of the position Deputy Chief, IRL, to manage stateside administration and logistical support. Dolores Alvino possesses the ideal qualifications for this task, however her present employment as LEARNTECH's Associate Director for Administration implies that Mike Laflin, LEARNTECH's Director, will need to seriously consider if Dolores's present responsibilities can be delegated to someone else; or if, indeed, he is even willing to release her from her pivotal role within the larger project.

Chief of Party: Ann Fitzgerald

Over the past year, Ann Fitzgerald has done an excellent job in managing the development of Radio Health's third and fourth grade curriculum. At this point, she has established herself solidly as counterpart to the curriculum division's chief; and her decision-making authority within the health component is respected by the project's technical staff, PER's executive committee, and our ministry counterparts. When I have been away from La Paz on TDY, Ann has demonstrated her eagerness and ability to assume key management tasks; and her previous experience in public relations and health promotion is critical to guiding PARI's future work in community health and media promotion. It is therefore recommended that Ann Fitzgerald replace me as the EDC Chief of party. Given the progress that Ann has made in advancing the Radio Health curriculum, it won't be necessary to replace her with a second long-term advisor. The strides that she has made in her work will enable the curriculum team to advance the scripting of Radio Health under minimal supervision, while freeing Ann to assume broader management responsibilities.

Executive Director: Emilio Oros

As Director of Programma de Educación por Radio (PER), Emilio has demonstrated diplomacy and tenacity in providing local direction to IRL. He has positioned himself and his institution solidly as the ministry's local counterpart, and speaks with understanding and authority about technical and managerial concerns. Emilio has played a pivotal role in IRL's local success, and is poised to assume the final,

critical responsibility of IRL's institutionalization. It is widely understood that Bolivians respond openly and positively to their local peers. Thus, our strategy of working with teachers' unions to achieve institutionalization outside of the MEC requires that Emilio receive national project authority. To gain access to the inner circles of decision-makers and opinion leaders, Emilio must be recognized as IRL's Executive Director. Otherwise, he may not be taken seriously as a decision-maker; and the project's identify as a Bolivian intervention could be questioned.

Deputy Chief: Dolores Alvino

Projects of the size and scope of Bolivia frequently have a paid home-office staff; but in IRL's case, EDC's multiplier generates home-office support for all LEARNTECH activities, not just for Bolivia. Given the complexity of our project and the present transition in management, IRL has reached a point in its development where we need dedicated backstopping funded through a permanent earmark within IRL's generated multiplier.

I anticipate IRL's demand for stateside support in logistical management and overall administration to increase sharply during this next year given the change in project leadership and the closure of field activities. Since 1987, Dolores Alvino, LEARNTECH Project's Associate Director for Administration, has provided Stateside coordination for Bolivia among her many other responsibilities. She is highly motivated, extremely reliable, and has established excellent working relationships with Ann and Emilio. Her proximity to EDC officers at the company's administrative locus has ensured smooth coordination, and the relationships that she has cultivated with her counterparts in the AID/W contracts office have been advantageous for Bolivia. Dolores is the only LEARNTECH employee with more than a year's project involvement, and her institutional memory will be critical for Ann in her new role as COP. Dolores is the only LEARNTECH representative based in Newton.

In June of this year, I proposed the above reorganization to USAID/B, AID/W, and EDC; and it was formally approved by all three agencies in August. (Scopes of work are included in Annex 3.) During this three-month period, I worked closely with Emilio, Ann, and Jorge Ayala, our MEC counterpart, to ensure a smooth transition in management. Our first task was to revise the 1993-94 workplan (Annex 2) given specific implementation and funding considerations presented in Section VI. Other activities included articulation of IRL's institutional strategy (Section VII.), development of a revised TA budget through 12/94 (Annex 4), and Ann's orientation to AID and EDC standards of project management.

Without a doubt, one reason I am viewed as a good COP in Bolivia is because of the quality of the technical guidance and administrative support that I receive from EDC. That same level of support will now be directed towards making certain that Emilio and Ann have the information and training they need to make informed decisions and provide strong direction.

Continuity on the technical side will be maintained by Mike Laflin, LEARNTECH Director. Throughout Mike's tenure at EDC and with LEARNTECH, he has maintained an open door policy to providing advice and guidance to IRL; and the benefit of his experience has had, and will continue to have, a profound impact on the project. Mike's professional network ensures IRL access to the most qualified selection of consultants; and his commitment to developing a solid institutional base for continued IRL activities will contribute to a positive outcome.

VI. EXTENSION OF IRL'S PACD.

EDC's contract to provide technical services to IRL terminates on 10/30/94; however, we have recently learned that the 1994 school year will not end until November of that same year--making it impossible for EDC to complete validation of the fifth-grade Radio Health curriculum as per our original SOW. Rather than compromise the technical quality of future IRL activities, EDC will request that AID/W extend the PACD for TA services at no additional cost to the Mission. Note: the attached workplan and revised budget have been projected through the close of the 1994 calendar year; however a PACD of March 1995 would be desirable, should there be any delay associated with the final, complete obligation of funds.

VII. INSTITUTIONALIZATION OF IRL.

The final, and perhaps most important objective of IRL is development of the MEC's managerial capacity to sustain national implementation in the long-term. With this in mind, IRL has worked closely with the MEC to establish a national infrastructure of trained IRL supervisors, and to strengthen MEC management of the same. Today, the Ministry has 20 trained field supervisors, five regional coordinators, and one national director as counterpart to IRL. Next year they will dedicate land to construct permanent Project offices.

In 1992, Radio Math was declared the "official" primary-school mathematics program by ministerial resolution. To the extent that the Ministry has integrated the curricula into the national syllabus and dedicated personnel to IRL, we have succeeded in our efforts at institutionalization. The fact remains, however, that we have not yet reached full compliance with the resolution, and long-range funding requires long-term planning. Unless IRL is able to go beyond project status and become fully incorporated in the future educational reform, it may loose its present momentum. Given these objectives, the following tasks remain to be done:

- Maintain an open and continuing dialogue with MEC authorities at the national, Departmental, and regional levels regarding IRL activities and achievements.

- Establish regular coordination with the authors of Bolivia's educational reform, ETARE, and the Consejo Nacional de Educación. One possibility might be to second an IRL expert to ETARE for up to six months, to explore possible avenues of support under the new reform package.

- Cultivate broad-based support for institutionalization by coordinating outreach with the teachers' unions and the teacher training colleges.

- Develop public awareness of IRL through social marketing and mass-media campaigns.

To aid MEC efforts in institutionalizing IRL, short-term TA in institutional development, economics, social marketing, and public relations are included in the revised budget.

Strengthening local institutions.

One element of IRL's success to date has been our dual approach to institutionalization. Given the frequent change of personnel within the ministry, IRL fostered the development of long-term technical and managerial expertise within the private sector. Today, the team of specialists that I began training six years ago, have matured, formed their own NGO, and are acknowledged as country and regional authorities in radio education. The transfer of technology in instructional systems design and project management is now complete, and PER is well-positioned to continue providing Bolivia's Ministry of Education and Culture with constancy and

continuity through local expertise. Thus, as part of our TA plan, EDC has earmarked funds for short-term expertise to continue strengthening PER's institutional viability.

ANNEX 1.

EVALUATION SUMMARY

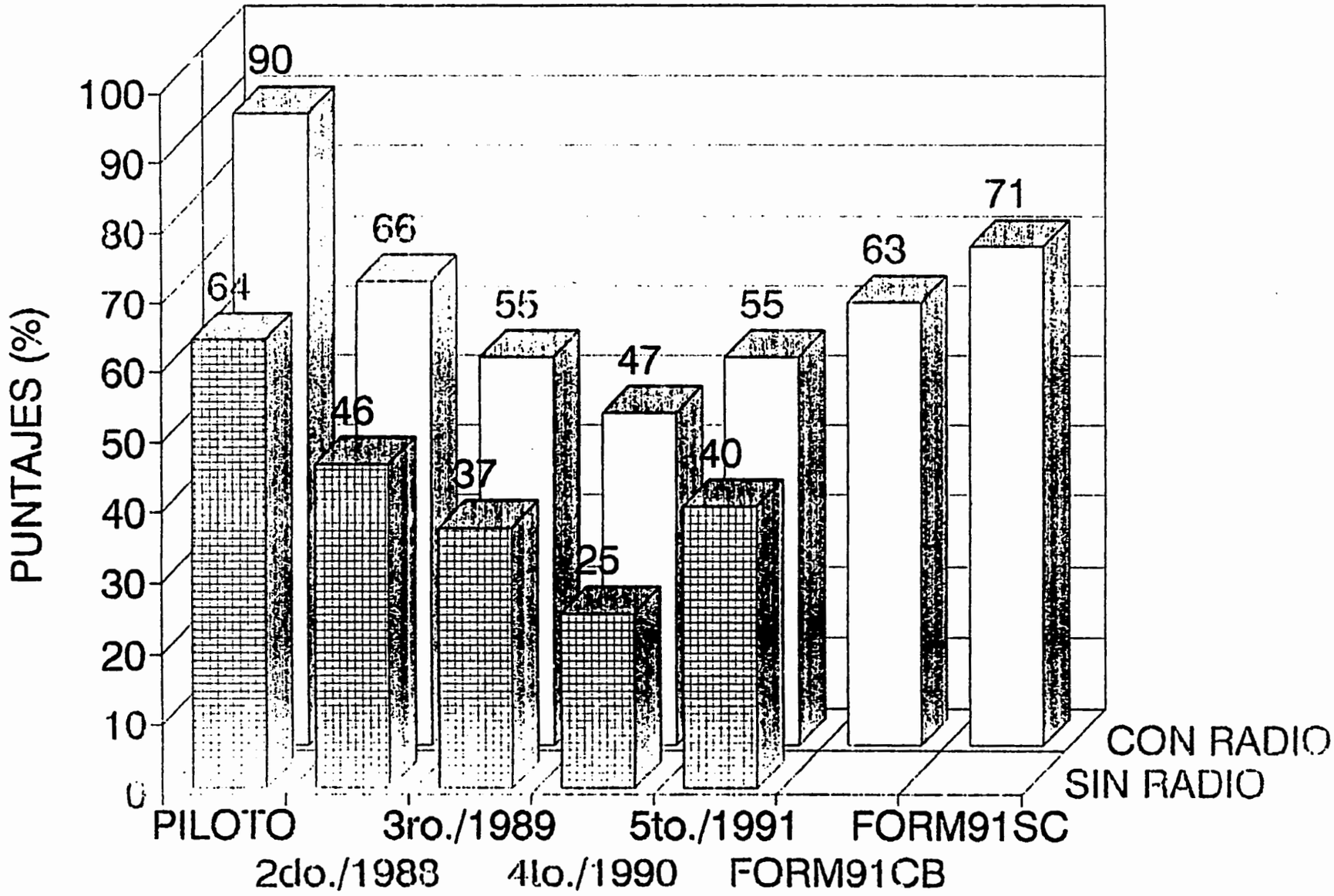
1987 - 1993

PRODUCED BY:

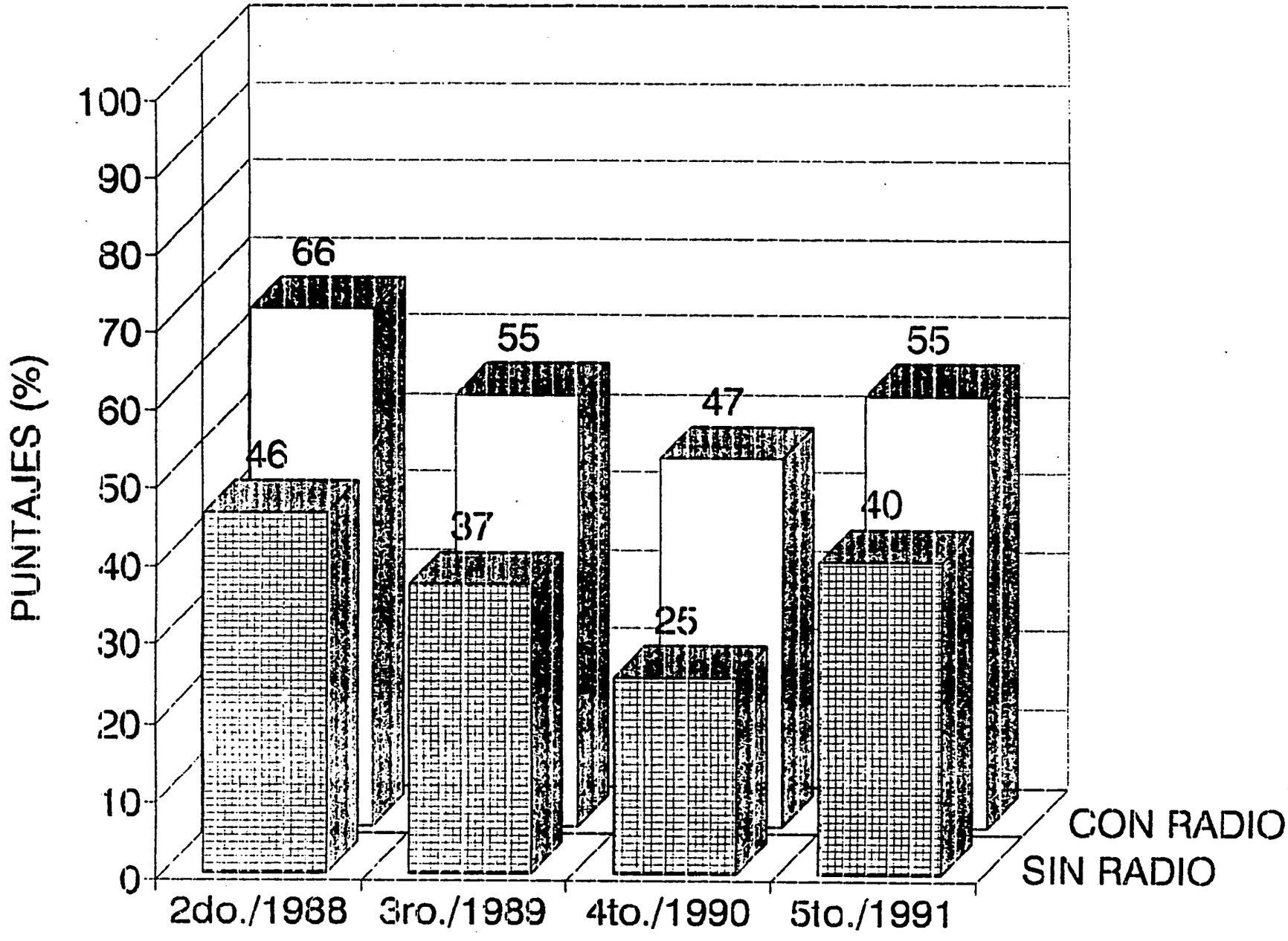
PROGRAMMA DE EDUCACION POR RADIO

MATEMATICAS POR RADIO EN BOLIVIA

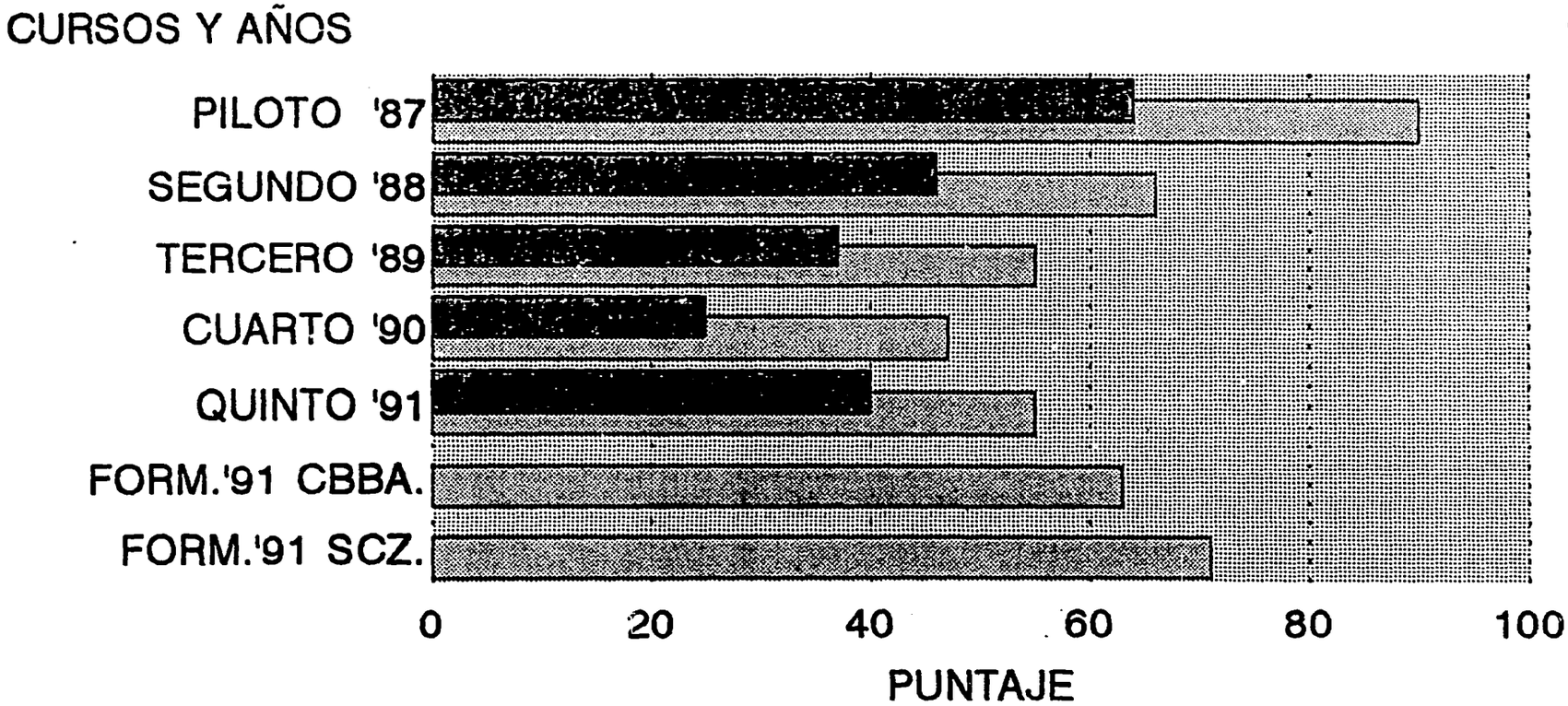
RENDIMIENTOS



MATEMATICAS POR RADIO EN BOLIVIA



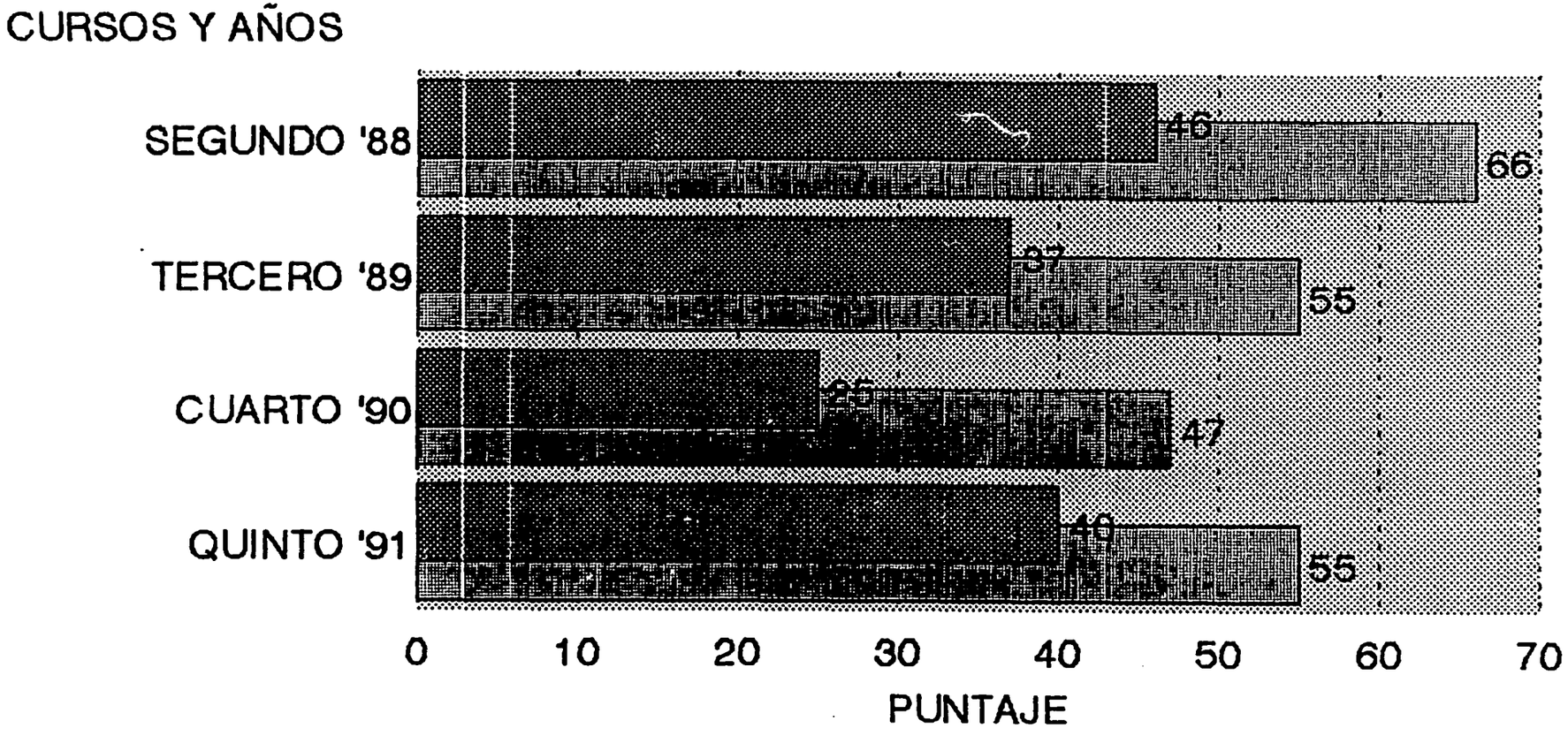
PROGRAMA DE MATEMATICAS POR RADIO
APROVECHAMIENTO CON Y SIN RADIO
(1987 - 1991)



SIN RADIO	64	46	37	25	40		
CON RADIO	90	66	55	47	55	63	71

DPTO. DE EVALUACION

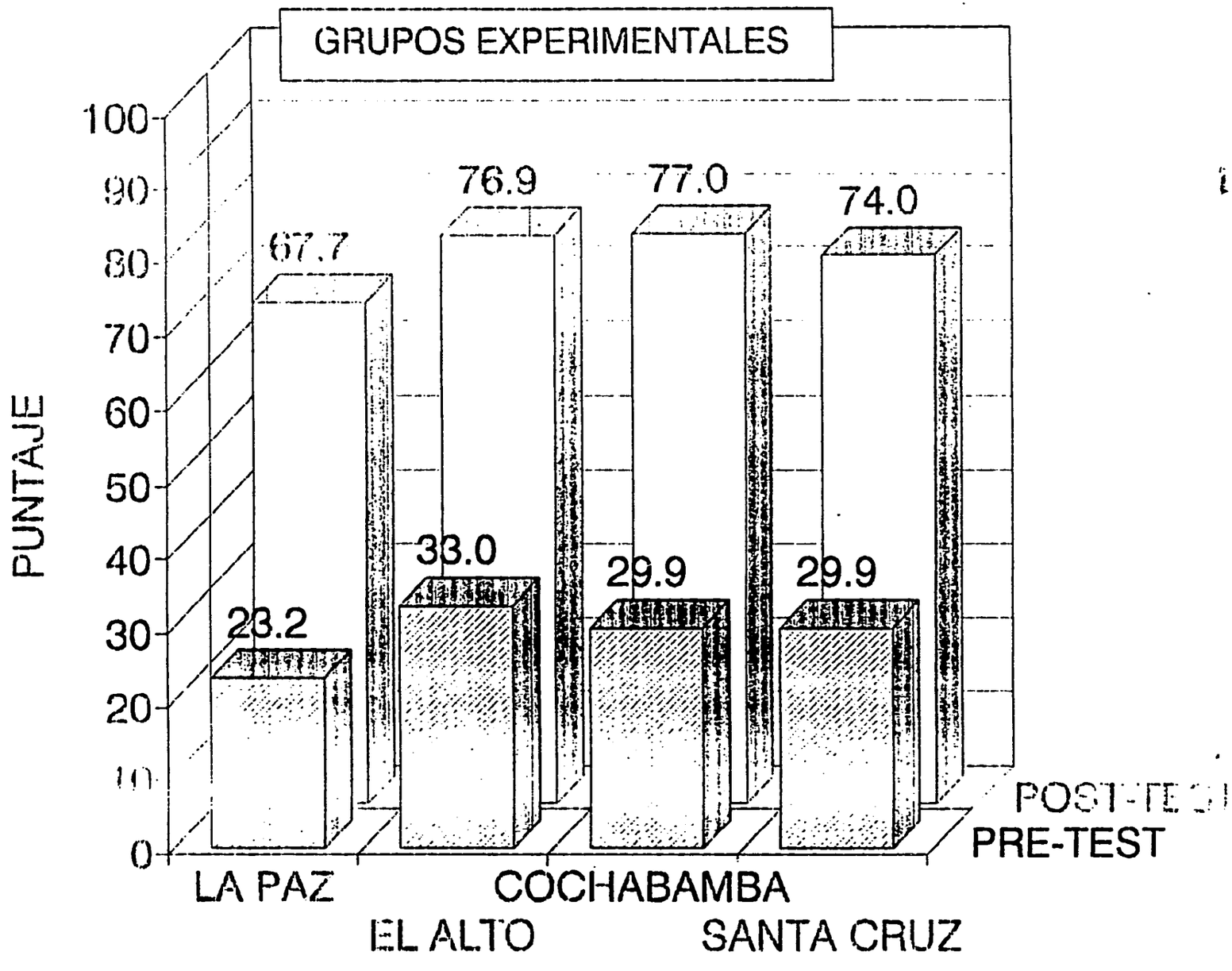
PROGRAMA DE MATEMATICAS POR RADIO
APROVECHAMIENTO CON Y SIN RADIO
(1987 - 1991)



24

MATEMATICAS POR RADIO

SEGUNDO BASICO ,1992



PROGRAMA DE MATEMATICAS POR RADIO
PRUEBAS DE HIPOTESIS: MATEMATICAS - 1992

CIUDADES Y TIPO DE PRUEBA	DESV.TIPICA MUESTRAL	DIFERENCIA DE MEDIAS	PROBABILIDAD
CIUDAD: LA PAZ			
PRE-TEST: CTRL. Y EXP.	0.2486	-0.5250	0.0174
POST-TEST: CTRL. Y EXP.	0.3249	-4.5250	0.0000
CIUDAD: EL ALTO			
PRE-TEST: CTRL. Y EXP.	0.2316	0.1000	0.6664
POST-TEST: CTRL. Y EXP.	0.2502	-4.8500	0.0000

FUENTE: DEPTO. DE IMPLEMENTACION Y EVALUACION, PARI. 1993

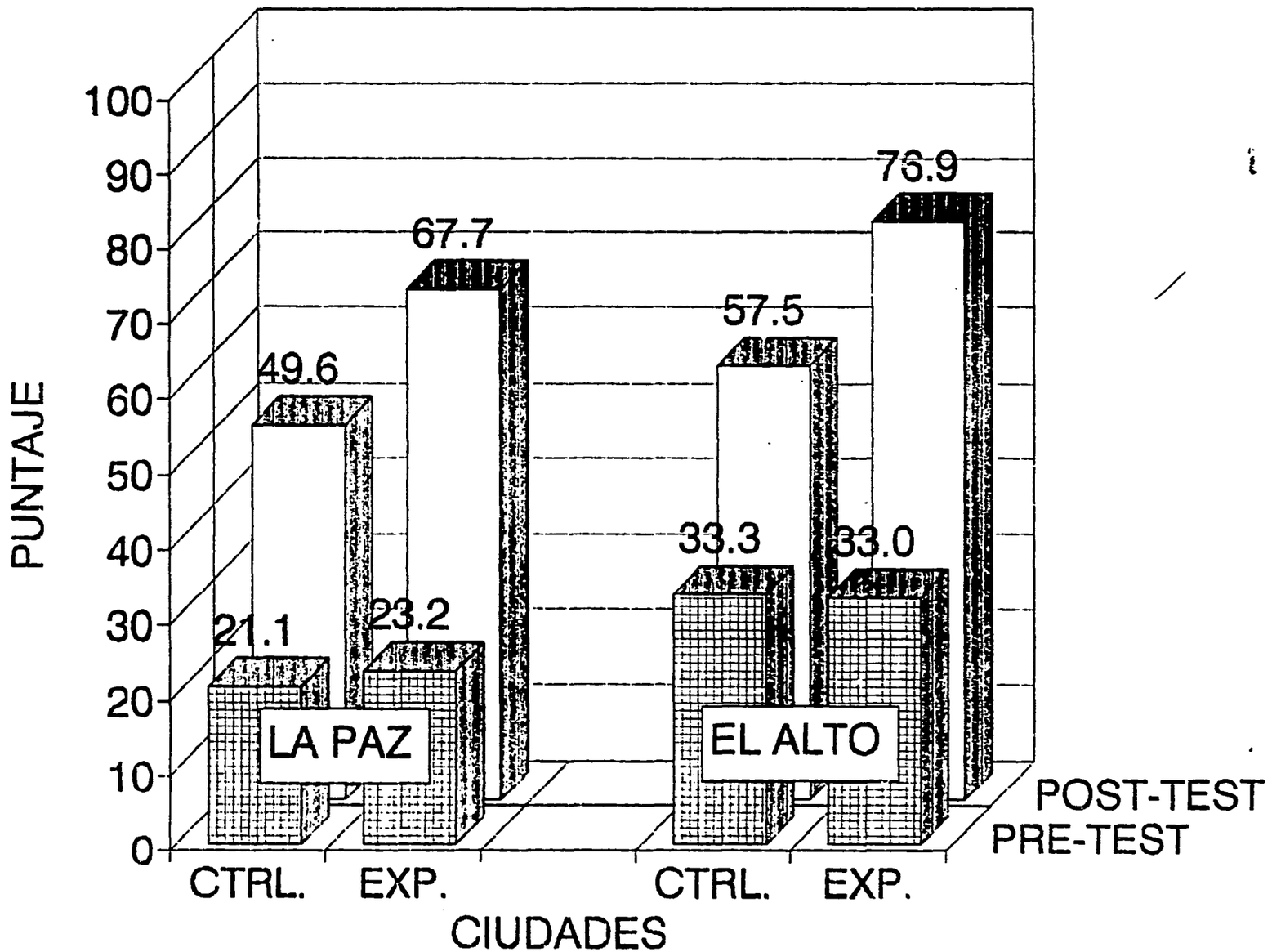
PROGRAMA DE APRENDIZAJE POR RADIO INTERACTIVA
PROGRAMA DE MATEMATICAS POR RADIO

ANALISIS DE LAS PRUEBAS DE MATEMATICAS POR TEMAS 2do. BASICO

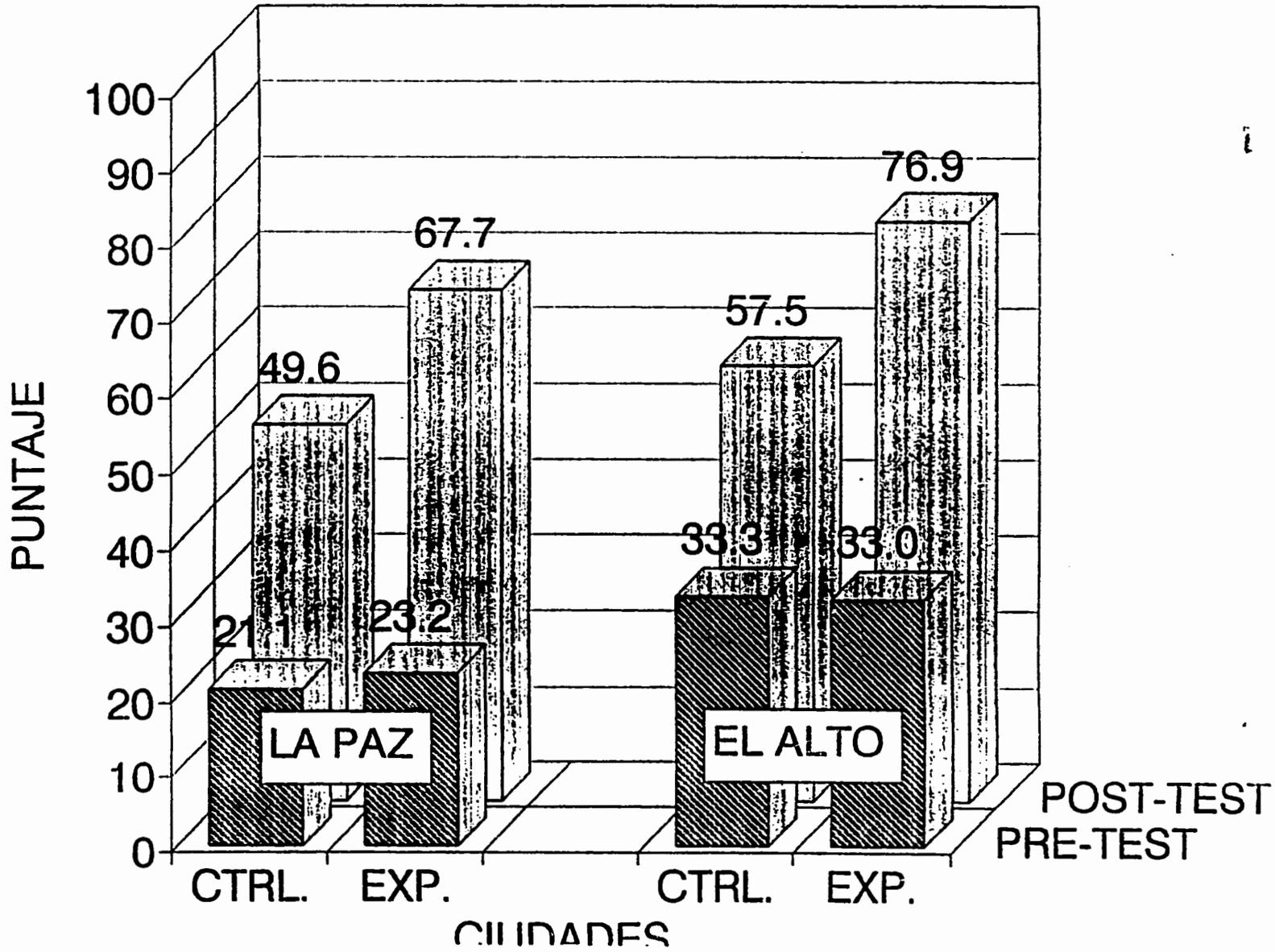
TEMA	ITEMS	LA PAZ		EL ALTO		COCHABAMBA		SANTA CRUZ	
		MEDIA	D.S.	MEDIA	D.S.	MEDIA	D.S.	MEDIA	D.S.
NUMERACION	A,B,C,CH,D	83.0	14.4	87.7	12.4	90.6	10.4	88.0	12.8
ADICION	F,H,I,K,M,V	66.1	18.0	73.6	17.2	72.9	16.4	72.6	17.2
SUSTRAC.	J,L,LL,N1,S,T	60.6	19.2	74.4	16.4	74.7	16.8	68.4	17.2
MULTIPLIC	P,N,U	73.4	16.8	81.3	15.6	82.3	14.0	80.9	15.2
DIVISION	R	79.2	16.0	76.2	17.2	82.2	15.2	70.7	18.4
FRACCIONES	G	60.6	19.6	73.1	17.6	69.9	18.4	67.0	18.8
ORDINALES	E	33.7	26.0	47.8	20.0	50.6	20.0	39.3	19.6
LONGITUD	Q	48.6	20.0	71.6	18.0	58.6	19.6	63.2	19.2
MED.TIEMPO	O	75.9	17.2	82.6	15.2	77.0	16.8	81.2	15.6

FUENTE: DEPTO. DE EVALUACION, 1993

MATEMATICAS POR RADIO
SEGUNDO BASICO , 1992



MATEMATICAS POR RADIO
SEGUNDO BASICO , 1992

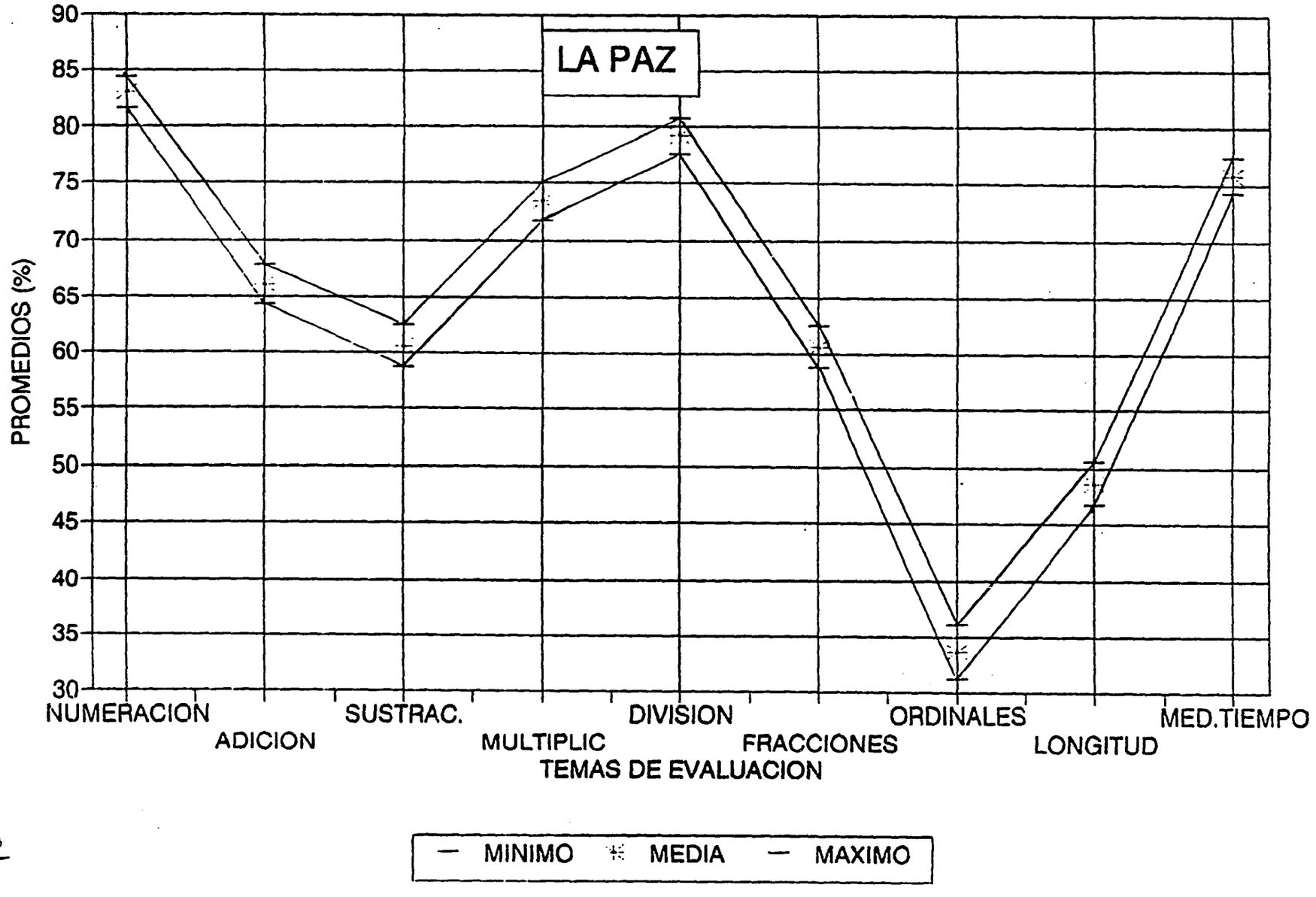


PROGRAMA DE APRENDIZAJE POR RADIO INTERACTIVA
EVALUACION DE MATEMATICAS POR RADIO

CURSO: 2do. BASICO
CIUDAD : LA PAZ

TEMA	CODO	NOMBRE DE LA PREGUNTA	PRE - TEST SIN RADIO n=528 %	D.S.	PRE - TEST CON RADIO n=424 %	D.S.	POST - TEST SIN RADIO n=528 %	D.S.	POST - TEST CON RADIO n=424 %	D.S.	TAMAÑO DE EFECTO
NUMERACION	A	ESCRITURA SUCESOR DOS DIGITOS	58.1	4.9	49.5	5.0	79.5	4.0	84.4	3.6	1.22
	B	CONTEO Y ESCRITURA DOS DIGITOS	53.8	5.0	56.1	5.0	82.2	3.8	87.0	3.4	1.27
	C	RECONOCIMIENTO CENTENAS COMPARACION	26.9	4.4	25.5	4.4	55.7	5	65.8	4.74	2.02
	CH	RECONOCIMIENTO Y LECTURA DE CENTENAS	48.9	5.0	52.6	5.0	86.7	3.3	91.7	2.8	1.52
	D	ESCRITURA CENTENAS C/CERO INTERMEDIO	33.5	4.7	42.7	4.9	80.9	3.9	86.1	3.5	1.34
ADICION	F	ADICION VERTICAL 2 SUMANDOS CON CENTENAS	28.2	4.5	42.2	4.9	54.7	5.0	86.1	3.5	6.27
	H	ADICION HORIZONTAL SIN LLEVAR	23.1	4.2	21.2	4.1	60.4	4.9	78.5	4.1	3.70
	I	APLIC. ADICION Y MEDIDAS DE TIEMPO Y HORA	17.6	3.8	21.5	4.1	24.1	4.3	52.1	5.0	6.53
	K	ADICION MENTAL	7.4	2.6	6.8	2.5	25.9	4.4	48.1	5.0	5.04
	M	ADICION 2 SUMANDOS, LLEVANDO UNA VEZ	3.2	1.8	2.1	1.4	47.7	5.0	73.1	4.4	5.08
	V	PROBLEMAS DE APLICACION	21.2	4.1	26.7	4.4	36.9	4.8	58.5	4.9	4.49
SUSTRACCION	J	SUSTRC.VERTICAL, SIN PRESTAR, CERO IMPLICITO	5.3	2.2	5.9	2.4	37.7	4.9	70.0	4.6	6.60
	L	SUSTRC. HORIZONTAL SIN PRESTARSE	8.7	2.8	16.3	3.7	42.2	4.9	69.6	4.6	5.58
	LL	CALCULO MENTAL SIN ESCRIBIR DATOS PREVIOS	12.9	3.3	13.2	3.4	29.9	4.6	57.3	4.9	5.95
	N1	SUSTRC. VERTICAL PRESTANDOSE UNA VEZ	0.4	0.6	0.2	0.5	18.4	3.9	46.2	5.0	7.14
	S	SUSTRC.,APLICACION CON MANEJO DE DINERO	19.9	4.0	23.1	4.2	43.8	5.0	47.9	5.0	0.83
	T	SUSTRACCION PROBLEMAS DE APLICACION	35.6	4.8	44.3	5.0	62.5	4.8	72.4	4.5	2.06
MULTIPLIC.	P	MULTIPLICACION VERTICAL SIN LLEVAR NI PASAR	0.9	1.0	1.9	1.4	54.5	5.0	80.9	3.9	5.27
	N	TABLAS	8.5	2.8	9.4	2.9	57.8	4.9	81.4	3.9	4.82
	U	PROBLEMAS DE APLICACION	30.1	4.6	36.3	4.8	48.3	5.0	57.8	4.9	1.90
DIVISION	R	DIVISION DE UN DIGITO (DIVID.,DIVIS.) S/RESIDU	2.8	1.7	4.0	2.0	40.7	4.9	79.2	4.0	7.86
FRACCIONES	G	RECONOCIMIENTO GRAFICACION FRACCIONES	17.2	3.8	15.3	3.6	37.3	4.8	60.6	4.9	4.85
ORDINALES	E	RECONOCIMIENTO UBICACION	14.0	3.5	12.0	3.3	24.4	4.3	33.7	6.5	2.16
LONGITUD	Q	RECONOCIMIENTO EQUIVALENCIAS: cm. y Mtr.	10.6	3.1	8.0	2.7	39.4	4.9	48.6	5.0	1.88
MED.TIEMPO	O	RECONOCIMIENTO MEDIDA MAYOR	38.3	4.9	43.6	5.0	68.0	4.6	75.9	4.3	1.73
		TOTALES	21.1	3.7	23.2	3.9	49.6	5.2	67.7	4.8	3.51

MATEMATICAS POR RADIO,1992
EVALUACION POR TEMAS,2do. BASICO

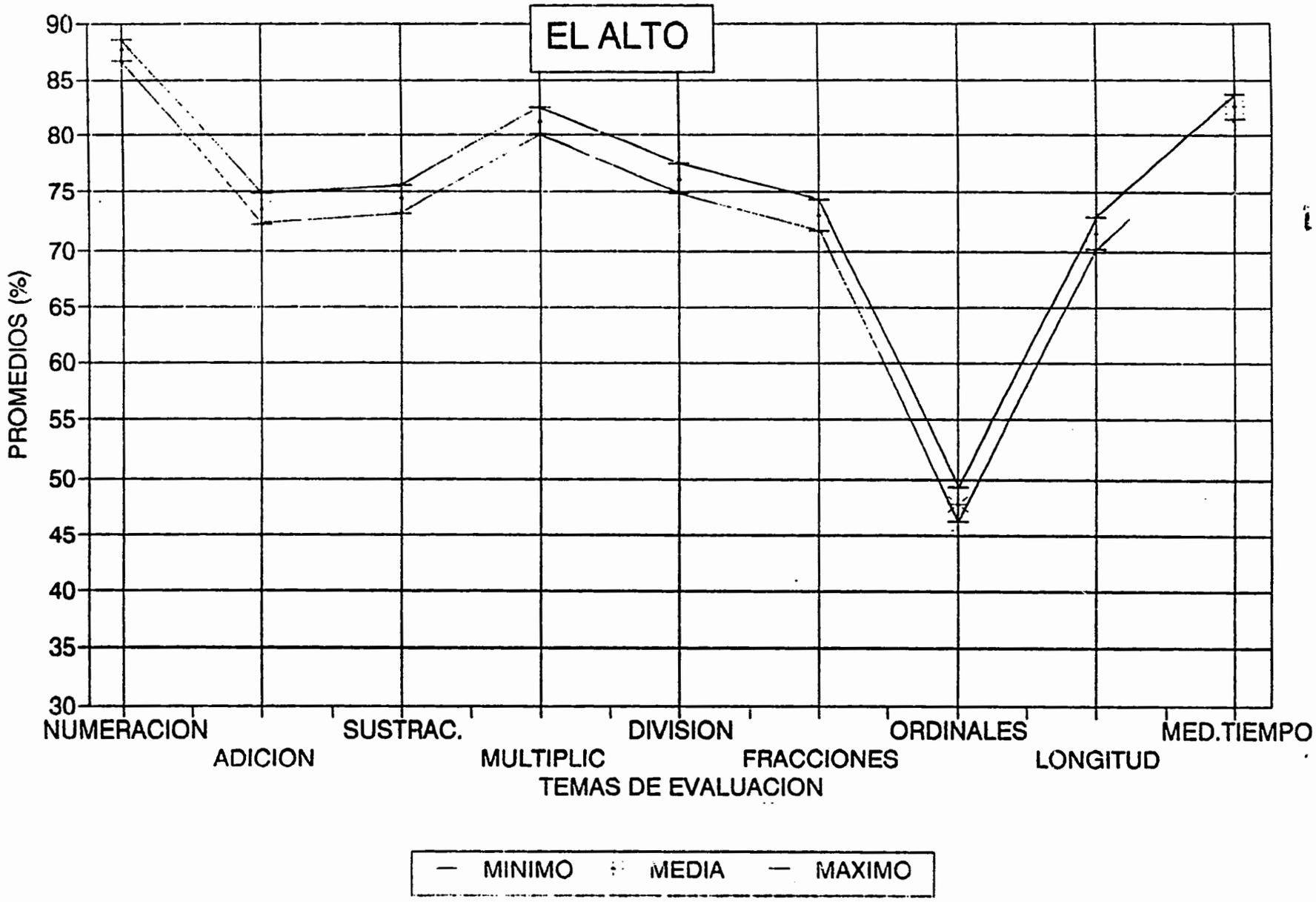


PROGRAMA DE APRENDIZAJE POR RADIO INTERACTIVA
EVALUACION DE MATEMATICAS POR RADIO

CURSO: 2do BASICO
CIUDAD: EL ALTO

TEMA	ITEM	NOMBRE DE LA PREGUNTA	PRE - TEST SIN/RADIO n=760 %	D.S.	PRE - TEST CON/RADIO n=685 %	D.S.	POST - TEST SIN/RADIO n=738 %	D.S.	POST - TEST CON/RADIO n=680 %	D.S.	TAMAÑO DE EFECTO
NUMERACION	A	ESCRITURA SUCESOR DOS DIGITOS	67.4	4.7	67.9	4.7	84.4	3.6	95.3	2.1	3.02
	B	CONTEO Y ESCRITURA DOS DIGITOS	62.9	4.8	62.3	4.9	82.2	3.8	89.9	3.0	2.00
	C	RECONOCIMIENTO CENTENAS COMPARACION	27.4	4.5	39.7	4.9	55.8	5.0	72.4	4.5	3.31
	CH	RECONOCIMIENTO Y LECTURA DE CENTENAS	61.6	4.9	50.4	5.0	76.2	3.2	91.6	2.8	4.83
	D	ESCRITURA CENTENAS C/CERO INTERMEDIO	43.9	5.0	43.2	5.0	80.2	4.0	89.4	3.1	2.30
ADICION	F	ADICION VERTICAL 2 SUMANDOS CON CENTENAS	39.2	4.9	43.5	5.0	60.6	4.9	84.9	3.6	4.96
	H	ADICION HORIZONTAL SIN LLEVAR	32.5	4.7	31.4	4.6	66.4	4.7	80.1	4.0	2.93
	I	APLIC. ADICION Y MEDIDAS DE TIEMPO Y HORA	37.2	4.8	45.5	5.0	51.5	5.0	80.6	4.0	5.82
	K	ADICION MENTAL	9.1	2.9	18.1	3.9	30.1	4.6	55.3	5.0	5.48
	M	ADICION 2 SUMANDOS, LLEVANDO UNA VEZ	6.6	2.5	5.3	2.2	47.0	5.0	76.3	4.3	5.86
	V	PROBLEMAS DE APLICACION	39.7	4.9	36.8	4.8	52.7	5.0	64.6	4.8	2.37
SUSTRACCION	J	SUSTRC.VERTICAL, SIN PRESTAR, CERO IMPLICITO	12.2	3.3	10.1	3.0	34.7	4.8	73.5	4.4	8.09
	L	SUSTRC. HORIZONTAL SIN PRESTARSE	21.8	4.1	25.0	4.3	56.6	5.0	76.9	4.2	4.05
	LL	CALCULO MENTAL SIN ESCRIBIR DATOS PREVIOS	14.7	3.5	16.8	3.7	55.6	5.0	79.4	4.0	4.77
	N1	SUSTRC. VERTICAL PRESTANDOSE UNA VEZ	4.1	2.0	2.0	1.4	17.1	3.8	43.4	5.0	6.92
	S	SUSTRC.,APLICACION CON MANEJO DE DINERO	57.4	5.0	63.1	4.8	64.9	4.8	84.0	3.7	3.97
	T	SUSTRACCION PROBLEMAS DE APLICACION	62.1	4.9	55.8	5.0	71.4	4.5	89.3	3.1	3.97
MULTIPLIC.	P	MULTIPLICACION VERTICAL SIN LLEVAR NI PASAR	7.1	2.6	6.6	2.5	56.5	5.0	81.6	3.9	5.02
	N	TABLAS	22.4	4.2	11.7	3.2	64.9	4.8	84.9	3.6	4.16
	U	PROBLEMAS DE APLICACION	48.7	5.0	2.0	4.8	58.1	4.9	77.4	4.2	3.92
DIVISION	R	DIVISION DE UN DIGITO (DIVID.,DIVIS.) S/RESIDU	17.8	3.8	27.0	4.4	46.2	5.0	76.2	4.3	5.99
FRACCIONES	G	RECONOCIMIENTO GRAFICACION FRACCIONES	26.7	4.4	28.5	4.5	40.8	4.9	73.1	4.4	6.59
ORDINALES	E	RECONOCIMIENTO UBICACION	22.8	4.2	27.4	4.5	38.1	4.9	47.8	5.0	1.98
LONGITUD	Q	RECONOCIMIENTO EQUIVALENCIAS: cm. y Mtr.	30.9	4.6	20.1	4.0	52.3	5.0	71.6	4.5	3.86
MED.TIEMPO	O	RECONOCIMIENTO MEDIDA MAYOR	59.3	4.9	51.7	5.0	79.8	4.0	82.6	3.8	0.71
		TOTALES	33.4	4.5	33.0	4.3	57.5	5.2	76.9	4.2	3.73

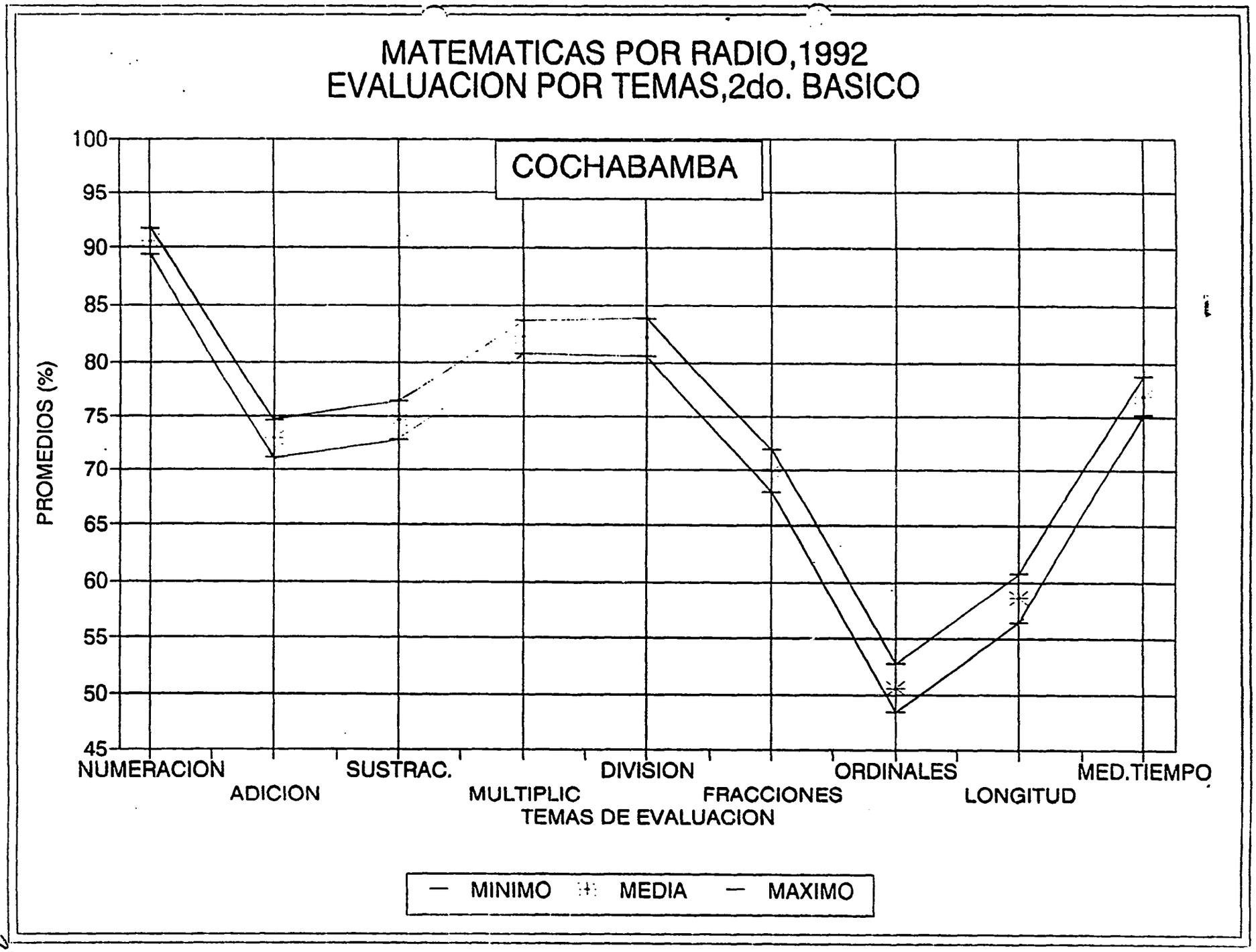
MATEMATICAS POR RADIO,1992
EVALUACION POR TEMAS,2do. BASICO



PROGRAMA DE APRENDIZAJE POR RADIO INTERACTIVA
EVALUACION DEL PROGRAMA DE MATEMATICAS POR RADIO

CURSO: 2do.BASICO
CIUDAD : COCHABAMBA

TEMA	CO D.	NOMBRE DE LA PREGUNTA	PRUEBA: PRE - TEST CON RADIO (n=369) MEDIA	D.TIPICA	PRUEBA: POST - TEST CON RADIO (n=326) MEDIA	D.TIPICA
NUMERACION	A	ESCRITURA SUCESOR DOS DIGITOS	67.20	4.69	96.90	1.72
	B	CONTEO Y ESCRITURA DOS DIGITOS	66.70	4.71	91.10	2.85
	C	RECONOCIMIENTO CENTENAS COMPARACION	39.30	4.88	73.90	4.39
	CH	RECONOCIMIENTO Y LECTURA DE CENTENAS	66.40	4.72	95.10	2.16
	D	ESCRITURA CENTENAS C/CERO INTERMEDIO	39.60	4.89	96.00	1.96
ADICION	F	ADICION VERTICAL 2 SUMANDOS CON CENTENAS	55.60	4.97	92.60	2.61
	H	ADICION HORIZONTAL SIN LLEVAR	29.80	4.57	81.90	3.85
	I	APLIC. ADICION Y MEDIDAS DE TIEMPO Y HORA	30.40	4.60	62.30	4.85
	K	ADICION MENTAL	12.50	3.30	46.90	4.99
	M	ADICION 2 SUMANDOS, LLEVANDO UNA VEZ	11.10	3.14	78.80	4.08
	V	PROBLEMAS DE APLICACION	35.50	4.79	75.20	4.32
SUSTRACCION	J	SUSTRC.VERTICAL, SIN PRESTAR, CERO IMPLICITO	14.60	3.53	81.90	3.85
	L	SUSTRC. HORIZONTAL SIN PRESTARSE	11.70	3.21	74.50	4.36
	LL	CALCULO MENTAL SIN ESCRIBIR DATOS PREVIOS	13.80	3.45	66.60	4.72
	N1	SUSTRC. VERTICAL PRESTANDOSE UNA VEZ	3.25	1.77	60.70	4.88
	S	SUSTRC.,APLICACION CON MANEJO DE DINERO	32.20	4.67	71.80	4.50
	T	SUSTRACCION PROBLEMAS DE APLICACION	45.80	4.98	92.60	2.61
MULTIPLIC.	P	MULTIPLICACION VERTICAL SIN LLEVAR NI PASAR	9.49	3.93	92.00	2.71
	N	TABLAS	7.05	2.56	89.90	3.02
	U	PROBLEMAS DEA APLICACION	49.10	5.00	65.00	4.77
DIVISION	R	DIVISION DE UN DIGITO (DIVID.,DIVIS.) S/RESIDUO	10.60	3.07	82.20	3.82
FRACCIONES	G	RECONOCIMIENTO GRAFICACION FRACCIONES	26.80	4.43	69.90	4.59
ORDINALES	E	RECONOCIMIENTO UBICACION	16.00	3.67	50.60	5.00
LONGITUD	Q	RECONOCIMIENTO EQUIVALENCIAS: cm. y Mtr.	13.00	3.36	58.60	4.93
MED.TIEMPO	O	RECONOCIMIENTO MEDIDA MAYOR	41.70	4.93	77.00	4.21
		TOTALES	29.96	3.90	77.00	3.91

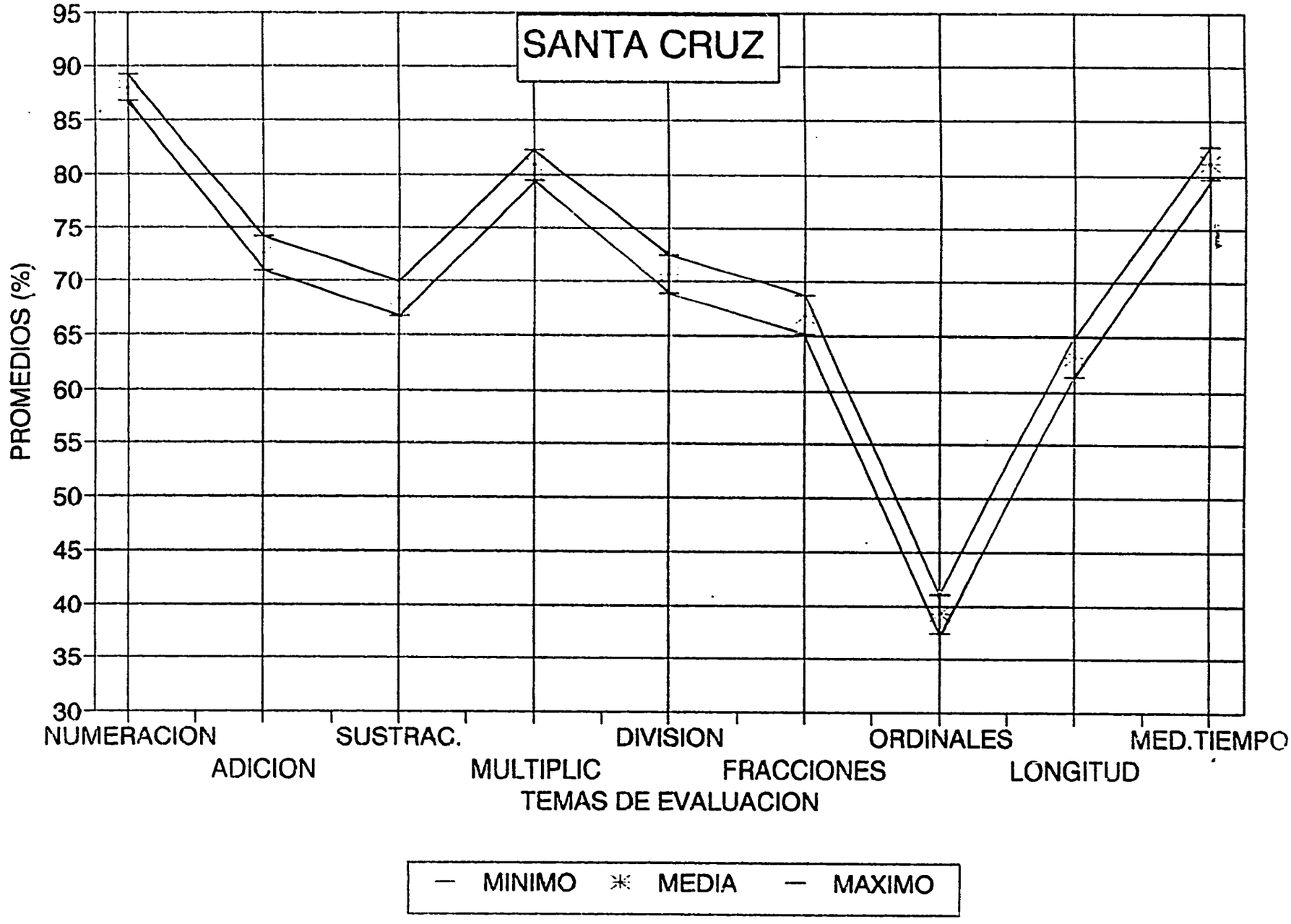

MATEMATICAS POR RADIO,1992
EVALUACION POR TEMAS,2do. BASICO
COCHABAMBA
PROMEDIOS (%)
100
95
90
85
80
75
70
65
60
55
50
45
NUMERACION
ADICION
SUSTRAC.
MULTIPLIC
DIVISION
FRACCIONES
ORDINALES
LONGITUD
MED.TIEMPO
TEMAS DE EVALUACION
MINIMO
MEDIA
MAXIMO

PROGRAMA DE APRENDIZAJE POR RADIO INTERACTIVA
EVALUACION DEL PROGRAMA DE MATEMATICAS POR RADIO

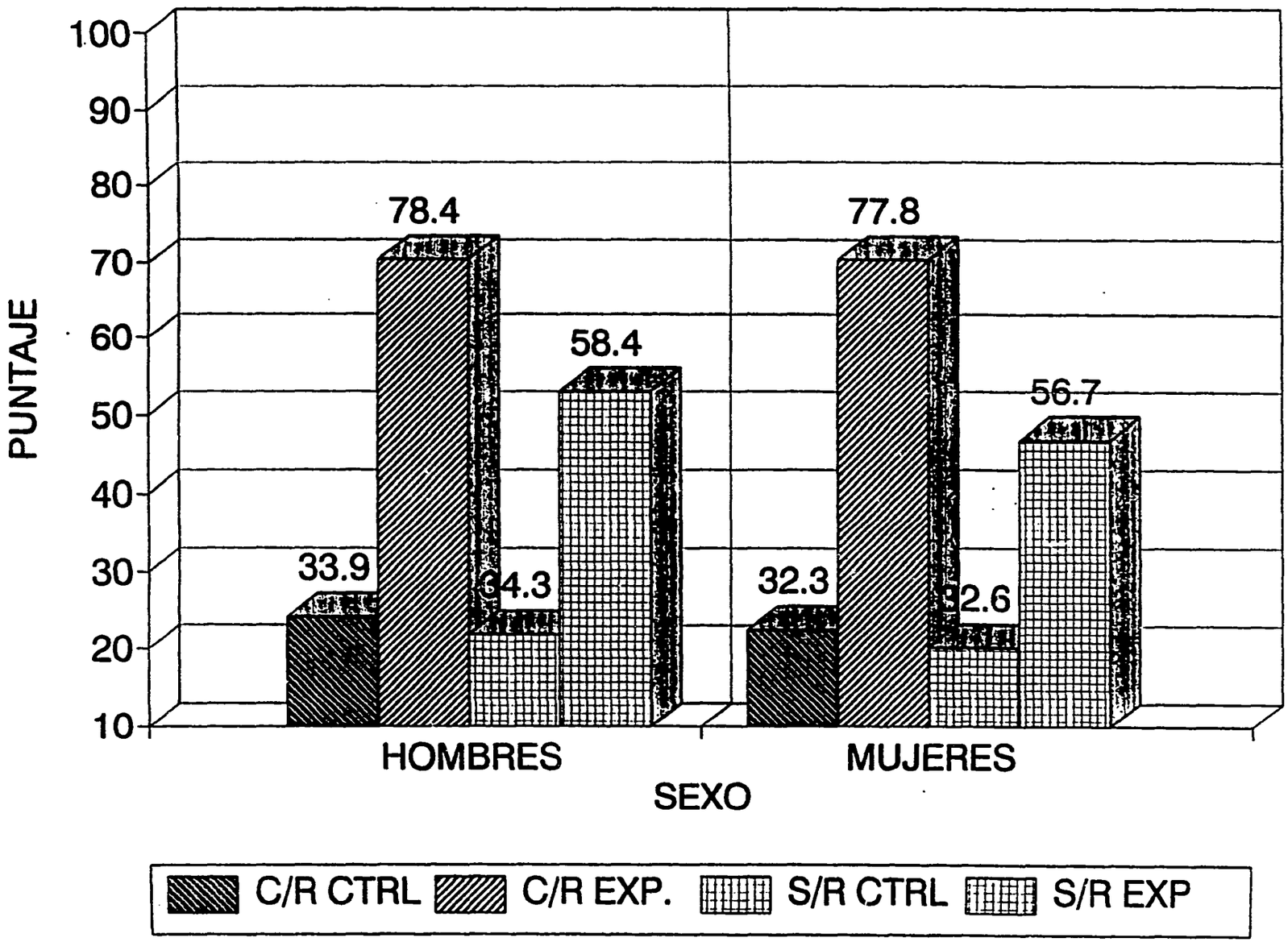
CURSO: 2do.BASICO
CIUDAD : SANTA CRUZ

TEMA	CO D.	NOMBRE DE LA PREGUNTA	PRUEBA: PRE - TEST CON RADIO (n=471) MEDIA	D.TIPICA	PRUEBA: POST - TEST CON RADIO (n=430) MEDIA	D.TIPICA
NUMERACION	A	ESCRITURA SUCESOR DOS DIGITOS	50.70	5.00	84.70	3.60
	B	CONTEO Y ESCRITURA DOS DIGITOS	64.50	4.78	87.00	3.37
	C	RECONOCIMIENTO CENTENAS COMPARACION	29.90	4.58	82.10	3.83
	CH	RECONOCIMIENTO Y LECTURA DE CENTENAS	62.20	4.85	94.90	2.20
	D	ESCRITURA CENTENAS C/CERO INTERMEDIO	43.90	4.96	91.40	2.80
ADICION	F	ADICION VERTICAL 2 SUMANDOS CON CENTENAS	54.60	4.98	80.70	3.95
	H	ADICION HORIZONTAL SIN LLEVAR	30.80	4.62	83.50	3.71
	I	APLIC. ADICION Y MEDIDAS DE TIEMPO Y HORA	44.20	4.97	71.60	4.51
	K	ADICION MENTAL	11.10	3.14	48.10	5.00
	M	ADICION 2 SUMANDOS, LLEVANDO UNA VEZ	7.43	2.62	81.90	3.91
	V	PROBLEMAS DE APLICACION	30.10	4.59	69.80	4.59
SUSTRACCION	J	SUSTRC.VERTICAL, SIN PRESTAR, CERO IMPLICITO	11.90	3.24	77.90	4.15
	L	SUSTRC. HORIZONTAL SIN PRESTARSE	17.00	3.76	73.30	4.43
	LL	CALCULO MENTAL SIN ESCRIBIR DATOS PREVIOS	17.60	3.81	65.10	4.77
	M1	SUSTRC. VERTICAL PRESTANDOSE UNA VEZ	3.18	1.76	45.10	4.98
	S	SUSTRC.,APLICACION CON MANEJO DE DINERO	47.60	4.99	62.80	4.83
	T	SUSTRACCION PROBLEMAS DE APLICACION	61.60	4.86	86.30	3.44
MULTIPLIC.	P	MULTIPLICACION VERTICAL SIN LLEVAR NI PASAR	7.86	2.69	88.60	3.18
	N	TABLAS	11.30	3.16	82.80	3.77
	U	PROBLEMAS DEA APLICACION	35.20	4.78	71.20	4.53
DIVISION	R	DIVISION DE UN DIGITO (DIVID.,DIVIS.) S/RESIDUO	1.49	1.21	70.70	4.55
FRACCIONES	G	RECONOCIMIENTO GRAFICACION FRACCIONES	33.80	4.73	67.00	4.70
ORDINALES	E	RECONOCIMIENTO UBICACION	19.70	3.98	39.30	4.88
LONGITUD	Q	RECONOCIMIENTO EQUIVALENCIAS: cm. y Mtr.	7.22	2.59	63.20	4.82
MED.TIEMPO	O	RECONOCIMIENTO MEDIDA MAYOR	42.90	4.95	81.20	3.91
		TOTALES	29.89	4.34	73.98	4.20

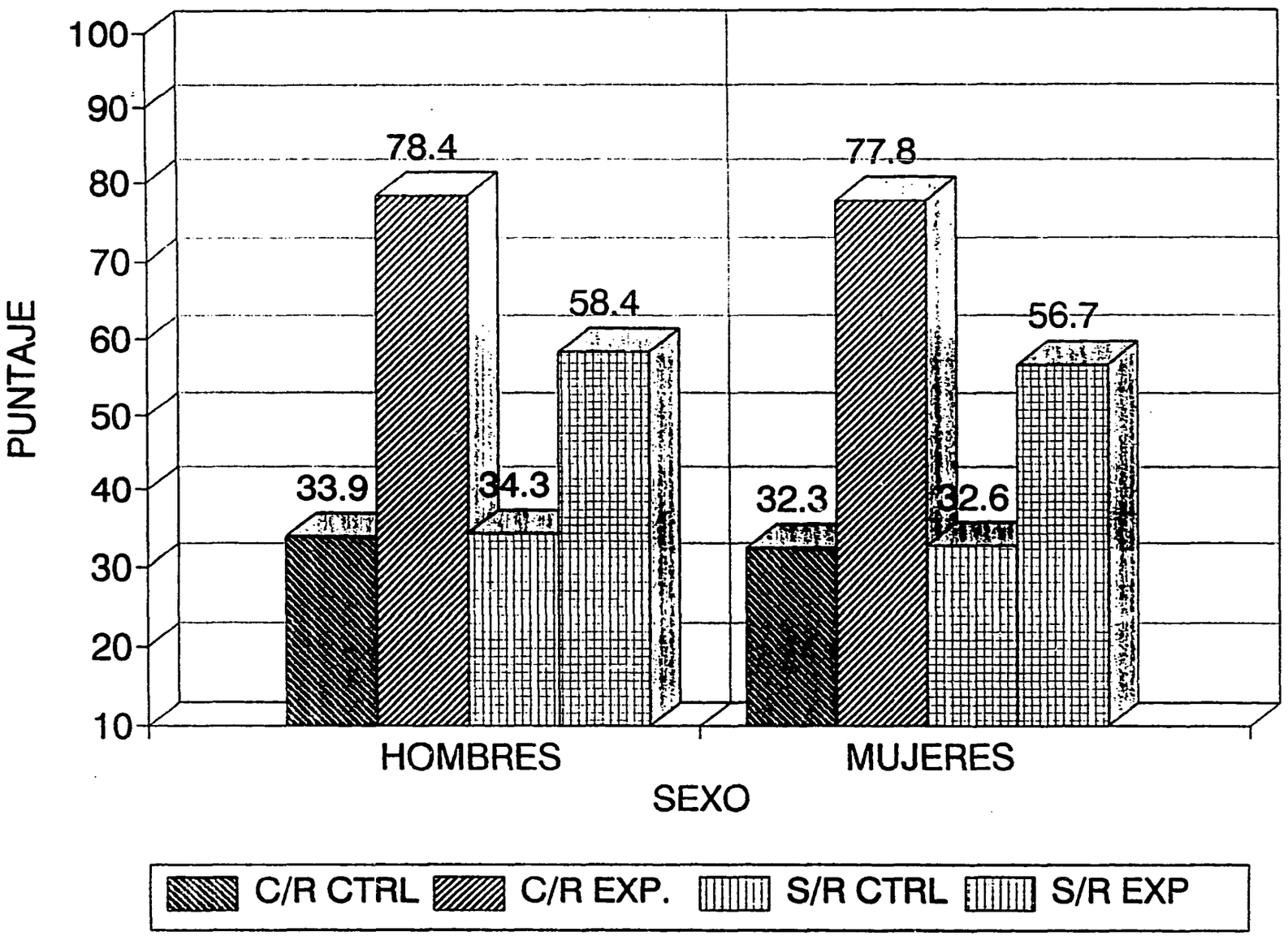
MATEMATICAS POR RADIO,1992
EVALUACION POR TEMAS,2do. BASICO



MATEMATICAS POR RADIO
LA PAZ: 2do.BASICO ,1992



MATEMATICAS POR RADIO
EL ALTO: 2do.BASICO ,1992



PROGRAMA DE APRENDIZAJE POR RADIO INTERACTIVA
PROGRAMA DE MATEMATICAS POR RADIO

RESULTADOS EVALUACION SUMATIVA 2do. GRADO
MATEMATICAS POR SEXO , 1992

CIUDAD : LA PAZ CURSO: 2do. BASICO

TIPO DE PRUEBA	EXPERI-MENTO	HOMBRES MEDIA	HOMBRES D.TIPICA	MUJERES MEDIA	MUJERES D.TIPICA	AMBOS SEXOS MEDIA	AMBOS SEXOS D.TIPICA
PRE-TEST	CON RADIO	24.2	3.6	22.4	4.1	23.2	3.9
	SIN RADIO	21.9	3.6	20.3	3.7	21.1	3.7
POST-TEST	CON RADIO	70.3	4.7	70.3	4.8	67.7	4.8
	SIN RADIO	53.0	4.8	46.8	5.6	49.6	5.2

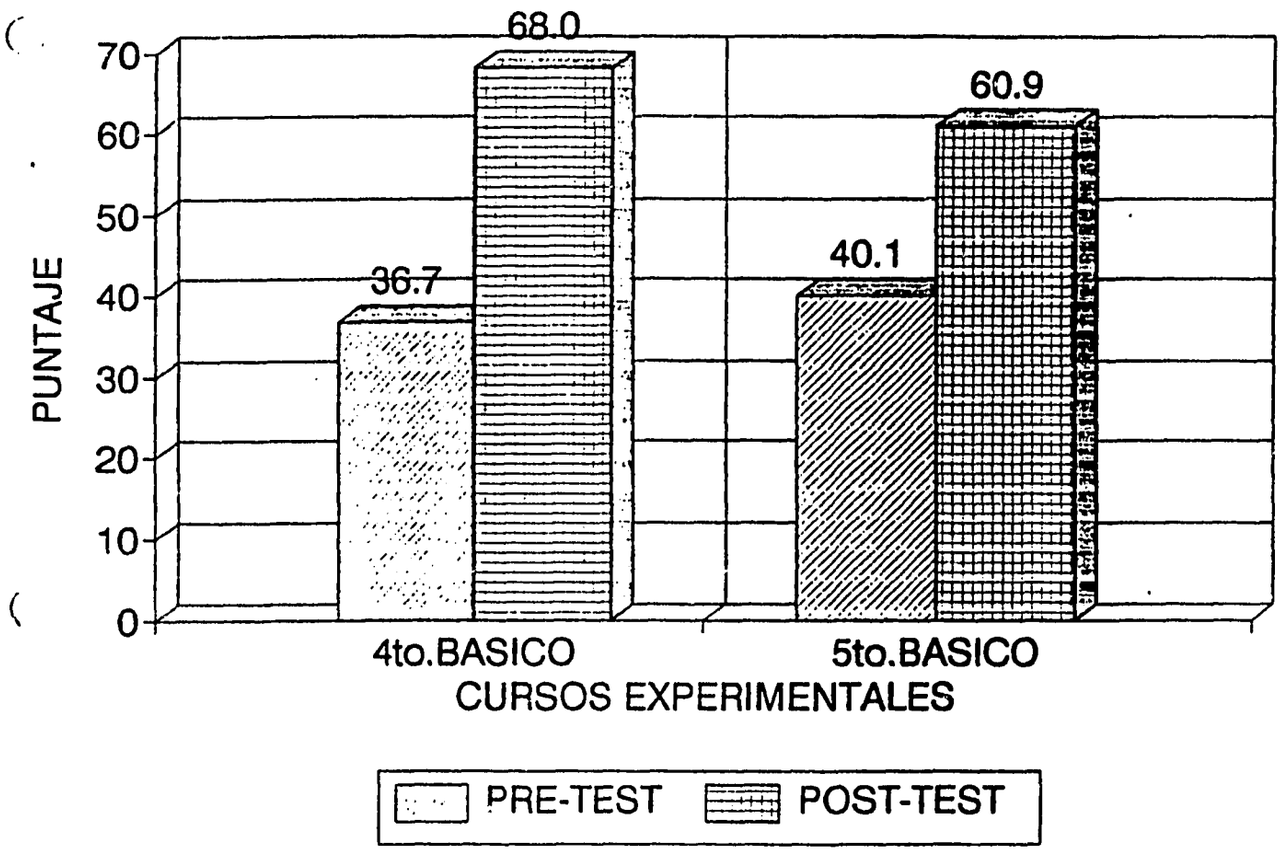
CIUDAD : EL ALTO CURSO: 2do. BASICO

TIPO DE PRUEBA	EXPERI-MENTO	HOMBRES MEDIA	HOMBRES D.TIPICA	MUJERES MEDIA	MUJERES D.TIPICA	AMBOS SEXOS MEDIA	AMBOS SEXOS D.TIPICA
PRE-TEST	CON RADIO	33.9	4.4	32.3	4.1	33.0	4.3
	SIN RADIO	34.3	4.5	32.6	4.6	33.4	4.5
POST-TEST	CON RADIO	78.4	4.0	77.8	4.0	76.9	4.2
	SIN RADIO	58.4	5.2	56.7	5.4	57.5	5.2

FUENTE: DPTO. DE EVALUACION DEL PARI.,1993

MATEMATICAS POR RADIO

COCHABAMBA: 4to. y 5to.



PROGRAMA DE APRENDIZAJE POR RADIO INTERACTIVA
EVALUACION DEL PROGRAMA DE MATEMATICAS POR RADIO, 1992

CURSO: 4do.BASICO
CIUDAD : COCHABAMBA

TEMA	COD.	NOMBRE DE LA PREGUNTA	PRUEBA: PRE - TEST CON RADIO (n=355) MEDIA	D.TIPICA	PRUEBA: POST - TEST CON RADIO (n=296) MEDIA	D.TIPICA
NUMERACION	A	Escritura miles, el cero en decenas y cent	64.20	4.79	92.20	2.68
	M	Escritura antecesor y sucesor	44.20	4.97	75.00	4.33
ADICION	O	Adicion 4 sumandos, llevando y pasando	54.60	4.98	70.60	4.56
	B	Adicion horizontal sin llevar.	64.50	4.78	86.80	3.38
	E	Problemas de aplicacion con horas	1.13	1.06	6.76	2.51
SUSTRACCION	F	Sustraccion vertical sin prestarse.	62.00	4.85	84.80	3.59
	N	Sustraccion vertical prestandose	35.20	4.78	75.30	4.31
MULTIPLICACION	CH	Multiplicacion, calculo mental	8.17	2.74	74.00	4.39
	H	Multiplicacion por un digito	70.10	4.58	92.60	2.62
	S	Multiplicacion llevando y pasando por dos	14.60	3.54	76.40	4.25
DIVISION	Q	Division entre un digito en el divisor	31.80	4.66	77.70	4.16
	L	Division entre dos digitos en el divisor	7.04	2.56	49.30	5.00
	N1	Division de reparto, problemas de aplicaci	57.70	4.94	79.40	4.04
FRACCIONES	D	Adicion homogeneos	72.70	4.46	97.60	1.52
	U	Sustraccion homogeneos	50.40	5.00	94.90	2.19
	R	Multiplicacion fracciones	42.80	4.95	74.30	4.37
	P	Equivalencia mixto a impropios	15.50	3.62	51.00	5.00
	I	Problemas aplicacion	19.20	3.94	32.80	4.69
DECIMALES	J	Adicion entero mas decimal	0.00	0.00	9.80	2.97
	RR	Comparacion mayor menor	6.2	2.41	6.76	2.51
	W	Sustraccion	26.5	4.41	75.00	4.33
ORDINALES	C	Reconocimiento	26.50	4.41	54.40	4.98
GEOMETRIA	V	Area	0.00	0.00	17.90	3.83
	LL	Perimetro	12.10	3.26	48.30	5.00
ROMANOS	G	Lectura y reconocimiento	39.20	4.88	68.60	4.64
CONJUNTOS	K	Inclusion	0.00	0.00	0.00	0.00
LONGITUD	T	Medir en centimetros	23.40	4.23	45.60	4.98
CONVERSION	X	Conversion	66.5	4.72	82.40	3.81
TOTAL			36.65	3.89	68.01	3.84

FUENTE: DPTO. DE EVALUACION DEL PARI.,1993

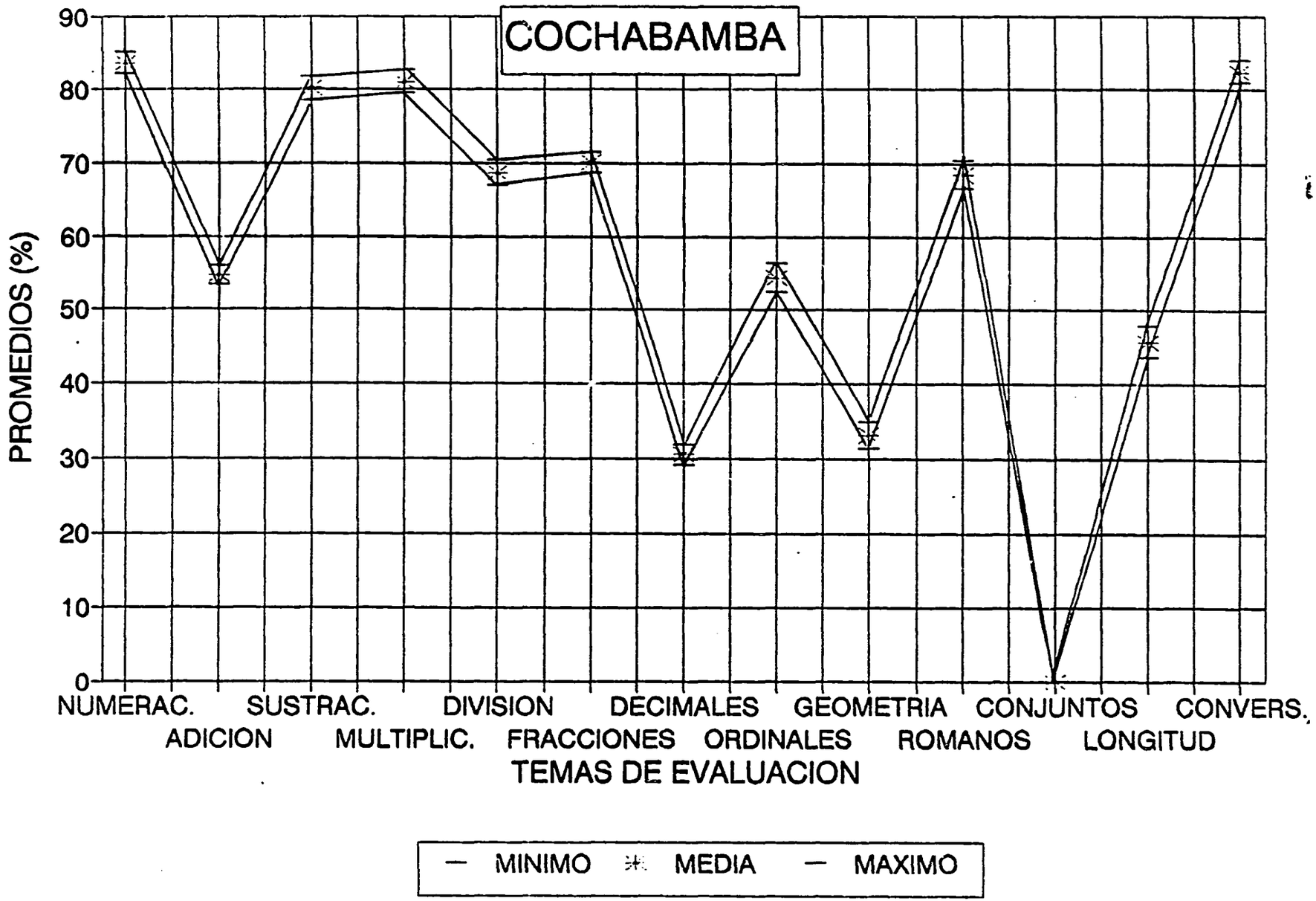
PROGRAMA DE APRENDIZAJE POR RADIO INTERACTIVA
EVALUACION DEL PROGRAMA DE MATEMATICAS POR RADIO, 1992

CURSO: 5do.BASICO
CIUDAD : COCHABAMBA

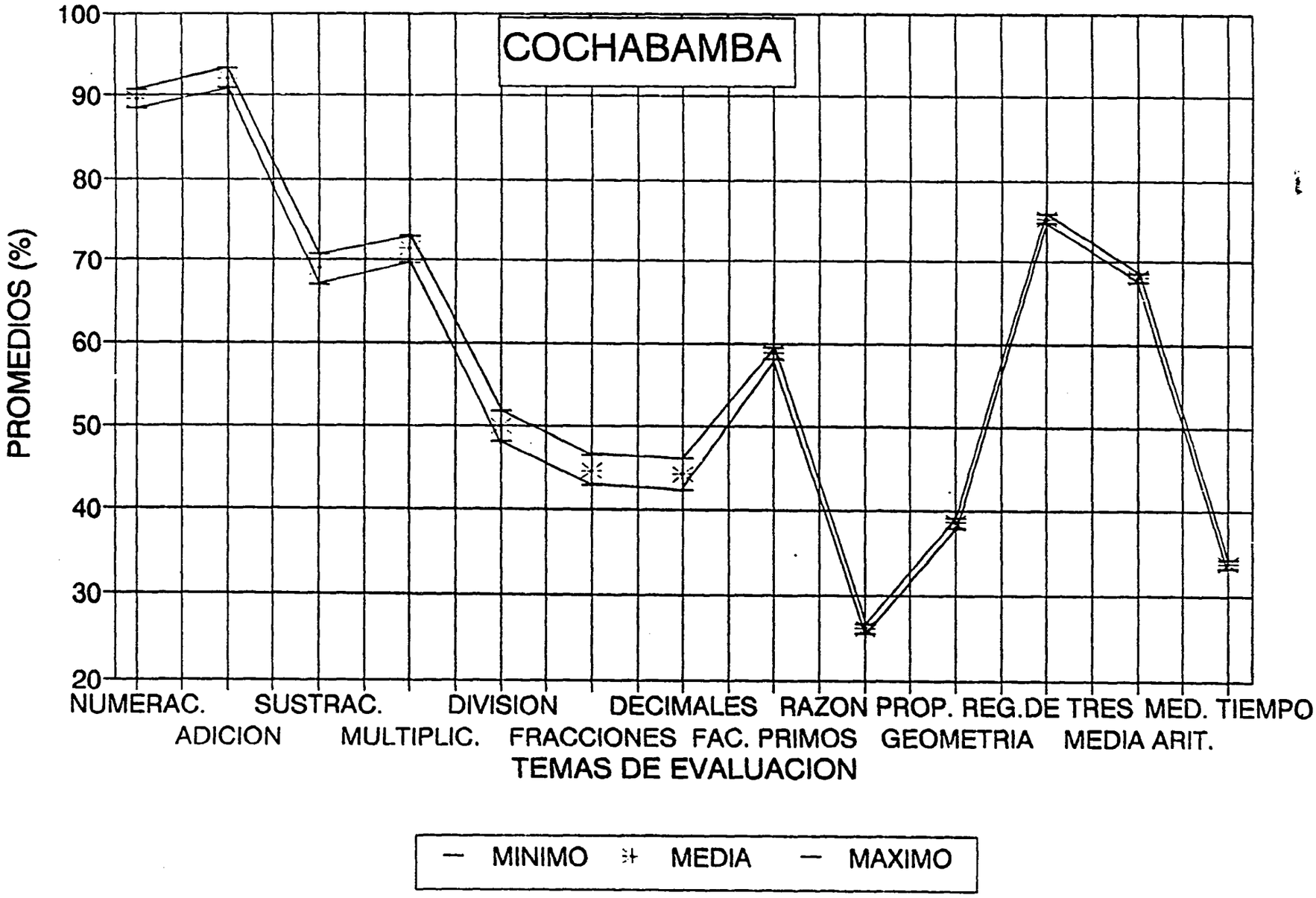
TEMA	CODIGO	NOMBRE DE LA PREGUNTA	PRUEBA: PRE - TEST CON RADIO (n=267) MEDIA	D.TIPICA	PRUEBA: POST - TEST CON RADIO (n=260) MEDIA	D.TIPICA
NUMERACION	1	Escritura de 6 cifras.	53.20	4.99	83.50	3.72
	2	Reconoces < y >	93.30	2.51	98.50	1.23
	5	Escritura antecesor y sucesor	76.50	4.22	86.50	3.41
ADICION	19	Adicion varios sumandos llevando y pasando	80.90	3.93	92.70	2.60
	7	Adicion mental	80.50	3.96	91.20	2.84
SUSTRACCION	21	Sustraccion prestando sobre cero forma rec	48.30	5.00	68.10	4.66
	25	Sustraccion prestando de forma rara	59.90	4.90	68.50	4.65
	13	Sustraccion problemas a aplicacion	65.20	4.76	70.00	4.58
MULTIPLICACION	3	Tabla de calculo mental	73.00	4.44	89.60	3.05
	27	Multiplicacion por 3 digitos en el multipl	31.50	4.64	55.80	4.97
	29	Multipl. por 3 digitos, ceros multiplicand	38.20	4.86	70.40	4.57
	12	Multiplicacion aplicacion	47.20	4.99	79.60	4.03
	18	Multiplicacion aplicacion	30.70	4.61	61.50	4.87
DIVISON	22	Division 2 digitos divisor	17.60	3.81	28.50	4.51
	30	Division 3 digitos divisor, cero al cocien	7.49	2.63	38.50	4.87
	15	Division aplicacion	68.50	4.64	83.10	3.75
FRACCIONES	8	Simplificacion de fracciones	10.10	3.01	44.20	4.97
	10	Comparacion < y >	92.10	2.69	78.80	4.08
	20	Adicion homogeneos	67.80	4.67	42.70	4.95
	24	Multiplicacion fracciones	58.40	4.93	34.60	4.76
	28	Division fracciones	0.37	0.61	29.20	4.55
	26	Sustraccion fracciones	0.00	0.00	38.80	4.87
DECIMALES	23	Sustraccion enteros menos decimal	15.00	3.57	40.00	4.90
	4	Escritura milecinos	4.12	1.99	48.50	5.00
FACTORES PRIMOS	6	Descomposicion factores primos	1.50	1.21	58.80	4.92
RAZONES Y PROP.	9	lectura de una razon	0.75	0.86	26.20	4.39
GEOMETRIA	11	Geometria area	16.10	3.68	38.50	4.87
REGLA DE TRES	14	Regla de tres simple	54.70	4.98	75.40	4.31
MEDIA ARITMETICA	16	Media aritmetica	1.50	1.21	68.10	4.66
MED. DE TIEMPO	17	Medidas de tiempo	8.61	2.81	33.80	4.73
TOTAL			40.11	4.56	60.89	4.74

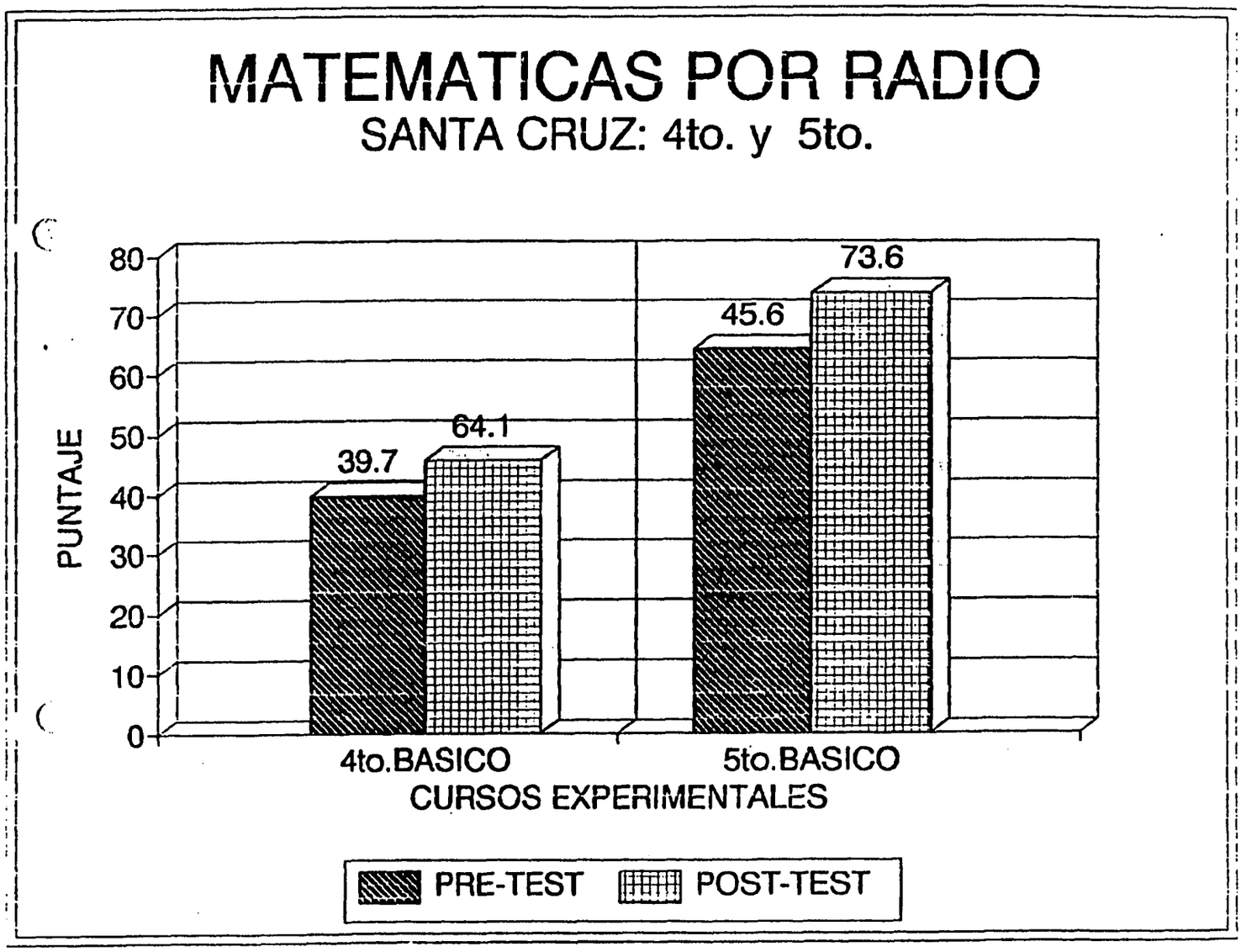
FUENTE: DEPTO. DE EVALUACION, 1993

MATEMATICAS POR RADIO, 1992
EVALUACION POR TEMAS, 4to. BASICO



MATEMATICAS POR RADIO, 1992
EVALUACION POR TEMAS, 5to. BASICO




MATEMATICAS POR RADIO
SANTA CRUZ: 4to. y 5to.
PUNTAJE
80
70
60
50
40
30
20
10
0
39.7
64.1
45.6
73.6
4to.BASICO
5to.BASICO
CURSOS EXPERIMENTALES
PRE-TEST
POST-TEST

PROGRAMA DE APRENDIZAJE POR RADIO INTERACTIVA
EVALUACION DEL PROGRAMA DE MATEMATICAS POR RADIO, 1992

CURSO: 4do.BASICO
CIUDAD : SANTA CRUZ

TEMA	COD.	NOMBRE DE LA PREGUNTA	PRUEBA: PRE - TEST CON RADIO (n=500) MEDIA	D.TIPICA	PRUEBA: POST - TEST CON RADIO (n=501) MEDIA	D.TIPICA
NUMERACION	A	Escritura miles, el cero en decenas y cent	79.20	4.06	95.40	2.10
	M	Escritura antecesor y sucesor	52.90	4.99	84.20	3.63
ADICION	O	Adicion 4 sunandos, llevando y pasando	52.50	4.99	74.60	4.34
	B	Adicion horizontal sin llevar.	76.20	4.26	86.20	3.43
	E	Problemas de aplicacion con horas	5.79	2.34	35.80	4.80
SUSTRACCION	F	Sustraccion vertical sin prestarse.	62.30	4.85	81.20	3.91
	N	Sustraccion vertical prestandose	27.30	4.46	61.60	4.86
MULTIPLICACION	CH	Multiplicacion, calculo mental	18.20	3.86	71.80	4.49
	H	Multiplicacion por un digito	70.10	4.58	86.80	3.37
	S	Multiplicacion llevando y pasando por dos	20.40	4.03	65.80	4.74
DIVISION	Q	Division entre un digito en el divisor	40.70	4.91	65.20	4.76
	L	Division entre dos digitos en el divisor	6.59	2.48	50.20	5.00
	M1	Division de reparto, problemas de aplicaci	65.10	4.77	90.40	2.95
FRACCIONES	D	Adicion homogeneos	70.10	8.58	94.20	2.34
	U	Sustraccion homogeneos	49.50	5.00	87.20	3.34
	R	Multiplicacion fracciones	45.10	7.15	72.60	4.45
	P	Equivalencia mixto a impropios	18.60	3.89	63.20	4.62
	I	Problemas aplicacion	18.00	3.84	44.60	4.[illegible]
DECIMALES	J	Adicion entero mas decimal	10.80	3.10	29.40	4.56
	RR	Comparacion mayor menor	16.6	3.72	22.60	4.29
	W	Sustraccion	42.9	4.95	67.00	4.[illegible]
ORDINALES	C	Reconocimiento	37.30	6.43	68.80	4.63
GEOMETRIA	Y	Area	31.90	4.66	31.80	4.[illegible]
	LL	Perimetro	21.80	4.13	55.60	4.[illegible]
ROMANOS	G	Lectura y reconocimiento	48.10	5.00	56.80	4.[illegible]
CONJUNTOS	K	Inclusion	1.00	0.99	0.20	0.45
LONGITUD	T	Medir en centimetros	41.50	6.80	59.60	4.90
CONVERSION	X	Conversion	88.6	3.17	91.40	2.[illegible]
TOTAL			39.69	3.58	64.08	3.80

FUENTE: DPTO. DE EVALUACION DEL PARI.,1993

PROGRAMA DE APRENDIZAJE POR RADIO INTERACTIVA
EVALUACION DEL PROGRAMA DE MATEMATICAS POR RADIO, 1992

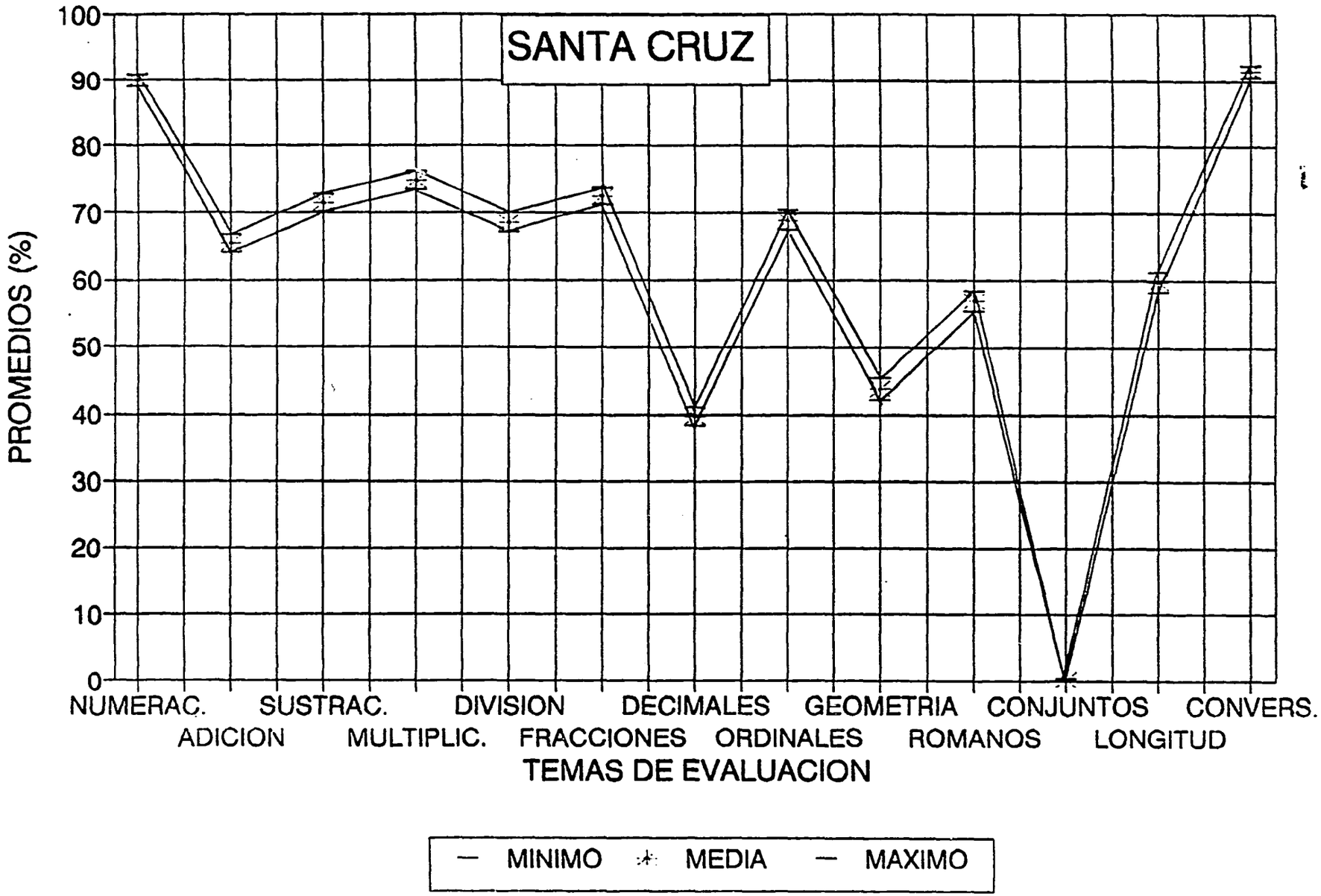
CURSO: 5do.BASICO
CIUDAD : SANTA CRUZ

TEMA	COD	NOMBRE DE LA PREGUNTA	PRUEBA: PRE - TEST CON RADIO (n=583) MEDIA	D.TIPICA	PRUEBA: POST - TEST CON RADIO (n=563) MEDIA	D.TIPICA
NUMERACION	1	Escritura de 6 cifras.	67.30	4.69	83.50	3.71
	2	Reconoces < y >	95.00	2.17	98.90	1.03
	5	Escritura antecesor y sucesor	80.50	6.19	92.40	2.66
ADICION	19	Adicion varios sumandos llevando y pasando	81.00	3.92	89.70	3.04
	7	Adicion mental	83.40	3.72	91.80	2.74
SUSTRACCION	21	Sustraccion prestando sobre cero forma rec	63.00	4.83	72.30	4.48
	25	Sustraccion prestando de forma rara	56.20	4.96	71.80	4.50
	13	Sustraccion problemas a aplicacion	70.50	4.56	79.90	4.01
MULTIPLICACION	3	Tabla de calculo mental	86.60	3.40	96.80	1.76
	27	Multiplicacion por 3 digitos en el multipl	42.80	4.95	66.60	4.72
	29	Multipl. por 3 digitos, ceros multiplicand	45.50	4.98	75.50	4.30
	12	Multiplicacion aplicacion	59.40	4.91	96.60	1.81
	18	Multiplicacion aplicacion	33.40	4.72	80.30	3.98
DIVISON	22	Division 2 digitos divisor	21.40	4.10	47.10	4.99
	30	Division 3 digitos divisor, cero al cocien	4.35	2.04	48.30	5.00
	15	Division aplicacion	62.50	4.84	89.70	3.04
FRACCIONES	8	Simplificacion de fracciones	7.53	1.64	58.30	4.93
	10	Comparacion < y >	87.30	3.33	78.90	4.08
	20	Adicion homogeneos	66.10	10.60	70.90	4.54
	24	Multiplicacion fracciones	74.10	4.42	62.90	4.83
	28	Division fracciones	6.34	2.44	61.30	4.87
	26	Sustraccion fracciones	4.62	2.10	51.20	5.00
DECIMALES	23	Sustarccion enteros menos decimal	14.90	3.56	45.60	4.98
	4	Escritura milecimos	16.80	3.74	58.30	4.93
FACTORES PRIMOS	6	Descomposicion factores primos	9.76	2.97	73.40	4.42
RAZONES Y PROP.	9	lectura de una razon	4.11	1.99	35.70	4.79
GEOMETRIA	11	Geometria area	29.30	4.55	73.40	4.42
REGLA DE TRES	14	Regla de tres simple	56.70	4.96	91.50	2.79
MEDIA ARITMETICA	16	Media aritmetica	19.50	3.96	88.10	3.24
MED. DE TIEMPO	17	Medidas de tiempo	21.90	4.14	76.90	4.21
TOTAL			45.60	3.74	73.57	4.49

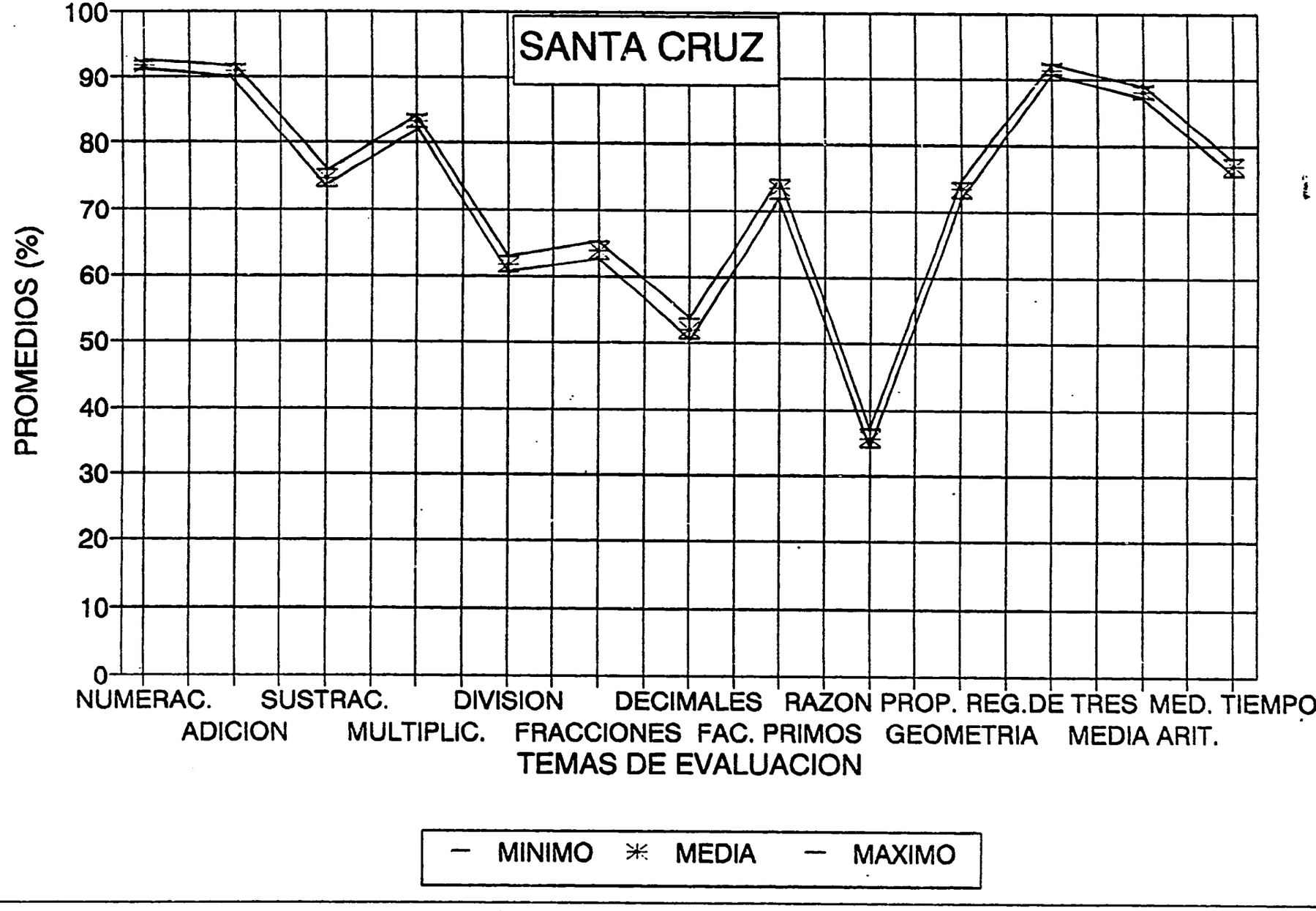
FUENTE: DEPTO. DE EVALUACION, 1993

48

MATEMATICAS POR RADIO, 1992
EVALUACION POR TEMAS, 4to. BASICO

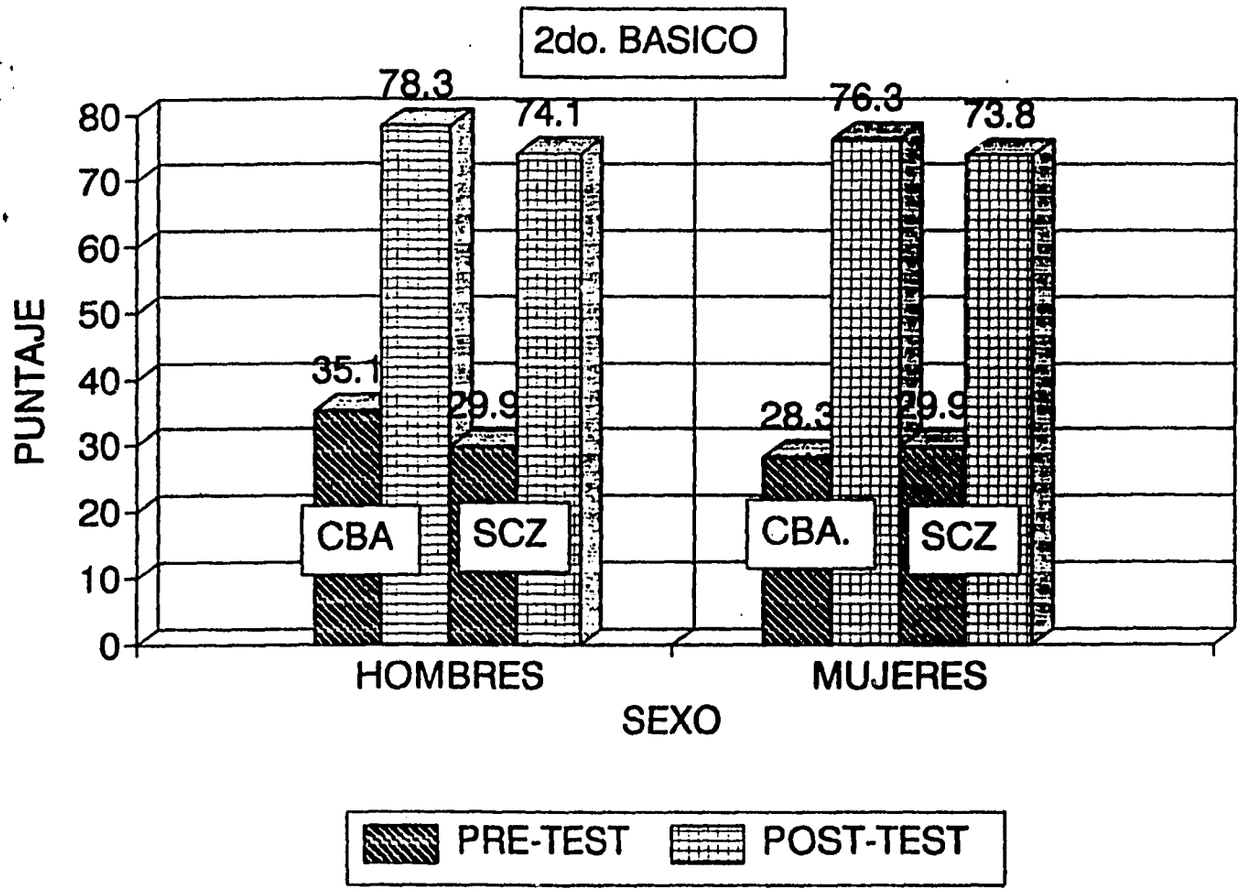


MATEMATICAS POR RADIO, 1992
EVALUACION POR TEMAS, 5to. BASICO

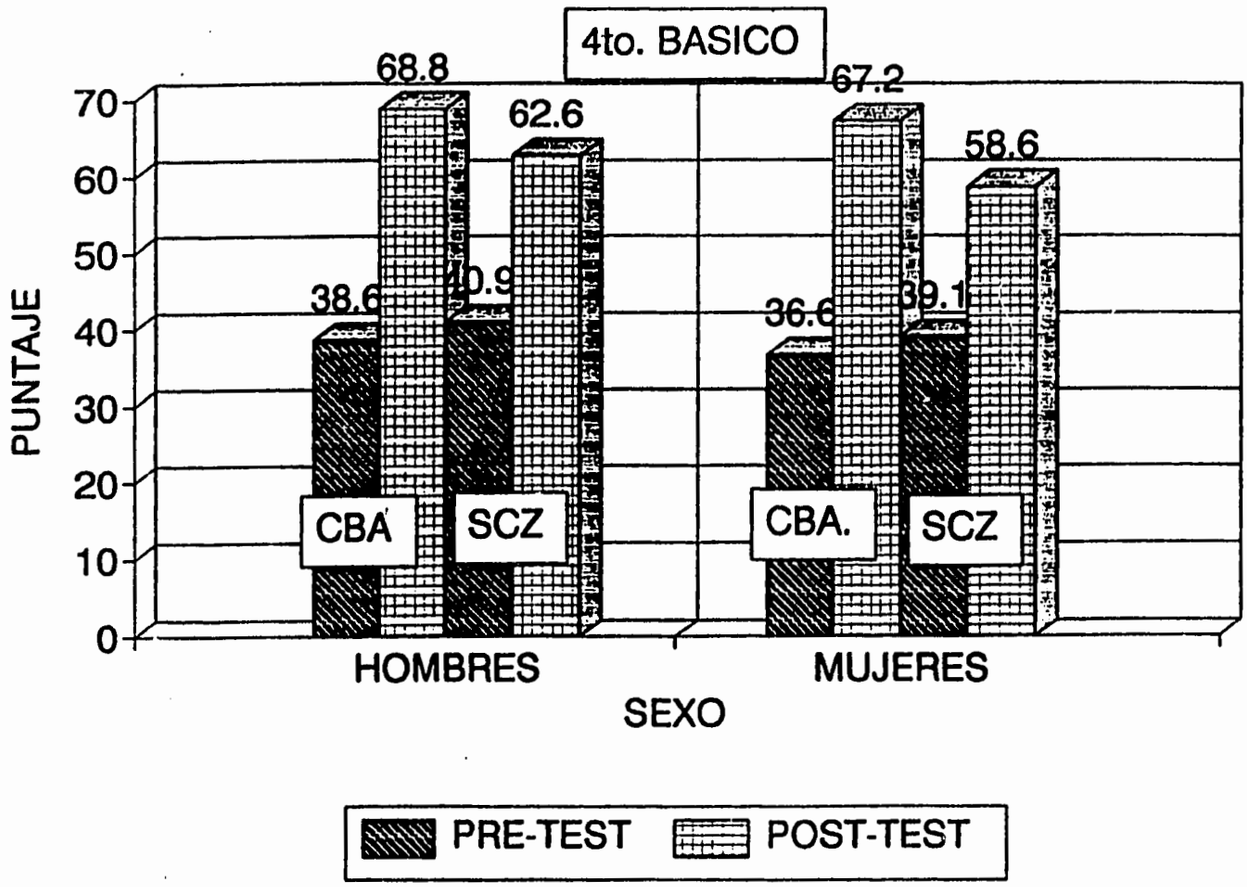


MATEMATICAS POR RADIO

COCHABAMBA Y SANTA CRUZ

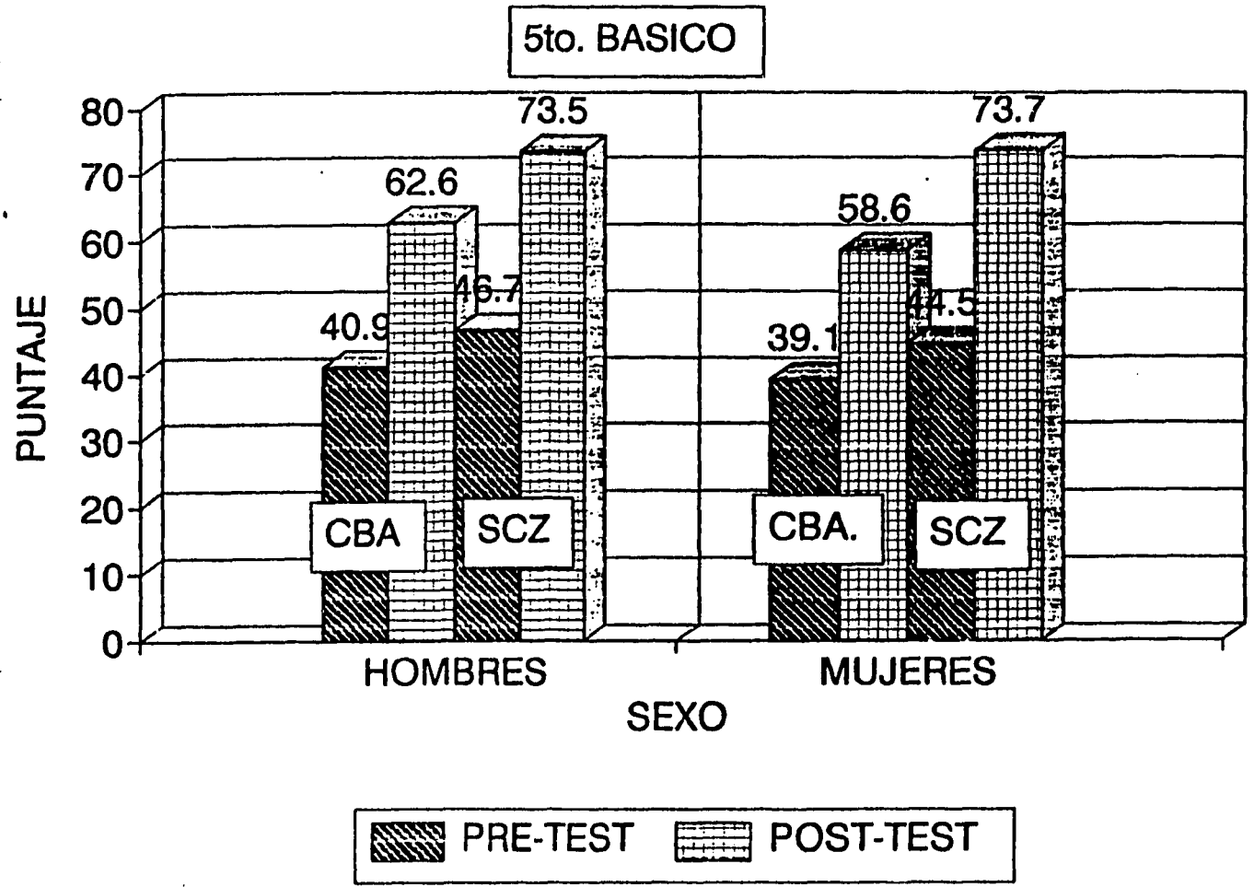


MATEMATICAS POR RADIO
COCHABAMBA Y SANTA CRUZ



MATEMATICAS POR RADIO

COCHABAMBA Y SANTA CRUZ



PROGRAMA DE APRENDIOZAJE POR RADIO INTERACTIVA
PROGRAMA DE MATEMATICAS POR RADIO

RESULTADOS EVALUACION SUMATIVA 2do. GRADO
MATEMATICAS POR SEXO , 1992

CIUDAD : COCHABAMBA CURSO: 2do. BASICO

PRUEBA	HOMBRES MEDIA	HOMBRES D.TIPICA	MUJERES MEDIA	MUJERES D.TIPICA	AMBOS SEXOS MEDIA	AMBOS SEXOS D.TIPICA
PRE-TEST	35.1	4.0	28.3	3.7	30.0	3.9
POST-TEST	78.3	3.9	76.3	3.9	77.0	3.9

CIUDAD : SANTA CRUZ CURSO: 2do. BASICO

PRUEBA	HOMBRES MEDIA	HOMBRES D.TIPICA	MUJERES MEDIA	MUJERES D.TIPICA	AMBOS SEXOS MEDIA	AMBOS SEXOS D.TIPICA
PRE-TEST	29.9	4.3	29.9	4.4	29.9	4.3
POST-TEST	74.1	4.1	73.8	4.3	74.0	4.2

FUENTE: DEPTO. DE EVALUACION DEL PARI, 1993

PROGRAMA DE APRENDIZAJE POR RADIO INTERACTIVA
PROGRAMA DE MATEMATICAS POR RADIO

RESULTADOS DE LA EVALUACION SUMATIVA DE 2do., 3ro. y 5to. GRADO DE MATEMATICAS POR SEXO, 1992

CIUDAD: COCHABAMBA

TIPO DE EXAMEN	SEGUNDO BASICO		CUARTO BASICO		QUINTO BASICO	
	HOMBRES	MUJERES	HOMBRES	MUJERES	HOMBRES	MUJERES
PRE-TEST	35.1	28.3	38.6	36.6	40.9	39.1
POST-TEST	78.3	76.3	68.8	67.2	62.6	58.6

CIUDAD : SANTA CRUZ

TIPO DE EXAMEN	SEGUNDO BASICO		CUARTO CUARTO BAS		QUINTO BASICO	
	HOMBRES	MUJERES	HOMBRES	MUJERES	HOMBRES	MUJERES
PRE - TEST	29.9	29.9	40.9	39.1	46.7	44.5
POST-TEST	74.1	73.8	62.6	58.6	73.5	73.7

FUENTE: DPTO. DE EVALUACION, 1993

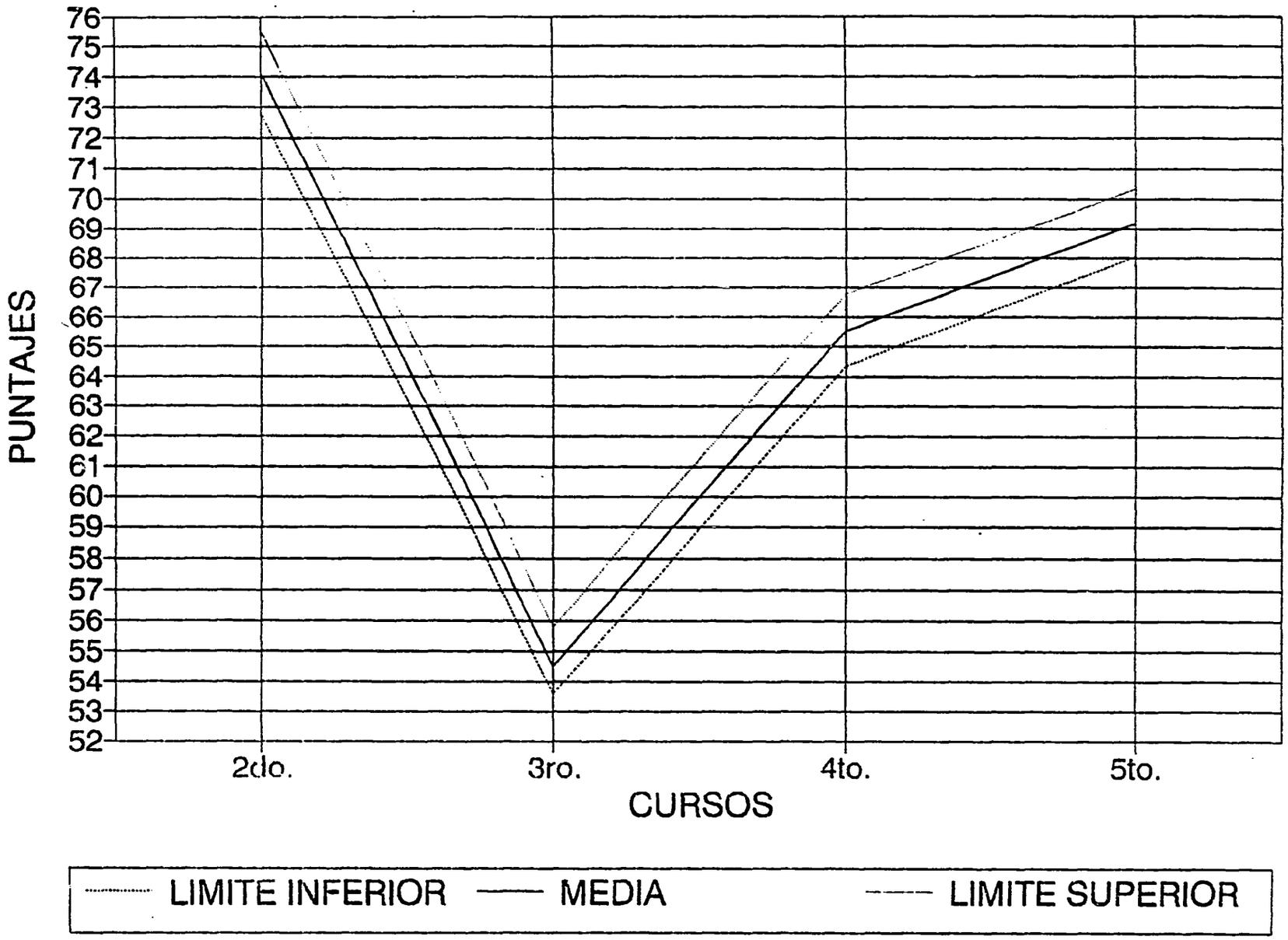
PROGRAMA DE APRENDIZAJE POR RADIO INTERACTIVA
PROGRAMA DE MATEMATICAS POR RADIO

ANALISIS DE LA PRUEBA DE MATEMATICA POR TEMAS 5to. BASICO

TEMA	ITEMS	COCHABAMBA MEDIA	D.S.	SANTA CRUZ MEDIA	D.S.
NUMERAC.	1,2,5	89.5	9.3	91.6	8.2
ADICION	19 , 7	92.0	9.1	90.8	9.6
SUSTRAC.	21 , 25 , 13	68.9	15.4	74.7	14.4
MULTIPLIC.	3,27,29,12,18	71.4	14.3	83.2	11.0
DIVISION	22,30, 15	50.0	14.6	61.7	14.5
FRACCIONES	8,10,20,24,28	44.7	15.7	63.9	15.7
DECIMALES	23, 4	44.3	16.5	52.0	16.5
FAC. PRIMOS	6	58.8	4.9	73.4	17.7
RAZON PROP.	9	26.2	4.4	35.7	16.0
GEOMETRIA	11	38.5	4.9	73.4	14.7
REG.DE TRES	14	75.4	4.3	91.5	9.3
MEDIA ARIT.	16	68.1	4.7	88.1	10.8
MED. TIEMPO	17	33.8	4.7	76.9	14.0

FUENTE: DEPTO. DE EVALUACION 1993

MATEMATICAS POR RADIO , 1992
INTERVALOS AL 95% DE CONFIANZA



PROGRAMA DE APRENDIZAJE POR RADIO INTERACTIVA
PROGRAMA DE MATEMATICAS POR RADIO

ANALISIS DE LA PRUEBA DE MATEMATICA POR TEMAS 5to. BASICO

TEMA	ITEMS	COCHABAMBA MEDIA	D.S.	SANTA CRUZ MEDIA	D.S.
NUMERAC.	1,2,5	89.5	9.3	91.6	8.2
ADICION	19 , 7	92.0	9.1	90.8	9.6
SUSTRAC.	21 , 25 , 13	68.9	15.4	74.7	14.4
MULTIPLIC.	3,27,29,12,18	71.4	14.3	83.2	11.0
DIVISION	22,30, 15	50.0	14.6	61.7	14.5
FRACCIONES	8,10,20,24,28	44.7	15.7	63.9	15.7
DECIMALES	23, 4	44.3	16.5	52.0	16.5
FAC. PRIMOS	6	58.8	4.9	73.4	17.7
RAZON PROP.	9	26.2	4.4	35.7	16.0
GEOMETRIA	11	38.5	4.9	73.4	14.7
REG.DE TRES	14	75.4	4.3	91.5	9.3
MEDIA ARIT.	16	68.1	4.7	88.1	10.8
MED. TIEMPO	17	33.8	4.7	76.9	14.0

FUENTE: DEPTO. DE EVALUACION 1993

PROGRAMA DE APRENDIZAJE POR RADIO INTERACTIVA
PROGRAMA DE MATEMATICAS POR RADIO

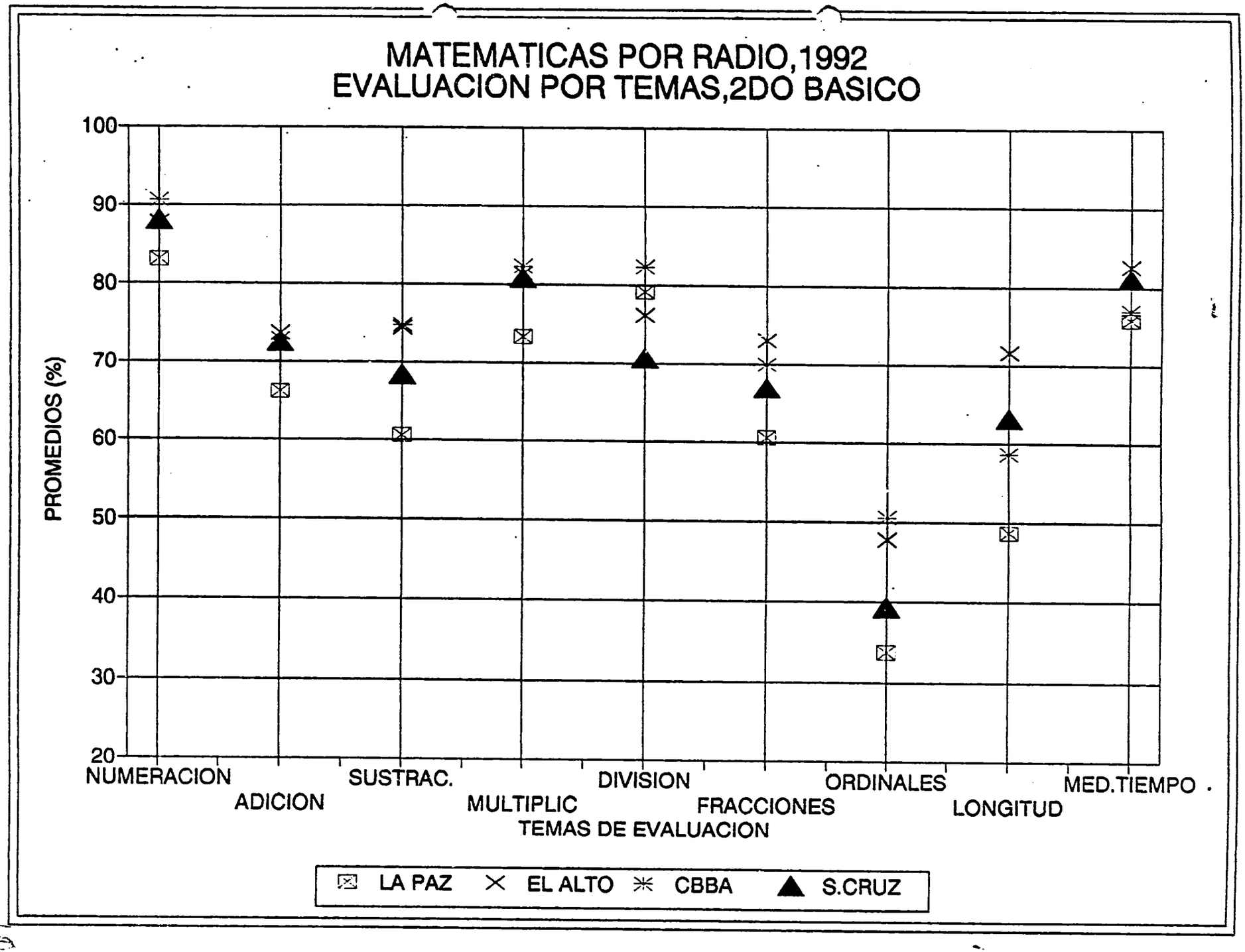
RESULTADOS DE LA EVALUACION SUMATIVA DE 2do., 3ro. y 5to.
GRADO DE MATEMATICAS POR SEXO, 1992

CIUDAD: COCHABAMBA

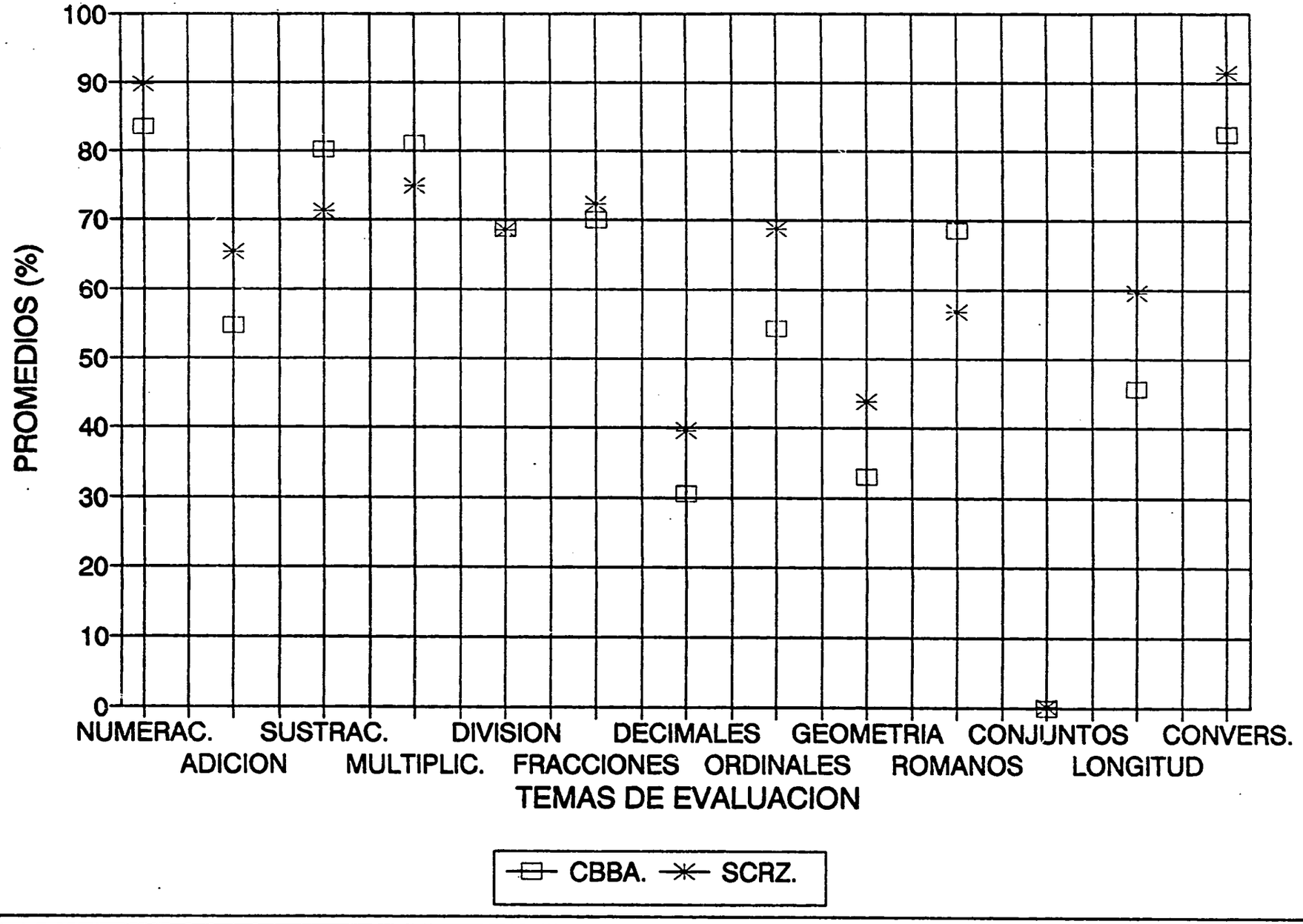
TIPO DE EXAMEN	SEGUNDO BASICO		CUARTO BASICO		QUINTO BASICO	
	HOMBRES	MUJERES	HOMBRES	MUJERES	HOMBRES	MUJERES
PRE-TEST	35.1	28.3	38.6	36.6	40.9	39.1
POST-TEST	78.3	76.3	68.8	67.2	62.6	58.6

CIUDAD : SANTA CRUZ

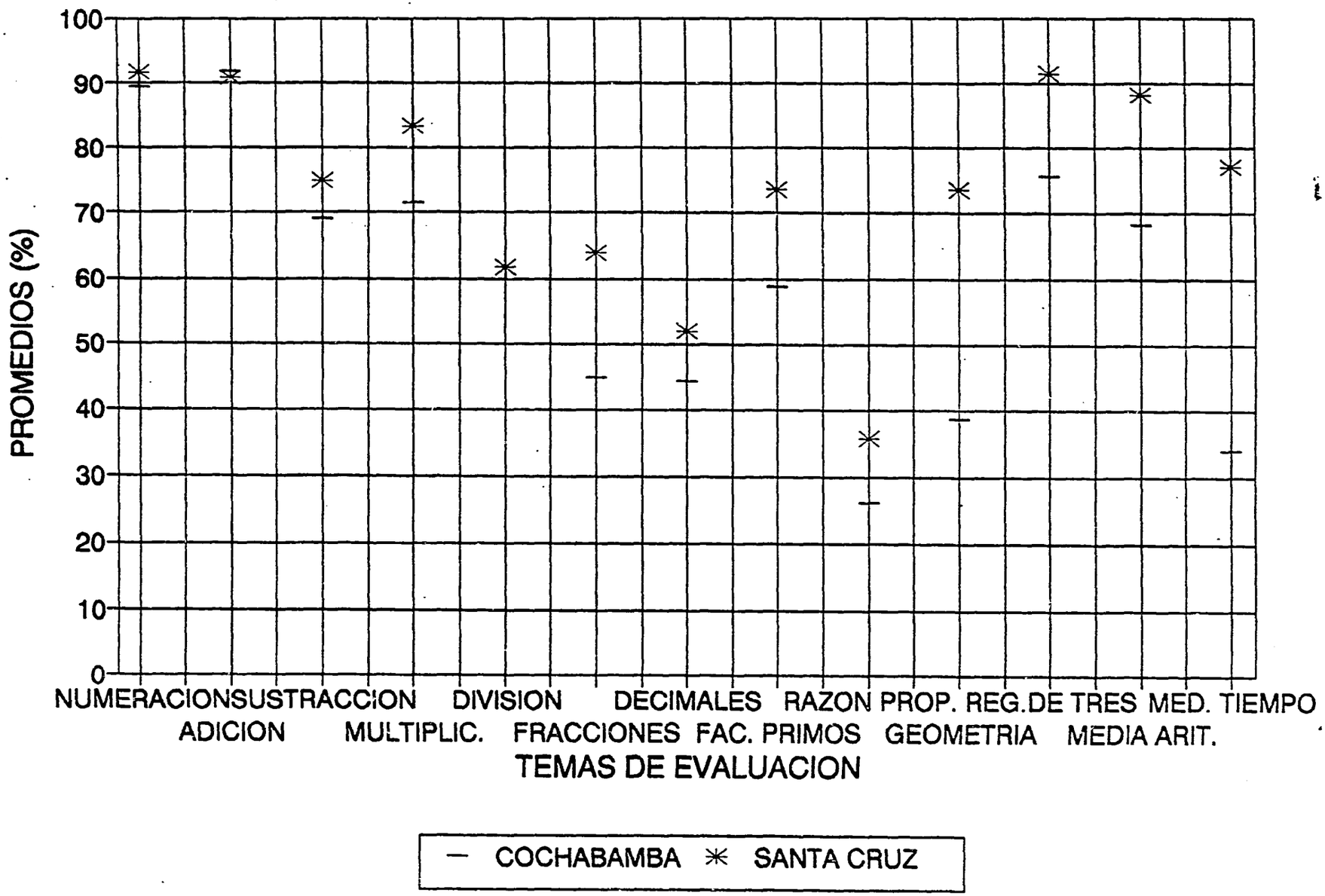
TIPO DE EXAMEN	SEGUNDO BASICO		CUARTO CUARTO B		QUINTO BASICO	
	HOMBRES	MUJERES	HOMBRES	MUJERES	HOMBRES	MUJERES
PRE - TEST	29.9	29.9	40.9	39.1	46.7	44.5
POST-TEST	74.1	73.8	62.6	58.6	73.5	73.7


MATEMATICAS POR RADIO,1992
EVALUACION POR TEMAS,2DO BASICO
PROMEDIOS (%)
100
90
80
70
60
50
40
30
20
NUMERACION
ADICION
SUSTRAC.
MULTIPLIC
DIVISION
FRACCIONES
ORDINALES
LONGITUD
MED.TIEMPO
TEMAS DE EVALUACION
LA PAZ
EL ALTO
CBBA
S.CRUZ

MATEMATICAS POR RADIO, 1992
EVALUACION POR TEMAS, 4to. BASICO



MATEMATICAS POR RADIO, 1992
EVALUACION POR TEMAS, 5to. BASICO



PROGRAMA DE APRENDIZAJE POR RADIO INTERACTIVA " PARI "

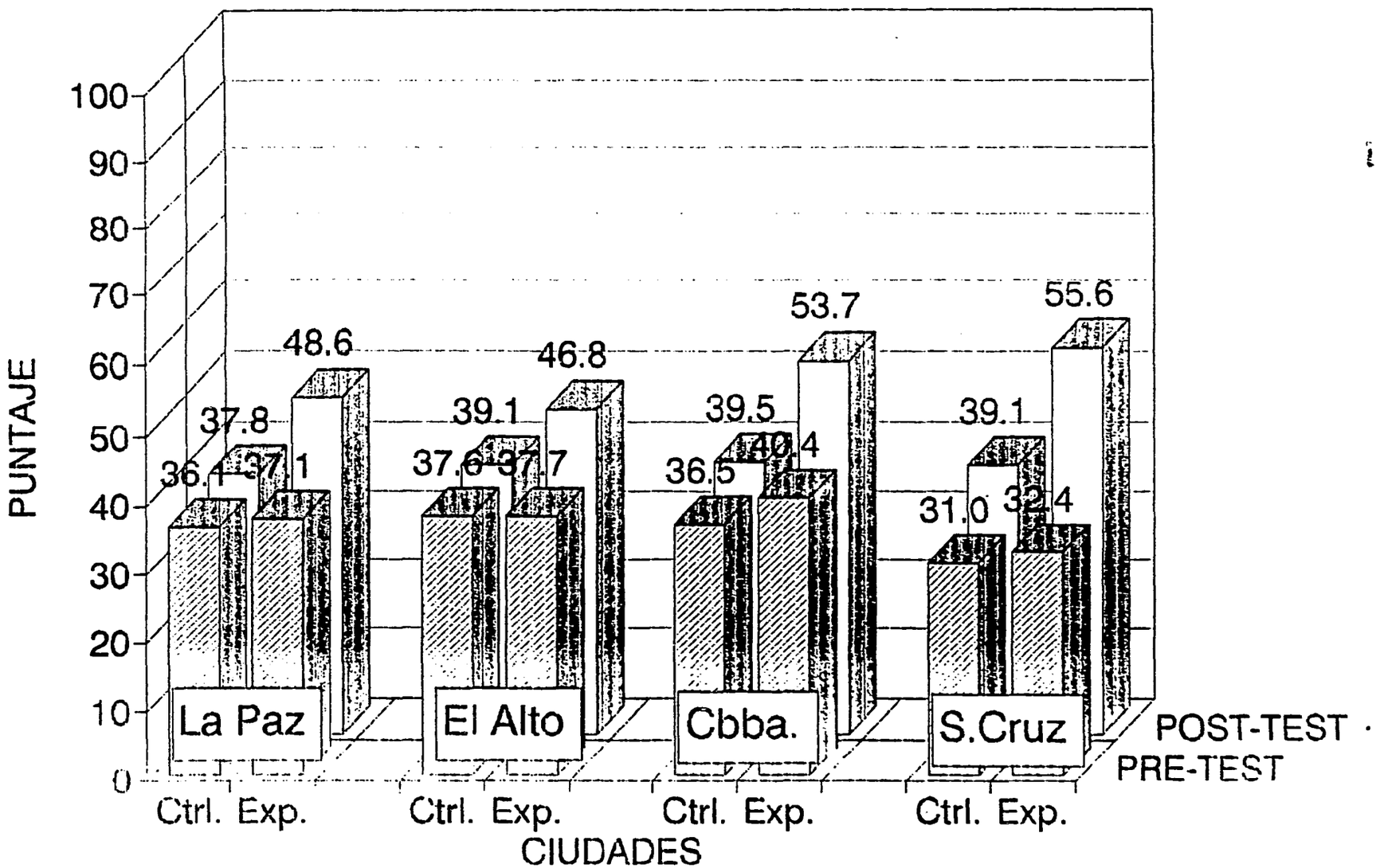
SALUD PREVENTIVA EN BOLIVIA

ESTADISTICAS

LA PAZ - BOLIVIA
1992

63

SALUD PREVENTIVA
TERCERO BASICO , 1992



69

PROGRAMA DE SALUD PREVENTIVA
PRUEBAS DE HIPOTESIS SALUD - 1992

CIUDADES Y TIPO DE PRUEBA	DESV.TIPICA MUESTRAL	DIFERENCIA DE MEDIAS	PROBABILIDAD
CIUDAD: LA PAZ			
PRE-TEST: CTRL. Y EXP.	0.6826	-0.3150	0.3228
POST-TEST: CTRL. Y EXP.	0.9341	-3.5050	0.0001
CIUDAD: EL ALTO			
PRE-TEST: CTRL. Y EXP.	0.7079	-0.0125	0.4920
POST-TEST: CTRL. Y EXP.	0.8638	-2.5150	0.0018
CIUDAD: SANTA CRUZ			
PRE-TEST: CTRL. Y EXP.	0.9699	1.0450	0.8599
POST-TEST: CTRL. Y EXP.	1.2951	-5.3600	0.0000
CIUDAD: COCHABAMBA			
PRE-TEST: CTRL. Y EXP.	0.8308	-1.2800	0.0618
POST-TEST: CTRL. Y EXP.	1.1597	-4.5850	0.0000

FUENTE: DEPTO. DE IMPLEMENTACION Y EVALUACION, PARI. 1993

PROGRAMA DE APRENDIZAJE POR RADIO INTERACTIVA
PROGRAMA DE SALUD PREVENTIVA
CIUDAD: LA PAZ

EVALUACION DEL CURSO DE SALUD PREVENTIVA 1992 (3ro.BASICO)
CUADRO COMPARATIVO ENTRE PRUEBAS PRE-TEST Y POST-TEST EN GRUPOS DE CONTROL Y EXPERIMENTAL, SEGUN AGRUPACION DE ITEMS (PORCENTAJES)

COD	PREGUNTA	PRE - TEST CRTL. n = 391 %	PRE - TEST EXP. n = 366 %	POST - TEST CTRL. n = 376 %	POST - TEST EXP. n = 358 %	DIFERENCIA EXP. %	DIFERENCIA CTRL. %	DIF.TOTAL EXP.-CTRL.
P1	Un nino SANO esta:	89.07	89.96	84.38	90.57	0.61	-4.69	5.31
P2	Un nino ENFERMO esta:	70.08	77.46	73.94	80.52	3.06	3.86	-0.80
P3	Yo puedo PREVENIR enfermedades, Si:	57.03	60.93	60.37	70.04	9.11	3.34	5.77
P4	Los MICROBIOS viven en:	65.41	66.39	68.22	81.15	14.75	2.81	11.94
P5	La CACA puede entrar a mi cuerpo, si:	51.02	49.25	58.05	66.97	17.72	7.02	10.70
P6	Amis Hnos. menores debo ensenarles que despues de hacer caca	58.18	53.62	62.30	60.27	6.65	4.12	2.53
P7	Para que las ENFERMEDADES no entren en mi boca, debo:	70.20	71.93	75.40	77.51	5.59	5.19	0.39
P8	Las MOSCAS traen enfermedades poque:	52.11	52.32	58.51	60.41	8.08	6.40	1.68
P9	Para que la BASURA no nos traiga ENFERMEDADES debemos:	60.61	63.18	67.49	77.51	14.33	6.87	7.46
P10	La DIARREA COMUN:	66.56	71.52	71.21	72.97	1.46	4.65	-3.19
P11	Para MATAR los microbios de las verduras es necesario:	55.05	51.64	54.72	64.80	13.17	-0.33	13.50
P12	A un enfermo DESHIDRATADO por diarrea, debemos darle:	56.97	56.35	57.11	57.40	1.05	0.15	0.90
P13	Las VERDURAS debo comerlas COCIDAS:	53.45	52.80	60.37	62.71	9.91	6.92	2.99
P14	Si hay un enfermo con COLERA en la casa. Que debemos hacer?	58.89	60.93	60.97	74.16	13.23	2.08	11.15
P15	Que debes ensenar en tu casa para PREVENIR el COLERA?	71.42	74.52	73.40	84.92	10.39	1.98	8.41
	SUBTOTAL 1	62.40	63.52	65.76	72.13	8.61	3.36	5.25
P16	El agua que tomo debe estar hervida por lo menos___minutos	16.11	15.03	21.81	40.22	25.20	5.70	19.50
P17	La enfermedades entran a mi cuerpo por mi____	29.92	34.97	34.31	75.98	41.00	4.39	36.62
	SUBTOTAL 2	23.02	25.00	28.06	58.10	33.10	5.04	28.06
P18	Que debes hacer para estar SANO ?	23.44	24.23	17.46	32.40	8.18	-5.98	14.16
P19	Como reconoces a una persona DESHIDRATADA ?	0.43	0.64	1.06	5.21	4.58	0.64	3.94
P21	Como se prepara el SUERO CASERO ?	0.00	1.18	0.53	39.39	38.20	0.53	37.67
	SUBTOTAL 3	7.96	8.68	6.35	25.67	16.98	-1.60	18.59
P20	Que cuidados debes tener si comes comida en la calle ?	1.02	2.32	0.93	2.09	-0.23	-0.09	-0.14
P22	Como se prepara el suero con el sobre URO ?	0.00	0.68	0.27	5.73	5.04	3.04	2.78
	SUBTOTAL 4	0.51	1.50	0.60	3.91	2.41	-6.59	-7.19
P24	Con una raya une lo que corresponde a la diarrea comun	61.69	60.38	63.03	57.71	-2.67	1.34	-4.02
P25	Con una raya une lo que corresponde a diarrera del colera	33.25	34.92	37.02	48.77	13.85	3.77	10.08
	SUBTOTAL 5	47.47	47.65	50.03	53.24	5.59	2.56	3.03

FUENTE: DEPARTAMENTO DE EVALUACION - PARI.

PROGRAMA DE APRENDIZAJE POR RADIO INTERACTIVA
PROGRAMA DE SALUD PREVENTIVA
CIUDAD: LA PAZ

EVALUACION DEL CURSO DE SALUD PREVENTIVA 1992 (3ro.BASICO)
CUADRO COMPARATIVO ENTRE PRUEBAS PRE-TEST Y POST-TEST EN
GRUPOS DE CONTROL Y EXPERIMENTAL
(MEDIAS , DESVIACIONES TIPICAS Y TAMANO DE EFECTO)

COD	PREGUNTA	VALOR DE LA PREG.	PRE - TEST CONTROL n = 391 MEDIA	PRE - TEST CONTROL n = 391 D.S.	PRE - TEST EXPERIMENTAL n = 366 MEDIA	PRE - TEST EXPERIMENTAL n = 366 D.S.	POST - TEST CONTROL n = 376 MEDIA	POST - TEST CONTROL n = 376 D.S.	POST - TEST EXPERIMENTAL n = 358 MEDIA	POST - TEST EXPERIMENTAL n = 358 D.S.	TAMANO DE EFECTO
P1	Un nino SANO esta:	4	3.56	0.94	3.60	0.89	3.38	1.16	3.62	0.97	0.07
P2	Un nino ENFERMO esta:	4	2.81	1.22	3.10	1.21	2.97	1.17	3.22	1.21	0.09
P3	Yo puedo PREVENIR enfermedades, Si:	4	2.28	0.85	2.44	0.81	2.42	0.77	2.80	0.80	0.16
P4	Los MICROBIOS viven en:	4	2.62	1.29	2.66	1.25	2.73	1.26	3.25	1.08	0.19
P5	La CACA puede entrar a mi cuerpo, si:	4	2.04	1.41	1.97	1.45	2.32	1.33	2.68	1.38	0.15
P6	Amis Hnos. menores debo ensenarles que despues de hacer caca	4	2.33	1.14	2.14	1.11	2.49	1.15	2.41	1.16	-0.03
P7	Para que las ENFERMEDADES no entren en mi boca, debo:	4	2.81	0.75	2.88	0.63	3.02	0.70	3.10	0.55	0.03
P8	Las MOSCAS traen enfermedades poque:	4	2.09	1.09	2.09	0.89	2.34	0.96	2.42	0.84	0.03
P9	Para que la BASURA no nos traiga ENFERMEDADES debemos:	4	2.43	1.01	2.53	0.93	2.70	0.98	3.10	0.80	0.15
P10	La DIARREA COMUN:	4	2.66	1.06	2.86	1.51	2.85	0.99	2.92	1.06	0.02
P11	Para MATAR los microbios de las verduras es necesario:	4	2.21	1.04	2.07	1.02	2.19	1.08	2.59	1.06	0.18
P12	A un enfermo DESHIDRATADO por diarrea, debemos darle:	4	2.28	0.92	2.25	0.88	2.29	0.93	2.30	1.00	0.00
P13	Las VERDURAS debo comerlas COCIDAS:	4	2.15	1.03	2.11	1.01	2.42	1.08	2.51	1.11	0.04
P14	Si hay un enfermo con COLERA en la casa. Que debemos hacer?	4	2.36	0.92	2.44	0.94	2.44	0.91	2.97	0.77	0.22
P15	Que debes ensenar en tu casa para PREVENIR el COLERA?	4	2.86	0.99	2.98	1.02	2.94	1.09	3.40	0.78	0.16
P16	El agua que tomo debe estar hervida por lo menos__minutos	4	0.64	2.05	0.60	1.43	0.87	2.10	1.61	1.96	0.85
P17	La enfermedades entran a mi cuerpo por mi____	4	1.20	1.96	1.40	1.91	1.37	1.90	3.04	1.71	1.22
P18	Que debes hacer para estar SANO ?	12	2.81	3.02	2.91	2.92	2.10	2.33	3.89	2.60	0.85
P19	Como reconoces a una persona DESHIDRATADA ?	12	0.05	0.60	0.08	0.62	0.13	1.45	0.63	2.13	3.85
P20	Que cuidados debes tener si comes comida en la calle ?	8	0.08	0.63	0.19	0.94	0.07	1.25	0.17	0.80	1.43
P21	Como se prepara el SUERO CASERO ?	12	0.00	0.00	0.14	1.26	0.06	0.87	4.73	5.65	77.83
P22	Como se prepara el suero con el sobre URO ?	8	0.00	0.00	0.05	0.62	0.02	0.41	0.46	1.92	22.00
P24	Con una raya une lo que corresponde a la diarrea comun	5	3.08	1.21	3.02	1.29	3.15	1.05	2.89	1.46	-0.08
P25	Con una raya une lo que corresponde a diarrera del colera	5	1.66	0.94	1.75	1.08	1.85	0.97	2.43	1.50	0.31
	TOTALES	130	46.98	8.91	48.24	9.81	49.09	9.79	63.11	14.87	0.29
	PORCENTAJE		36.14		37.11		37.76		48.55		

OGRAMA DE APRENDIZAJE POR RADIO INTERACTIVA
OGRAMA DE SALUD PREVENTIVA
UDAD: EL ALTO

EVALUACION DEL CURSO DE SALUD PREVENTIVA 1992 (3ro.BASICO)
CUADRO COMPARATIVO ENTRE PRUEBAS PRE-TEST Y POST-TEST EN
GRUPOS CONTROL Y EXPERIMENTAL SEGUN AGRUPACION DE ITEMS
(PORCENTAJES)

D	PREGUNTA	PRE-TEST CTRL. n = 350 %	PRE-TEST EXP. n = 388 %	POST-TEST CTRL. n = 401 %	POST-TEST EXP. n = 369 %	DIFERENCIAS EXP. %	DIFERENCIAS CTRL. %	DIF. TOT. ENTRE EXP-CTRL %
	Un nino SANO esta:	87.14	82.99	85.79	87.53	4.54	-1.36	5.90
	Un nino ENFERMO esta:	72.00	68.69	78.80	73.51	4.82	6.80	-1.98
	Yo puedo PREVENIR enfermedades, Si:	63.86	63.02	60.85	65.92	2.91	-3.01	5.92
	Los MICROBIOS viven en:	69.21	70.75	70.89	73.85	3.10	1.67	1.43
	¿ NACA puede entrar a mi cuerpo, si:	48.00	58.05	71.57	64.43	6.38	23.57	-17.19
	Mis Hnos. menores debo ensenarles que despues de hacer cac	55.14	62.37	57.23	59.35	-3.02	2.09	-5.11
	Para que las ENFERMEDADES no entren en mi boca, debo:	70.57	72.74	71.70	74.53	1.78	1.12	0.66
	Las MOSCAS traen enfermedades poque:	52.57	56.44	51.56	59.76	3.31	-1.01	4.33
	Para que la BASURA no nos traiga ENFERMEDADES debemos:	64.86	63.14	67.58	69.99	6.84	2.72	4.12
.0	La DIARREA COMUN:	68.21	70.81	74.63	70.53	-0.28	6.41	-6.70
1	Para MATAR los microbios de las verduras es necesario:	51.21	55.73	51.68	68.97	13.24	0.47	12.77
.2	A un enfermo DESHIDRATADO por diarrea, debemos darle:	56.79	57.28	55.80	59.35	2.07	-0.99	3.06
.3	Las VERDURAS debo comerlas COCIDAS:	58.86	52.71	61.16	60.03	7.32	2.30	5.02
4	Si hay un enfermo con COLERA en la casa. Que debemos hacer?	59.71	61.15	60.60	69.11	7.96	0.88	7.07
.5	Que debes ensenar en tu casa para PREVENIR el COLERA?	73.50	72.62	74.00	77.85	5.23	0.50	4.73
	SUB TOTAL 1	63.44	64.57	66.26	68.98	4.41	2.81	1.60
6	El agua que tomo debe estar hervida por lo menos__minutos	32.00	15.21	43.14	42.28	27.07	11.14	15.93
7	La enfermedades entran a mi cuerpo por mi____	35.43	40.46	51.37	78.86	38.40	15.94	22.45
	SUBTOTAL 2	33.71	27.84	47.26	60.57	32.73	13.54	19.19
.	¿ debes hacer para estar SANO ?	21.52	23.63	17.46	35.14	11.51	-4.07	15.58
.	Como reconoces a una persona DESHIDRATADA ?	0.76	0.00	0.25	2.71	2.71	-0.51	3.22
1	Como se prepara el SUERO CASERO ?	1.24	0.00	1.00	30.62	30.62	-0.24	30.86
	SUBTOTAL 3	7.84	7.88	6.23	10.21	2.33	-1.61	3.94
1	Que cuidados debes tener si cones comida en la calle ?	3.29	2.06	0.87	5.96	3.90	-2.41	6.31
2	Como se prepara el suero con el sobre ORO ?	1.43	0.00	1.25	7.99	7.99	-0.18	8.18
	SUBTOTAL 4	2.36	1.03	1.06	22.97	21.94	-1.30	23.23
4	Con una raya une lo que corresponde a la diarrea comun	61.83	63.51	60.75	59.35	-4.16	-1.08	-3.08
5	Con una raya une lo que corresponde a diarrera del colera	36.97	37.11	36.91	47.21	10.10	-0.06	10.16
	SUBTOTAL 5	49.40	50.31	48.83	53.28	2.97	-0.57	3.54

FUENTE: DEPARTAMENTE DE EVALUACION - PARI.

PROGRAMA DE APRENDIZAJE POR RADIO INTERACTIVA
PROGRAMA DE SALUD PREVENTIVA
CIUDAD: EL ALTO

EVALUACION DEL CURSO DE SALUD PREVENTIVA 1992 (3ro.BASICO)
CUADRO COMPARATIVO ENTRE PRUEBAS PRE-TEST Y POST-TEST EN
GRUPOS CONTROL Y EXPERIMENTAL SEGUN ITEMS
(MEDIAS Y DESVIACIONES TIPICAS)

COD	PREGUNTA	VALOR DE LA PREG.	PRE-TEST CONTROL n = 350 MEDIA	PRE-TEST CONTROL n = 350 D.S.	PRE-TEST EXPERIMENTAL n = 388 MEDIA	PRE-TEST EXPERIMENTAL n = 388 D.S.	POST-TEST CONTROL n = 401 MEDIA	POST-TEST CONTROL n = 401 D.S.	POST-TEST EXPERIMENTAL n = 369 MEDIA	POST-TEST EXPERIMENTAL n = 369 D.S.	TAMANO DE EFECTO
P1	Un nino SANO esta:	4	3.49	1.46	3.31	1.03	3.43	1.14	3.50	1.00	0.06
P2	Un nino ENFERMO esta:	4	2.88	1.12	2.74	1.11	3.15	1.18	2.94	1.20	-0.18
P3	Yo puedo PREVENIR enfermedades, Si:	4	2.55	0.88	2.51	0.98	2.43	0.80	2.64	0.82	0.25
P4	Los MICROBIOS viven en:	4	2.77	1.19	2.88	1.09	2.84	1.25	2.95	1.16	0.10
P5	La CACA puede entrar a mi cuerpo, si:	4	1.92	1.42	2.31	1.42	2.86	1.36	2.58	1.29	-0.21
P6	Amis Hnos. menores debo ensenarles que despues de hacer cac	4	2.21	1.07	2.49	1.20	2.29	1.13	2.37	1.30	0.08
P7	Para que las ENFERMEDADES no entren en mi boca, debo:	4	2.82	0.72	2.90	0.71	2.87	0.69	2.98	0.64	0.16
P8	Las MOSCAS traen enfermedades poque:	4	2.10	0.96	2.25	1.02	2.06	0.88	2.39	0.80	0.37
P9	Para que la BASURA no nos traiga ENFERMEDADES debemos:	4	2.59	0.90	2.52	1.00	2.70	0.97	2.81	0.85	0.11
P10	La DIARREA COMUN:	4	2.73	1.04	2.83	1.02	2.99	1.10	2.82	1.08	-0.15
P11	Para MATAR los microbios de las verduras es necesario:	4	2.05	1.03	2.22	1.08	2.07	0.99	2.76	1.08	0.70
P12	A un enfermo DESHIDRATADO por diarrea, debemos darle:	4	2.27	0.85	2.28	0.91	2.23	0.89	2.37	0.98	0.16
P13	Las VERDURAS debo comerlas COCIDAS:	4	2.35	1.06	2.10	1.09	2.45	1.07	2.40	1.12	-0.04
P14	Si hay un enfermo con COLERA en la casa. Que debemos hacer?	4	2.39	0.94	2.44	0.88	2.42	0.91	2.77	0.87	0.38
P15	Que debes ensenar en tu casa para PREVENIR el COLERA?	4	2.94	1.04	2.90	1.02	2.96	1.07	3.12	0.98	0.15
P16	El agua que tomo debe estar hervida por lo menos__minutos	4	1.28	2.03	0.60	1.88	1.73	2.04	1.69	2.22	-0.02
P17	La enfermedades entran a mi cuerpo por mi____	4	1.42	1.91	1.62	1.96	2.05	2.00	3.15	1.66	0.55
P18	Que debes hacer para estar SANO ?	12	2.58	3.17	2.81	3.19	2.09	2.40	4.22	3.23	0.89
P19	Como reconoces a una persona DESHIDRATADA ?	12	0.09	0.85	0.00	0.00	0.03	0.34	0.33	1.24	0.88
P20	Que cuidados debes tener si comes comida en la calle ?	8	0.26	1.16	0.16	0.85	0.07	0.52	0.48	1.42	0.79
P21	Como se prepara el SUERO CASERO ?	12	0.15	1.10	0.00	0.00	0.12	1.19	3.68	5.13	2.99
P22	Como se prepara el suero con el sobre URO ?	8	0.11	0.67	0.00	0.00	0.10	0.79	0.64	1.79	0.68
P24	Con una raya une lo que corresponde a la diarrea comun	5	3.09	1.06	3.17	0.96	3.04	1.02	2.97	1.21	-0.07
P25	Con una raya une lo que corresponde a diarrera del colera	5	1.85	0.97	1.85	0.95	1.85	0.95	2.36	1.26	0.54
	TOTALES	130	48.90	9.59	48.95	9.39	50.83	9.77	60.89	14.01	1.03
	PORCENTAJE (%)		37.62		37.65		39.10		46.84		

PROGRAMA DE APRENDIZAJE POR RADIO INTERACTIVA
PROGRAMA DE SALUD PREVENTIVA
CIUDAD: SANTA CRUZ

EVALUACION DEL CURSO DE SALUD PREVENTIVA 1992 (3ro.BASICO)
CUADRO COMPARATIVO ENTRE PRUEBAS PRE-TEST Y POST-TEST EN GRUPOS CONTROL Y EXPERIMENTAL, SEGUN AGRUPACION DE ITEMS (EN PORCENTAJES)

COD	PREGUNTA	PRE - TEST CTRL. n = 316 %	PRE - TEST EXP. n = 609 %	POST - TEST CRTL. n = 303 %	POST - TEST EXP. n = 528 %	DIFERENCIA EXP. %	DIFERENCIA CTRL %	DIF. TOTAL EXP-CTRL. %
P1	Un nino SANO esta:	82.99	81.61	85.40	92.52	10.91	2.41	8.50
P2	Un nino ENFERMO esta:	65.98	70.44	75.83	81.96	11.52	9.84	1.67
P3	Yo puedo PREVENIR enfermedades, Si:	51.03	50.00	60.56	69.27	19.27	9.53	9.74
P4	Los MICROBIOS viven en:	54.35	61.86	66.50	79.17	17.30	12.15	5.15
P5	La CACA puede entrar a mi cuerpo, si:	41.14	44.58	46.45	69.37	24.78	5.31	19.47
P6	Anis Hnos. menores debo ensenarles que despues de hacer cac	51.19	43.51	56.27	68.66	25.14	5.08	20.06
P7	Para que las ENFERMEDADES no entren en mi boca, debo:	56.65	54.68	67.66	73.82	19.14	11.01	8.13
P8	Las MOSCAS traen enfermedades poque:	43.20	36.95	56.02	63.87	26.93	12.83	14.10
P9	Para que la BASURA no nos traiga ENFERMEDADES debemos:	47.39	47.25	57.10	72.77	25.53	9.71	15.82
P10	La DIARREA COMUN:	60.36	63.30	66.83	74.38	11.08	6.47	4.62
P11	Para MATAR los microbios de las verduras es necesario:	25.16	24.92	37.79	60.98	36.07	12.63	23.44
P12	A un enfermo DESHIDRATADO por diarrea, debemos darle:	44.78	42.57	52.64	64.73	22.16	7.86	14.29
P13	Las VERDURAS debo comerlas COCIDAS:	42.41	40.76	53.47	64.91	24.15	11.06	13.09
P14	Si hay un enfermo con COLERA en la casa. Que debemos hacer?	54.67	51.77	62.79	74.48	22.71	8.12	14.59
P15	Que debes ensenar en tu casa para PREVENIR el COLERA?	63.77	63.30	73.10	77.23	13.92	9.34	4.59
	SUB TOTAL 1	52.34	51.83	61.23	72.54	20.71	8.89	11.82
P16	El aqua que tomo debe estar hervida por lo menos__minutos	42.72	42.69	41.91	57.39	14.69	-0.81	15.50
P17	La enfermedades entran a mi cuerpo por mi____	38.61	46.47	52.48	80.68	34.21	13.87	20.34
	SUB TOTAL 2	40.66	44.58	47.19	69.03	24.45	6.53	17.92
P18	Que debes hacer para estar SANO ?	24.58	30.76	31.57	51.70	20.94	7.00	13.95
P19	Como reconoces a una persona DESHIDRATADA ?	7.17	7.99	9.90	32.01	24.02	2.73	21.29
P21	Como se prepara el SUERO CASERO ?	0.84	3.72	4.07	46.40	42.68	3.23	39.45
	SUB TOTAL 3	10.86	14.16	15.18	43.37	29.21	4.32	24.90
P20	Que cuidados debes tener si comes comida en la calle ?	7.75	7.80	13.25	27.56	19.76	5.49	14.27
P22	Como se prepara el suero con el sobre URO ?	1.58	4.27	5.46	24.43	20.16	3.88	16.28
	SUB TOTAL 4	4.67	6.03	9.35	25.99	19.96	4.69	15.27
P24	Con una raya une lo que corresponde a la diarrea comun	10.70	15.93	39.47	39.55	23.62	28.78	-5.16
P25	Con una raya une lo que corresponde a diarrera del colera	8.29	12.74	20.66	34.77	22.03	12.37	9.66
	SUB TOTAL 5	9.49	14.33	30.07	37.16	22.82	20.57	2.25

FUENTE: DEPARTAMENTO DE EVALUACION - PARI

PROGRAMA DE APRENDIZAJE POR RADIO INTERACTIVA
PROGRAMA DE SALUD PREVENTIVA
CIUDAD: SANTA CRUZ

EVALUACION DEL CURSO DE SALUD PREVENTIVA 1992 (3ro.BASICO)
CUADRO COMPARATIVO ENTRE PRUEBAS PRE-TEST Y POST-TEST EN
GRUPOS CONTROL Y EXPERIMENTAL, SEGUN ITEMS
(MEDIAS, DESVIACIONES TIPICAS Y TAMANO DE EFECTO)

COD	PREGUNTA	VALOR DE LA PREG.	PRE - TEST CONTROL n = 316 MEDIA	D.S.	PRE - TEST EXPERIMENTAL n = 609 MEDIA	D.S.	POST - TEST CONTROL n = 303 MEDIA	D.S.	POST - TEST EXPRIMENTAL n = 528 MEDIA	D.S.	TAMANO DE EFECTO
P1	Un nino SANO esta:	4	3.32	1.21	3.26	1.36	3.42	1.13	3.70	0.88	0.25
P2	Un nino ENFERMO esta:	4	2.64	1.42	2.82	1.45	3.03	1.17	3.28	1.24	0.21
P3	Yo puedo PREVENIR enfermedades, Si:	4	2.04	1.17	2.00	1.27	2.42	0.95	2.77	1.07	0.37
P4	Los MICROBIOS viven en:	4	2.17	1.38	2.47	1.45	2.66	1.33	3.17	1.22	0.38
P5	La CACA puede entrar a mi cuerpo, si:	4	1.65	1.62	1.79	1.73	2.16	1.64	2.77	1.57	0.37
P6	Amis Hnos. menores debo ensenarles que despues de hacer cac	4	2.05	1.45	1.74	1.52	2.25	1.37	2.75	1.25	0.36
P7	Para que las ENFERMEDADES no entren en mi boca, debo:	4	2.23	1.11	2.19	1.19	2.71	1.00	2.95	0.85	0.24
P8	Las MOSCAS traen enfermedades poque:	4	1.73	1.18	1.48	1.25	2.24	1.22	2.55	1.14	0.25
P9	Para que la BASURA no nos traiga ENFERMEDADES debemos:	4	1.90	1.25	1.89	1.36	2.28	1.22	2.91	1.10	0.52
P10	La DIARREA COMUN:	4	2.42	1.33	2.53	1.44	2.67	1.28	2.98	1.21	0.24
P11	Para MATAR los microbios de las verduras es necesario:	4	1.01	1.12	1.00	1.19	1.51	1.21	2.44	1.24	0.77
P12	A un enfermo DESHIDRATADO por diarrea, debemos darle:	4	1.79	1.29	1.70	1.36	2.11	1.12	2.59	1.21	0.43
P13	Las VERDURAS debo comerlas COCIDAS:	4	1.70	1.36	1.63	1.49	2.14	1.31	2.60	1.44	0.35
P14	Si hay un enfermo con COLERA en la casa. Que debemos hacer?	4	2.19	1.18	2.07	1.28	2.51	0.92	2.98	1.06	0.51
P15	Que debes ensenar en tu casa para PREVENIR el COLERA?	4	2.55	1.34	2.53	1.44	2.92	1.13	3.09	1.29	0.15
P16	El agua que tomo debe estar hervida por lo menos__minutos	4	1.71	2.71	1.71	2.41	1.68	2.39	2.14	2.00	0.19
P17	La enfermedades entran a mi cuerpo por mi____	4	1.54	2.15	1.86	2.25	2.10	2.49	3.06	1.75	0.39
P18	Que debes hacer para estar SANO ?	12	2.95	2.86	3.69	3.37	3.79	3.09	6.20	3.83	0.78
P19	Como reconoces a una persona DESHIDRATADA ?	12	0.86	1.95	0.96	2.23	1.19	2.40	3.84	4.19	1.10
P20	Que cuidados debes tener si comes comida en la calle ?	8	0.62	1.45	0.62	1.59	1.06	2.26	2.20	3.14	0.50
P21	Como se prepara el SUERO CASERO ?	12	0.10	0.77	0.45	1.70	0.49	1.93	5.57	5.37	2.63
P22	Como se prepara el suero con el sobre URO ?	8	0.13	0.89	0.34	1.71	0.44	2.05	1.95	3.46	0.74
P24	Con una raya une lo que corresponde a la diarrea comun	5	0.54	0.77	0.80	1.00	1.97	1.95	1.98	1.92	0.01
P25	Con una raya une lo que corresponde a diarrera del colera	5	0.42	0.70	0.56	0.90	1.03	1.34	1.74	1.75	0.53
	TOTALES	130	40.26	12.02	42.08	17.16	50.77	14.63	72.21	22.64	1.47
	PORCENTAJES		30.97		32.37		39.05		55.55		

PROGRAMA DE APRENDIZAJE POR RADIO INTERACTIVA
PROGRAMA DE SALUD PREVENTIVA
CIUDAD: COCHABAMBA

EVALUACION DEL CURSO DE SALUD PREVENTIVA 1992 (3ro.BASICO)
CUADRO COMPARATIVO ENTRE PRUEBAS PRE-TEST Y POST-TEST EN GRUPOS CONTROL Y EXPERIMENTAL, SEGUN AGRUPACION DE ITEMS
(EN PORCENTAJES)

COD	PREGUNTA	PRE - TEST CTRL. n=203 %	PRE - TEST EXP. n=220 %	POST - TEST CRTL. n=193 %	POST - TEST EXP. n=208 %	DIFERENCIA EXP. %	DIFERENCIA CTRL %	DIF. TOTAL EXP-CTRL. %
P1	Un nino SANO esta:	86.33	86.14	89.90	90.63	4.49	3.57	0.92
P2	Un nino ENFERMO esta:	76.48	83.07	87.69	84.62	1.55	11.22	-9.67
P3	Yo puedo PREVENIR enfermedades, Si:	64.41	65.11	62.95	70.19	5.08	-1.46	6.53
P4	Los MICROBIOS viven en:	67.49	71.25	78.11	85.70	14.45	10.62	3.83
P5	La CACA puede entrar a mi cuerpo, si:	54.43	59.20	65.16	76.56	17.36	10.72	6.64
P6	Mis Hnos. menores debo ensenarles que despues de hacer caca	48.89	56.82	58.94	68.03	11.21	10.05	1.16
P7	Para que las ENFERMEDADES no entren en mi boca, debo:	71.55	73.86	76.94	76.80	2.94	5.39	-2.45
P8	Las MOSCAS traen enfermedades poque:	49.26	54.89	54.53	60.82	5.93	5.27	0.66
P9	Para que la BASURA no nos traiga ENFERMEDADES debemos:	61.33	64.66	66.32	74.28	9.62	4.99	4.63
P10	La DIARREA COMUN:	73.77	72.05	77.59	70.67	-1.37	3.82	-5.19
P11	Para MATAR los microbios de las verduras es necesario:	44.70	47.05	46.37	64.66	17.62	1.67	15.95
P12	A un enfermo DESHIDRATADO por diarrea, debemos darle:	57.14	57.61	61.79	66.71	9.09	4.64	4.45
P13	Las VERDURAS debo comerlas COCIDAS:	51.85	59.89	59.33	72.12	12.23	7.48	4.75
P14	Si hay un enfermo con COLERA en la casa. Que debemos hacer?	65.64	67.95	65.16	78.00	10.05	-0.48	10.54
P15	Que debes ensenar en tu casa para PREVENIR el COLERA?	76.48	85.91	81.09	86.06	0.15	4.61	-4.46
	SUB TOTAL 1	63.32	67.03	68.79	75.06	8.03	5.47	2.55
P16	El agua que tomo debe estar hervida por lo menos__minutos	35.96	53.18	42.49	64.90	11.72	6.53	5.20
P17	La enfermedades entran a mi cuerpo por mi____	47.78	55.45	46.11	84.13	28.68	-1.67	30.35
	SUB TOTAL 2	41.87	54.32	44.30	74.52	20.20	2.43	17.77
P18	Que debes hacer para estar SANO ?	9.03	23.33	13.82	25.32	1.99	4.79	-2.80
P19	Como reconoces a una persona DESHIDRATADA ?	0.16	0.30	0.17	9.46	9.15	0.01	9.14
P21	Como se prepara el SUERO CASERO ?	0.16	3.03	0.00	54.17	51.14	-0.16	51.30
	SUB TOTAL 3	3.12	8.89	4.66	29.65	20.76	1.54	19.22
P20	Que cuidados debes tener si comes comida en la calle ?	0.49	1.14	1.04	8.17	7.04	0.54	6.49
P22	Como se prepara el suero con el sobre URO ?	0.99	0.23	0.00	20.43	20.21	-0.99	21.19
	SUB TOTAL 4	0.74	0.68	0.52	14.30	13.62	-0.22	13.84
P24	Con una raya une lo que corresponde a la diarrea comun	62.27	61.73	62.28	61.63	-0.09	0.01	-0.11
P25	Con una raya une lo que corresponde a diarrera del colera	33.99	32.27	33.58	53.94	21.67	-0.42	22.08
	SUB TOTAL 5	48.13	47.00	47.93	57.79	10.79	-0.20	10.99

FUENTE: DEPARTAMENTO DE EVALUACION - PARI

PROGRAMA DE APRENDIZAJE POR RADIO INTERACTIVA
PROGRAMA DE SALUD PREVENTIVA
CIUDAD: COCHABAMBA

EVALUACION DEL CURSO DE SALUD PREVENTIVA 1992 (3ro.BASICO)
CUADRO COMPARATIVO ENTRE PRUEBAS PRE-TEST Y POST-TEST EN
GRUPOS CONTROL Y EXPERIMENTAL, SEGUN ITEMS
(MEDIAS, DESVIACIONES TIPICAS Y TAMANO DE EFECTO)

COD	PREGUNTA	VALOR DE LA PREG.	PRE - TEST CONTROL n=203 MEDIA	D.S.	PRE - TEST EXPERIMENTAL n=220 MEDIA	D.S.	POST - TEST CONTROL n=193 MEDIA	D.S.	POST - TEST EXPRIMENTAL n=208 MEDIA	D.S.	TAMANO DE EFECTO
P1	Un nino SANO esta:	4	3.45	1.13	3.45	1.13	3.60	1.03	3.63	0.93	0.03
P2	Un nino ENFERMO esta:	4	3.06	1.17	3.32	1.04	3.51	0.96	3.38	0.99	-0.14
P3	Yo puedo PREVENIR enfermedades, Si:	4	2.58	0.71	2.60	0.84	2.52	0.75	2.81	0.77	0.39
P4	Los MICROBIOS viven en:	4	2.70	1.20	2.85	1.12	3.12	1.08	3.43	0.96	0.29
P5	La CACA puede entrar a mi cuerpo, si:	4	2.18	1.40	2.37	1.48	2.61	1.41	3.06	1.27	0.32
P6	Amis Hnos. menores debo ensenarles que despues de hacer caca	4	1.96	1.07	2.27	1.19	2.36	1.09	2.72	1.18	0.33
P7	Para que las ENFERMEDADES no entren en mi boca, debo:	4	2.86	0.60	2.95	0.59	3.08	0.58	3.07	0.58	-0.02
P8	Las MOSCAS traen enfermedades poque:	4	1.97	0.88	2.20	0.93	2.18	0.92	2.43	0.84	0.27
P9	Para que la BASURA no nos traiga ENFERMEDADES debemos:	4	2.45	0.84	2.59	1.04	2.65	0.90	2.97	0.82	0.36
P10	La DIARREA COMUN:	4	2.95	1.00	2.88	0.90	3.10	0.94	2.83	1.10	-0.29
P11	Para MATAR los microbios de las verduras es necesario:	4	1.79	0.94	1.88	1.04	1.85	0.93	2.59	1.02	0.80
P12	A un enfermo DESHIDRATADO por diarrea, debemos darle:	4	2.29	0.89	2.30	0.86	2.47	0.96	2.67	0.91	0.21
P13	Las VERDURAS debo comerlas COCIDAS:	4	2.07	1.01	2.40	1.03	2.37	1.08	2.88	1.13	0.47
P14	Si hay un enfermo con COLERA en la casa. Que debemos hacer?	4	2.63	0.82	2.72	0.81	2.61	0.84	3.12	0.81	0.61
P15	Que debes ensenar en tu casa para PREVENIR el COLERA?	4	3.06	0.96	3.44	0.78	3.24	0.90	3.44	0.81	0.22
P16	El agua que tomo debe estar hervida por lo menos__minutos	4	1.44	1.96	2.13	2.20	1.70	1.98	2.60	1.91	0.45
P17	La enfermedades entran a mi cuerpo por mi____	4	1.91	2.00	2.22	1.99	1.84	1.99	3.37	1.56	0.77
P18	Que debes hacer para estar SANO ?	12	1.08	1.78	2.80	2.47	1.66	2.32	3.04	2.42	0.59
P19	Como reconoces a una persona DESHIDRATADA ?	12	0.02	0.28	0.04	0.54	0.02	0.29	1.13	2.52	3.83
P20	Que cuidados debes tener si comes comida en la calle ?	8	0.04	0.40	0.09	0.60	0.08	0.57	0.65	2.05	1.00
P21	Como se prepara el SUERO CASERO ?	12	0.02	0.28	0.36	1.75	0.00	0.00	6.50	5.62	ERR
P22	Como se prepara el suero con el sobre URO ?	8	0.08	0.79	0.02	0.27	0.00	0.00	1.63	3.02	ERR
P24	Con una raya une lo que corresponde a la diarrea comun	5	3.11	1.24	3.09	1.26	3.11	1.19	3.08	1.61	-0.03
P25	Con una raya une lo que corresponde a diarrera del colera	5	1.70	1.16	1.61	1.02	1.68	1.02	2.70	1.68	1.00
	TOTALES	130	47.40	7.96	52.57	9.12	51.40	8.77	69.74	14.03	2.09
	PORCENTAJES		36.46		40.44		39.54		53.65		

ANNEX 2.

DETAILED WORK PLAN

1993 - 1994

PLAN ANUAL DE TRABAJO 1993

AÑO 1993	DIRECTORIO-MEC/PER/EDC	EQUIPO PEDAGOGICO	EQUIPO RADIO	EQUIPO IMPLEMENTACION E EVALUACION	TRANSMISION	ASESORIA TECNICA
ENERO	- PLANIFICAR TRABAJO DE LOS EQUIPOS TECNICOS - ENTREGAR PLAN ANUAL DE IMPLEMENTACION A USAID/DIFEM - SUPERVISAR LOS EQUIPOS TECNICOS - CONTACTOS CON ETARE - REUNION GENERAL CON LOS COORDINADORES DPTOS - CONCURSO DE PRENSA: GUIONISTAS, SUPERVISORES, SALUBRISTA, RADIO EMISORAS - NEGOCIAR CONTRACTOS: EDC/PER, EDC/FYA, RADIOEMISORAS, PERSONAL - APROBAR CRONOGRAMA Y CONTENIDOS DE LA CAPACITACION DE MAESTROS	- PRESENTACION DEL PLAN MAESTRO DE 3ro Y 4to SALUD - REORGANIZACION DE RESPONSIBILIDADES	- REPONER LECCIONES MATEMATICAS QUE TUVIERON ERRORS GESTION 1992 - REGRABAR RADIODRAMAS 2do MATEMATICAS, COPIAR POR MAYOR DISTRIBUCION	- ELABORAR CONTENIDO, METODOLOGIA, Y CRONOGRAMA DE CAPACITACION DE MAESTROS, GESTION 1993 - ANALIZAR RESULTADOS DE SALUD Y MATEMATICAS GESTION 1992 - TALLER SOBRE LA ELABORACION DE PRUEBAS - ELABORAR PRUEBA SUMATIVA, 3ro Y 4to SALUD - SUPERVISION/COORDINACION REGIONAL		
FEBRERO	- SUPERVISAR LOS EQUIPOS TECNICOS - COLABORAR EN LA CAPACITACION DE MAESTROS, MATEMATICAS - SUPERVISION NACIONAL	- APOYO EN LA CAPACITACION DE MAESTROS - MATEMATICAS - RECOLECTAR DATOS DE BASE SALUD. - GUIONIZACION DE LAS LECCIONES 1 Y 2 DE SALUD, 3ro Y 4to CURSOS. - PREPRUEBA Y REVISION DE LAS LECCIONES DE SALUD	- REGRABACION RADIODRAMAS DE 2do MATEMATICAS, COPIAR POR MAYOR DISTRIBUCION - GRABAR EN FORMA PRELIMINARIO Y FINAL LECCIONES 1 Y 2 DE SALUD, 3ro Y 4to. COPIR POR MAYOR DISTRIBUCION	- CAPACITAR MAESTROS DE ACUERDO A CRONOGRAMA - MATEMATICAS - ELABORAR ESTRATEGIAS DE ANALISIS Y EVALUATION EN SALUD - PROBAR EL INSTRUMENTO DE EVALUACION SUMMATIVA, SALUD		EXPERTO EN LA ELABORACION DE PRUEBAS
MARZO	- SUPERVISAR LOS EQUIPOS TECNICOS - PLANIFICAR 1er CONGRESO INTL PARI, DCA - SUPERVISION NACIONAL - ELABORAR SAR/ACCRUALS - COLABORAR EN LA CAPACITACION DE MAESTROS, MATEMATICAS Y SALUD	- APOYO EN LA CAPACITACION DE MAESTROS - MATEMATICAS, SALUD - GUIONIZACION DE LAS LECCIONES 3 AL 6 DE SALUD, 3RO Y 4TO CURSOS - PREPRUEBA Y REVISION DE LAS LECCIONES DE SALUD	- CONCLUSION RADIODRAMAS 2do. COPIAS - GRABAR EN FORMA PRELIMINARIO Y FINAL LECCIONES 3 AL 6 DE SALUD, 3RO Y 4TO - COPIAR POR MAYOR DISTRIBUCION	- CAPACITAR MAESTROS DE ACUERDO A CRONOGRAMA - MATEMATICAS Y SALUD - PREPRUEBA, LECCIONES 3 AL 6 DE SALUD 3ro Y 4to - EVALUACION FORMATIVA MATEMATICAS - ADMINISTRACION DE PRETESTS - MATEMATICAS Y SALUD - TALLER EN EVALUACION CUALITATIVA	- INICIAR EMISIONES RADIALES DE MATEMATICAS, 2do AL 5to GRADO	EXPERTO EN EVALUACION CUALITATIVO

AÑO 1993	DIRECTORIO - MEC/PER/EDC	EQUIPO PEDAGOGICO	EQUIPO RADIO	EQUIPO IMPLEMENTACION E EVALUACION	TRANSMISION	ASESORIA TECNICA
A B R I L	- SUPERVISAR LOS EQUIPOS TECNICOS - 1er CONGRESO INTERNACIONAL PARI, DCA - SUPERVISION NACIONAL - TALLER EN EL USO DEL IRI PARA ENSEÑAR EDUCACION AMBIENTAL, COSTA RICA	- APOYO EN LA CAPACITACION DE MAESTROS - SALUD - GUIONIZACION DE LAS LECCIONES 7 AL 10 DE SALUD, 3RO Y 4to - PREPRUEBA Y REVISION DE LAS LECCIONES DE SALUD	- GRABAR EN FORMA PRELIMINARIO Y FINAL LECCIONES 7 AL 10 DE SALUD, 3ro Y 4to - GRABAR CUENTOS - COPIAR POR MAYOR DISTRIBUCION	- CAPACITAR MAESTROS DE SALUD - PREPRUEBA, LECCIONES 7 AL 10, SALUD 3ro Y 4to - EVAL FORMATIVA - MATEMATICAS Y SALUD - ANALIZAR PRETEST SALUD 3ro Y 4to - ANALIZAR PRETEST, MATEMATICAS - ACTUALIZAR DE DATOS ESTADISTICOS - SUPERVISION/COORDINACION REGIONAL	- CONTINUAR EMISIONES DE MATEMATICAS 2do AL 5to GRADO - INICIAR EMISIONES RADIALES DE SALUD, 3RO Y 4TO	
M A Y O	- SUPERVISAR LOS EQUIPOS TECNICOS - SUPERVISION NACIONAL - PLANIFICACION DEL CONVIVENCIA LPB CON AUTORIDADES EDUCATIVAS - COLABORACION CON PLANAMIENTO DEL MEC EN EVALUAR 2DO MATEMATICAS - REUNION GENERAL CON LOS COORDINADORES DPTOS	- GUIONIZACION DE LAS LECCIONES 11 AL 14, 3RO Y 4TO SALUD - PREPRUEBA Y REVISION DE LAS LECCIONES DE SALUD	- GRABAR EN FORMA PRELIMINARIO Y FINAL LECCIONES 11 AL 14 DE SALUD, 3RO Y 4TO - CONCLUIR LA GRABACION DE LOS CUENTOS - COPIAR POR MAYOR DISTRIBUCION	- PREPRUEBA, LECCIONES 11 AL 14, SALUD 3RO Y 4TO - EVAL FORMATIVA - MATEMATICAS Y SALUD - ACTUALIZAR DE DATOS ESTADISTICOS - SUPERVISION Y COORDINACION REGIONAL - FINALIZAR ANALISS DE PRETEST, SALUD Y MATEMATICAS - CONTINUAR CON EL TALLER DE EVALUACION CUALITATIVA - COLABORAR CON LA OFICINA DE PLANAMIENTO DEL MEC EN EVALUAR 2DO MATEMATICAS	- CONTINUAR EMISIONES DE MATEMATICAS 2DO AL 5TO Y DE SALUD, 3RO Y 4TO	EXPERTO EN EVALUACION CUALITATIVA
J U N I O	- SUPERVISAR LOS EQUIPOS TECNICOS - SUPERVISION NACIONAL - CONVIVENCIA LPB, AUTORIDADES EDUCATIVAS - MANDAR DELEGACION AL CONGRESO ANUAL DEL NCIH - REDEFINIR RESPONSIBILIDADES DEL DIRECTORIO DEBIDO AL SALIDA DEL COP/EDC - TRANSICION/CAPACITACION COP/EDC - COLABORAR CON PLANAMIENTO (MEC) EN EVALUAR 2DO MATEMATICAS - ACCRUALS	- GUIONIZAR LECCIONES 15 AL 18, 3RO Y 4TO SALUD - PREPRUEBA Y REVISION DE LAS LECCIONES DE SALUD	- GRABAR EN FORMA PRELIMINARIO Y FINAL LECCIONES 15 AL 18 DE SALUD, 3RO Y 4TO - COPIAR POR MAYOR DISTRIBUCION	- PREPRUEBA, LECCIONES 15 AL 18 DE SALUD, 3RO Y 4TO - EVAL FORMATIVA - MATEMATICAS Y SALUD - SUPERVISION Y COORDINACION REGIONAL - RECOLECTAR DATOS PRELIMINARIOS, INVESTIGACION CUALITATIVA - COLABORAR CON LA OFICINA DE PLANAMENTO DEL MEC EN EVALUAR 2DO MATEMATICAS - PARTICIPAR EN LA REUNION NACIONAL DE AUTORIDADES EDUCATIVAS	- CONTINUAR EMISIONES DE MATEMATICAS 2DO AL 5TO Y DE SALUD, 3RO Y 4TO	

76

AÑO 1993	DIRECTORIO - MEC/PER/EDC	EQUIPO PEDAGOGICO	EQUIPO RADIO	EQUIPO IMPLEMENTACION E EVALUACION	TRANSMISION	ASESORIA TECNICA
JULIO	- SUPERVISAR LOS EQUIPOS TECNICOS - SUPERVISION NACIONAL - CONTINUAR CON LA REORGANIZACION DEL DIRECTORIO - ACTUALIZAR PLAN DE IMPLEMENTACION 1993 - REVISAR OBJECTIVOS Y PLANIFICAR ACTIVIDADES DEL PARI, 1994 - COLABORAR EN LA EVALUACION DEL UTP - VISITA DE SUPERVISION HOXENG, AID/RAD/ED - TRANSICION/CAPACITACION COP/EDC - PLANIFICAR 1ER CONGRESO NACIONAL DE AUTORIDADES EDUCATIVAS, CEBA - REDEFINIR COMITE NACIONAL DEL PARI - PRIMEROS CONTACTOS CON AUTORIDADES EDUCATIVAS DEL COMITE NACIONAL DEL PARI	- GUIONIZAR LECCIONES 19 AL 22, 3RO Y 4TO SALUD - PREPRUEBA Y REVISION DE LAS LECCIONES DE SALUD - CONTINUACION DE CAPACITACION EN EVALUACION CUALITATIVA - ELABORAR ESTRATEGIA PARA ENTREVISTAS Y OBSERVACIONES DE CASA, EVALUACION CUALITATIVA	- GRABAR EN FORMA PRELIMINARIO Y FINAL LECCIONES 19 AL 22 DE SALUD, 3RO Y 4TO - COPIAR POR MAYOR DISTRIBUCION	- PREPRUEBA, LECCIONES 19 AL 22 DE SALUD, 3RO Y 4TO - EVAL FORMATIVA - MATEMATICAS Y SALUD - SUPERVISION Y COORDINACION REGIONAL - CONTINUAR TALLER DE EVALUACION CUALITATIVA. ELABORAR ESTRATEGIA DE SEGUIMIENTO CON PADRES PARA LA INVESTIGACION CUALITATIVA, SALUD 4TO Y 5TO. ANALIZAR LOS DATOS PRELIMINARIOS.	- CONTINUAR EMISIONES DE MATEMATICAS, 2DO AL 5TO Y DE SALUD 3RO Y 4TO	- EXPERTO EN EVALUACION QUALITATIVA - ASISTANTE EN ESTUDIOS SOCIO-DEMOGRAFICO
AGOSTO	- SUPERVISAR LOS EQUIPOS TECNICOS - SUPERVISION NACIONAL - CONCLUIR REORGANIZACION DEL DIRECTORIO - APROBAR PARI PLAN DE IMPLEMENTACION, 1994 - CONCLUIR TRANSICION/CAPACITACION COP - CONTINUAR CON LA PLANIFICACION DEL 1ER CONGRESO NACIONAL DE AUTORIDADES, CEBA - COORDINACION DPTO. CON AUTORIDADES EDUCATIVAS DEL COMITE NACIONAL - ACTUALIZAR INVENTARIO PARI - PLANIFICAR 2DO CONGRESO INTL PARI, SRZ - PLANIFICAR ACTIVIDADES DE RELACIONES PUBLICAS, GESTION 1993 - CONCURSO DE MERITO PARA CONTRATAR 4 VIDEOS DEL PARI (MATEMATICAS Y SALUD, AUTORIDADES INTL, Y LA CAPACITACION DE MAESTROS) 1 TRIPTICO, Y 1 POSTER - DEFINIR PARAMETROS PARA LA REVISION TECNICA DE LAS GUIAS DE MATEMATICAS. - CONTRATAR PERSONAL	- GUIONIZAR LECCIONES 23 AL 27, 3RO Y 4TO SALUD - PREPRUEBA Y REVISION DE LAS LECCIONES DE SALUD - TALLERES DE PLANIFICACION, 5TO SALUD - RECOLLECTAR DATOS DE BASE, 5TO SALUD	- GRABAR EN FORMA PRELIMINARIO Y FINAL LECCIONES 23 AL 27 DE SALUD, 3RO Y 4TO - COPIAR POR MAYOR DISTRIBUCION	- PREPRUEBA, LECCIONES 23 AL 27 DE SALUD, 3RO Y 4TO - EVAL FORMATIVA - MATEMATICAS Y SALUD - SUPERVISION Y COORDINACION REGIONAL - RECOLLECTAR DATOS DE BASE, 5TO SALUD - COLABORAR CON LA OFICINA DE PLANAMIENTO DEL MEC EN SU DISEÑO DE EVALUACION DEL 3RO MATEMATICAS	- CONTINUAR EMISIONES DE MATEMATICAS, 2DO AL 5TO Y DE SALUD 3RO Y 4TO	- ASISTANTE EN ESTUDIOS SOCIO-DEMOGRAFICO
SEPTIEMBRE	- SUPERVISAR LOS EQUIPOS TECNICOS - SUPERVISION NACIONAL - CONVIVENCIA DEL 1ER CONGRESO NACIONAL DE AUTORIDADES EDUCATIVAS, CEBA - CONTINUAR PLANIFICACION DEL 2DO CONGRESO INTERNACIONAL DEL PARI, SRZ - EMPEZAR A PRODUCIR LOS PRIMEROS 3 VIDEOS (PADRES Y INTERNACIONAL), TRIPTICO, POSTER - ELABORAR SAR/ACCRUALS - PRIMEROS CONTACTOS CON LOS NUEVOS AUTORIDADES DEL MEC - APROBAR PLAN MAESTRO, 5TO CURSO SALUD - SUPERVISAR REVISION DE GUIAS DE MATE	- GUIONIZAR LECCIONES 28 AL 30, 3RO Y 4TO SALUD - ELABORAR PLAN MAESTRO, 5TO SALUD - ELABORAR METODOLOGIA PARA LA REVISION FINAL DEL CURRICULUM, GUIONES, Y GUIAS DEL 3RO Y 4TO SALUD EN BASE DE LA EVALUACION FORMATIVA Y SUMATIVA - SUBCONTRATOS: EMPEZAR LA REVISION DE LAS GUIAS DE MATEMATICAS, AÑADIENDO HILO DE CONJUNTOS Y EJERCICIOS DE LA RADIO	- GRABAR EN FORMA PRELIMINARIO Y FINAL LECCIONES 28 AL 30 SALUD, 3RO Y 4TO - GRABAR CUENTOS - COPIAR POR MAYOR DISTRIBUCION	- PREPRUEBA, LECCIONES 28 AL 30 DE SALUD, 3RO Y 4TO - EVAL FORMATIVA - MATEMATICAS Y SALUD - SUPERVISION Y COORDINACION REGIONAL - COLABORAR CON AUTORIDADES NACIONALES DE EDUCACION EN EL 1ER CONGRESO DEL PARI	- CONTINUAR EMISIONES DE MATEMATICAS, 2DO AL 5TO Y DE SALUD 3RO Y 4TO	- ASISTANTE EN ESTUDIOS SOCIO-DEMOGRAFICO - EXPERTO EN VIDEO - EXPERTO EN RELACIONES PUBLICOS/MEDIA

AÑO 1993	DIRECTORIO - MEC/PER/EDC	EQUIPO PEDAGOGICO	EQUIPO RADIO	EQUIPO IMPLEMENTACION E EVALUACION	TRANSMISION	ASESORIA TECNICA
OCTUBRE	- SUPERVISAR LOS EQUIPOS TECNICOS - SUPERVISION NACIONAL - CONVIVENCIA DEL 2DO CONGRESO INTERNACIONAL DE PARI, SRZ - TERMINAR CON LA PRODUCCION DE LOS PRIMEROS 3 VIDEOS, TRIPTICO, Y POSTER - SEGUIR PLAN DE INSTITUCIONALIZACION CON LOS AUTORIDADES DEL MEC - APOYAR A LAS EVALUACIONES SUMATIVAS Y CUALITATIVAS DE SALUD - SUPERVISAR REVISION TECNICA DE LAS GUIAS DE MATEMATICAS - APROBAR PLAN DE REVISION DE SALUD, 3RO Y 4TO	- COLABORAR CON LAS EVALUACIONES CUALITATIVAS Y SUMMATIVAS DE SALUD, 3RO Y 4TO BASICO -REVISAR OBSERVACIONES DE 3RO Y 4TO SALUD, EN PREPARACION PARA LA REVISION FINAL DE LOS PROGRAMAS Y GUIAS. HACER SUMARIO DE LOS CAMBIOS NECESARIOS INDICADOS - SUBCONTRATOS: CONTINUAR CON LA REVISION DE LAS GUIAS DE MATEMATICAS, AÑADIENDO CONJUNTOS Y EJERCICIOS DE LA RADIO - TERMINAR CON EL PLAN MAESTRO, 5TO SALUD	- REGRABAR LECCIONES DE MATEMATICAS CON DEFICIENCIAS - COPIAR POR MAYOR DISTRIBUCION	- SUPERVISION Y COORDINACION REGIONAL - ADMINISTRAR POSTTESTS, SALUD - SEGUIR CON LAS ENCUESTAS DE LA EVALUACION CUALITATIVA - COLABORAR CON AUTORIDADES INTERNACIONALES DE EDUCACION EN EL 1ER CONGRESO INTERNACIONAL DEL PARI. COORDINAR Y FACILITAR SU REALIZACION. - COLABORAR CON LA OFICINA DEL PLANAMIENTO DEL MEC EN LA ADMINISTRACION DE SUS POSTTESTS DE 2DO Y 3RO, MATEMATICAS	- CONTINUAR EMISIONES DE MATEMATICAS, 2DO AL 5TO Y DE SALUD 3RO Y 4TO	- EXPERTO EN VIDEO - AYUDA TEMPORADA
NOVIEMBRE	- SUPERVISAR LOS EQUIPOS TECNICOS - SUPERVISION NACIONAL - SEGUIR PLAN DE INSTITUCIONALIZACION CON LOS AUTORIDADES DEL MEC - SEGUIR APOYANDO LAS EVALUACIONES SUMATIVAS Y CUALITATIVAS DE SALUD - REVISAR AVANCE TECNICA DE LAS GUIAS DE MATEMATICAS Y DE SALUD 3RO Y 4TO - PRODUCIR 4TO VIDEO PARA LA CAPACITACION DE MAESTROS - ENVIAR DELEGACION A LA CONF DE EDUCACION A DISTANCIA, MONTEREY, MEXICO - DEFINIR OBJECTIVO Y PERSONALIDADES DEL CONSEJO INTERSECTORAL PARI	- EQUIPO A: EMPEZAR A GUIONIZAR LECCIONES 1 AL 4, 5TO SALUD. - EQUIPO B: EMPEZAR REVISION FINAL DEL CURRICULUM, GUIONES, Y GUIAS DE SALUD, 3RO Y 4TO, EN BASE DE LOS RESULTADOS DE LAS EVALUACIONES FORMATIVA Y SUMATIVA - SUBCONTRATOS: SEGUIR LA REVISION DE LAS GUIAS DE MATEMATICAS, AÑADIENDO CONJUNTOS Y EJERCICIOS DE LA RADIO	- GRABAR LECCIONES 1 AL 4 SALUD, 5TO - GRABAR Y REPONER SEGMENTOS DE 3RO Y 4TO SALUD QUE TUVIERON REELABORADOS - COPIAS POR MAYOR DISTRIBUCION	- SUPERVISION Y COORDINACION REGIONAL - ACTUALIZAR DATOS ESTADISTICOS - REVISAR LOS CUADERNOS DE MEASTROS PARA LA CERTIFICACION CORRESPONDIENTE - EMPEZAR A CALIFICAR LOS DATOS DE LOS POSTTESTS, SALUD -SEGUIR CON LAS ENCUESTAS DE LA EVALUACION CUALITATIVA Y SU ANALISIS - COLABORAR CON LA OFICINA DEL PLANAMIENTO DEL MEC EN REVISAR LOS RESULTADOS DE SU EVALUACION.	- TERMINAR EMISIONES RADIALES DE MATEMATICAS, 2DO AL 5TO, Y DE SALUD 3RO Y 4TO	- EXPERTO EN VIDEO - EXPERTO EN RELACIONES PUBLICOS/ MEDIA
DICIEMBRE	- SUPERVISAR LOS EQUIPOS TECNICOS - SUPERVISION NACIONAL - SEGUIR PLAN DE INSTITUCIONALIZATION CON LOS AUTORIDADES DEL MEC - REVISAR PERSONAL - NEGOCIOS PRELIMINARIOS SUBCONTRATOS: EDC/PER, EDC/FYA - REALIZAR AUDITO, PER - ACCRUALS - PLANIFICAR 1ER REUNION DEL CONSEJO INTERSECTORAL PARI - REVISAR AVANCE TECNICA DE LA REVISION DE MATEMATICAS Y DE SALUD - TALLER DE PLANIFICACION ESTRATEGICO/INSTITUCIONAL, PER	- EQUIPO A: GUIONIZAR LECCIONES 5 AL 8, 5TO SALUD. - EQUIPO B: CONTINUAR CON LA REVISION FINAL DEL CURRICULUM, GUIONES, Y GUIAS DE SALUD, 3RO Y 4TO, EN BASE DE LOS RESULTADOS DE LAS EVALUACIONES FORMATIVA Y SUMATIVA - SUBCONTRATOS: SEGUIR LA REVISION DE LAS GUIAS DE MATEMATICAS, AÑADIENDO CONJUNTOS Y EJERCICIOS DE LA RADIO	- GRABAR LECCIONES 5 AL 8 SALUD, 5TO - GRABAR Y REPONER SEGMENTOS DE 3RO Y 4TO SALUD QUE TUVIERON REELABORADOS - COPIAS POR MAYOR DISTRIBUCION		

AÑO 1993	DIRECTORIO - MEC/PER/EDC	EQUIPO PEDAGOGICO	EQUIPO RADIO	EQUIPO IMPLEMENTACION E EVALUACION	TRANSMISION	ASESORIA TECNICA
JULIO	- SUPERVISAR LOS EQUIPOS TECNICOS - SUPERVISION NACIONAL - CONTINUAR CON LA REORGANIZACION DEL DIRECTORIO - ACTUALIZAR PLAN DE IMPLEMENTACION 1993 - REVISAR OBJECTIVOS Y PLANIFICAR ACTIVIDADES DEL PARI, 1994 - COLABORAR EN LA EVALUACION DEL LTP - VISITA DE SUPERVISION HOXENG, AID/RR/ED - TRANSICION/CAPACITACION COP/EDC - PLANIFICAR 1ER CONGRESO NACIONAL DE AUTORIDADES EDUCATIVAS, CBBA - REDEFINIR COMITE NACIONAL DEL PARI - PRIMEROS CONTACTOS CON AUTORIDADES EDUCATIVAS DEL COMITE NACIONAL DEL PARI	- GUIONIZAR LECCIONES 19 AL 22, 3RO Y 4TO SALUD - PREPRUEBA Y REVISION DE LAS LECCIONES DE SALUD - CONTINUACION DE CAPACITACION EN EVALUACION CUALITATIVA - ELABORAR ESTRATEGIA PARA ENTREVISTAS Y OBSERVACIONES DE CASA, EVALUACION CUALITATIVA	- GRABAR EN FORMA PRELIMINARIO Y FINAL LECCIONES 19 AL 22 DE SALUD, 3RO Y 4TO - COPIAR POR MAYOR DISTRIBUCION	- PREPRUEBA, LECCIONES 19 AL 22 DE SALUD, 3RO Y 4TO - EVAL FORMATIVA - MATEMATICAS Y SALUD - SUPERVISION Y COORDINACION REGIONAL - CONTINUAR TALLER DE EVALUACION CUALITATIVA. ELABORAR ESTRATEGIA DE SIGUIEMIENTO CON PADRES PARA LA INVESTIGACION CUALITATIVA, SALUD 4TO Y 5TO. ANALIZAR LOS DATOS PRELIMINARIOS.	- CONTINUAR EMISIONES DE MATEMATICAS, 2DO AL 5TO Y DE SALUD 3RO Y 4TO	- EXPERTO EN EVALUACION QUALITATIVA - ASISTANTE EN ESTUDIOS SOCIO-DEMOGRAFICO
AGOSTO	- SUPERVISAR LOS EQUIPOS TECNICOS - SUPERVISION NACIONAL - CONCLUIR REORGANIZACION DEL DIRECTORIO - APROBAR PARI PLAN DE IMPLEMENTACION, 1994 - CONCLUIR TRANSICION/CAPACITACION COP - CONTINUAR CON LA PLANIFICACION DEL 1ER CONGRESO NACIONAL DE AUTORIDADES, CBBA - COORDINACION DPTO. CON AUTORIDADES EDUCATIVAS DEL COMITE NACIONAL - ACTUALIZAR INVENTARIO PARI - PLANIFICAR 2DO CONGRESO INTL PARI, SRZ - PLANIFICAR ACTIVIDADES DE RELACIONES PUBLICAS, GESTION 1993 - CONCURSO DE MERITO PARA CONTRATAR 4 VIDEOS DEL PARI (MATEMATICAS Y SALUD, AUTORIDADES INTL, Y LA CAPACITACION DE MAESTROS) 1 TRIPTICO, Y 1 POSTER - DEFINIR PARAMETROS PARA LA REVISION TECNICA DE LAS GUIAS DE MATEMATICAS. - CONTRATAR PERSONAL	- GUIONIZAR LECCIONES 23 AL 27, 3RO Y 4TO SALUD - PREPRUEBA Y REVISION DE LAS LECCIONES DE SALUD - TALLERES DE PLANIFICACION, 5TO SALUD - RECOLLECTAR DATOS DE BASE, 5TO SALUD	- GRABAR EN FORMA PRELIMINARIO Y FINAL LECCIONES 23 AL 27 DE SALUD, 3RO Y 4TO - COPIAR POR MAYOR DISTRIBUCION	- PREPRUEBA, LECCIONES 23 AL 27 DE SALUD, 3RO Y 4TO - EVAL FORMATIVA - MATEMATICAS Y SALUD - SUPERVISION Y COORDINACION REGIONAL - RECOLLECTAR DATOS DE BASE, 5TO SALUD - COLABORAR CON LA OFICINA DE PLANAMIENTO DEL MEC EN SU DISEÑO DE EVALUACION DEL 3RO MATEMATICAS	- CONTINUAR EMISIONES DE MATEMATICAS, 2DO AL 5TO Y DE SALUD 3RO Y 4TO	- ASISTANTE EN ESTUDIOS SOCIO-DEMOGRAFICO
SEPTIEMBRE	- SUPERVISAR LOS EQUIPOS TECNICOS - SUPERVISION NACIONAL - CONVIVENCIA DEL 1ER CONGRESO NACIONAL DE AUTORIDADES EDUCATIVAS, CBBA - CONTINUAR PLANIFICACION DEL 2DO CONGRESO INTERNACIONAL DEL PARI, SRZ - EMPEZAR A PRODUCIR LOS PRIMEROS 3 VIDEOS (PADRES Y INTERNACIONAL), TRIPTICO, POSTER - ELABORAR SAR/ACCRUALS - PRIMEROS CONTACTOS CON LOS NUEVOS AUTORIDADES DEL MEC - APROBAR PLAN MAESTRO, 5TO CURSO SALUD - SUPERVISAR REVISION DE GUIAS DE MATE	- GUIONIZAR LECCIONES 28 AL 30, 3RO Y 4TO SALUD - ELABORAR PLAN MAESTRO, 5TO SALUD - ELABORAR METODOLOGIA PARA LA REVISION FINAL DEL CURRICULUM, GUIONES, Y GUIAS DEL 3RO Y 4TO SALUD EN BASE DE LA EVALUACION FORMATIVA Y SUMATIVA - SUBCONTRATOS: EMPEZAR LA REVISION DE LAS GUIAS DE MATEMATICAS, AÑADIENDO HILO DE CONJUNTOS Y EJERCICIOS DE LA RADIO	- GRABAR EN FORMA PRELIMINARIO Y FINAL LECCIONES 28 AL 30 SALUD, 3RO Y 4TO - GRABAR CUENTOS - COPIAR POR MAYOR DISTRIBUCION	- PREPRUEBA, LECCIONES 28 AL 30 DE SALUD, 3RO Y 4TO - EVAL FORMATIVA - MATEMATICAS Y SALUD - SUPERVISION Y COORDINACION REGIONAL - COLABORAR CON AUTORIDADES NACIONALES DE EDUCACION EN EL 1ER CONGRESO DEL PARI	- CONTINUAR EMISIONES DE MATEMATICAS, 2DO AL 5TO Y DE SALUD 3RO Y 4TO	- ASISTANTE EN ESTUDIOS SOCIO-DEMOGRAFICO - EXPERTO EN VIDEO - EXPERTO EN RELACIONES PUBLICOS/MEDIA

79

AÑO 1993	DIRECTORIO - MEC/PER/EDC	EQUIPO PEDAGOGICO	EQUIPO RADIO	EQUIPO IMPLEMENTACION E EVALUACION	TRANSMISION	ASESORIA TECNICA
OCTUBRE	- SUPERVISAR LOS EQUIPOS TECNICOS - SUPERVISION NACIONAL - CONVIVENCIA DEL 2DO CONGRESO INTERNACIONAL DEL PARI, SRZ - TERMINAR CON LA PRODUCCION DE LOS PRIMEROS 3 VIDEOS, TRIPTICO, Y POSTER - SEGUIR PLAN DE INSTITUCIONALIZACION CON LOS AUTORIDADES DEL MEC - APOYAR A LAS EVALUACIONES SUMATIVAS Y CUALITATIVAS DE SALUD - SUPERVISAR REVISION TECNICA DE LAS GUIAS DE MATEMATICAS - APROBAR PLAN DE REVISION DE SALUD, 3RO Y 4TO	- COLABORAR CON LAS EVALUACIONES CUALITATIVAS Y SUMMATIVAS DE SALUD, 3RO Y 4TO BASICO -REVISAR OBSERVACIONES DE 3RO Y 4TO SALUD, EN PREPARACION PARA LA REVISION FINAL DE LOS PROGRAMAS Y GUIAS. HACER SUMARIO DE LOS CAMBIOS NECESARIOS INDICADOS - SUBCONTRATOS: CONTINUAR CON LA REVISION DE LAS GUIAS DE MATEMATICAS, AÑADIENDO CONJUNTOS Y EJERCICIOS DE LA RADIO - TERMINAR CON EL PLAN MAESTRO, 5TO SALUD	- REGRABAR LECCIONES DE MATEMATICAS CON DEFICIENCIAS - COPIAR POR MAYOR DISTRIBUCION	- SUPERVISION Y COORDINACION REGIONAL - ADMINISTRAR POSTTESTS, SALUD - SEGUIR CON LAS ENCUESTAS DE LA EVALUACION CUALITATIVA - COLABORAR CON AUTORIDADES INTERNACIONALES DE EDUCACION EN EL 1ER CONGRESO INTERNACIONAL DEL PARI. COORDINAR Y FACILITAR SU REALIZACION. - COLABORAR CON LA OFICINA DEL PLANAMIENTO DEL MEC EN LA ADMINISTRACION DE SUS POSTTESTS DE 2DO Y 3RO, MATEMATICAS	- CONTINUAR EMISIONES DE MATEMATICAS, 2DO AL 5TO Y DE SALUD 3RO Y 4TO	- EXPERTO EN VIDEO - AYUDA TEMPORADA
NOVIEMBRE	- SUPERVISAR LOS EQUIPOS TECNICOS - SUPERVISION NACIONAL - SEGUIR PLAN DE INSTITUCIONALIZACION CON LOS AUTORIDADES DEL MEC - SEGUIR APOYANDO LAS EVALUACIONES SUMATIVAS Y CUALITATIVAS DE SALUD - REVISAR AVANCE TECNICA DE LAS GUIAS DE MATEMATICAS Y DE SALUD 3RO Y 4TO - PRODUCIR 4TO VIDEO PARA LA CAPACITACION DE MAESTROS - ENVIAR DELEGACION A LA CONF DE EDUCACION A DISTANCIA, MONTEREY, MEXICO - DEFINIR OBJECTIVO Y PERSONALIDADES DEL CONSEJO INTERSECTORAL PARI	- EQUIPO A: EMPEZAR A GUIONIZAR LECCIONES 1 AL 4, 5TO SALUD. - EQUIPO B: EMPEZAR REVISION FINAL DEL CURRICULUM, GUIONES, Y GUIAS DE SALUD, 3RO Y 4TO, EN BASE DE LOS RESULTADOS DE LAS EVALUACIONES FORMATIVA Y SUMATIVA - SUBCONTRATOS: SEGUIR LA REVISION DE LAS GUIAS DE MATEMATICAS, AÑADIENDO CONJUNTOS Y EJERCICIOS DE LA RADIO	- GRABAR LECCIONES 1 AL 4 SALUD, 5TO - GRABAR Y REPONER SEGMENTOS DE 3RO Y 4TO SALUD QUE TUVIERON REELABORADOS - COPIAS POR MAYOR DISTRIBUCION			

ANNEX 3

SCOPES OF WORK

CHIEF OF PARTY

The COP will supervise all technical assistance provided by the Contractor, manage the Contractor's accounts, liaison with USAID and other official entities. The COP will work as technical counterpart to the MEC National Coordinator and IRL's Executive Director. Her principal responsibilities include: 1) the technical direction of Radio Health, 2) overall Project administration including management of EDC's local subcontracts, 3) coordination of international TA, and 4) donor coordination. Specifically, the COP will:

- identify local TA needs, and manage the work of all consultants provided by the Contract;
- supervise the technical output of all activities related to the evaluation and production of Radio Health;
- develop a detailed implementation plan for IRL through September 1994, in collaboration with IRL's Executive Director and the MEC National Coordinator; oversee implementation of the same;
- work with IRL's Executive Director and the MEC National Coordinator to develop long-range plans and procedural models for national implementation of IRL and its related institutionalization;
- coordinate the long-term professional development of Project staff;
- coordinate project activities with IRL's AID Project Manager, participate in internal and external reviews of IRL with AID;
- represent the work of the Project as appropriate, through professional publication and conference presentations;
- develop and implement a media-based public-relations strategy to promote IRL activities at the national and community levels;
- prepare semi-annual reports for the Mission on project management and implementation; prepare a final report.

IRL EXECUTIVE DIRECTOR

IRL's Executive Director will supervise all project implementation activities and liaison with the USAID Mission and other official entities. The Executive Director will represent the work of IRL's consortium at the national and international level, and work as counterpart to the MEC National Coordinator and EDC's COP. His principal responsibilities include: 1) directing IRL's institutional effort, 2) supervising IRL's regional offices, 3) coordinating field implementation, and 4) managing local TA. Specifically, the Executive Director will:

- work with the COP to identify TA needs;
- supervise the implementation and output of all project components;
- develop a detailed implementation plan for IRL through September 1994, in collaboration with the EDC COP and the MEC National Coordinator, oversee implementation of the same;
- work with EDC's COP and the MEC National Coordinator to develop long-range plans and procedural models for national implementation of IRL;
- develop a strategy for integrating IRL into the education reform package, promote institutionalization of IRL by integrating project research into policy dialogue at the highest levels, provide the MEC with the necessary technical and financial analyses needed to determine the feasibility of long-term sustainability, coordinate union support for institutionalization;
- establish a national advisory panel to aid IRL's institutionalization;
- coordinate the long-term professional development of Project staff;
- participate in internal and external reviews of The Project with USAID and GOB entities;
- represent the work of the Project through professional publication and conference presentations; promote Project activities through consultancies, as appropriate;
- prepare monthly reports for EDC on project management and implementation, prepare a final report of IRL in 1994;
- collaborate with the MEC National Coordinator in establishing a national infrastructure of trained teachers and supervisors in interactive radio.

DEPUTY CHIEF

The Deputy Chief will work under the supervision of the EDC COP and administer IRL's stateside activities. The Deputy Chief's main areas of responsibility are contractual, administrative, and fiscal management, as follows:

- o liaison with the AID/R&D/ED Chief Technical Officer (CTO) and the LEARNTECH Contracts Officer;
- o review all seven IRL field accounts; monitor for compliance with AID regulations,
- o develop letters to AID/W Contracts for procurement of equipment, employee salary approvals, consultant rate approvals, and other pertinent issues as they arise;
- o process and secure travel clearances from the AID/R&D/ED CTO for all IRL travel;
- o liaison with EDC's administrative and business services offices;
- o manage home office support backstopping the Bolivia field site;
- o maintain the LEARNTECH Project Director appraised of all issues involving AID/W follow-up;
- o manage complex procurements according to AID regulations for all project equipment; Coordinate international shipment of all commodities;
- o advise IRL's COP on contractual and administrative issues and procedures, in particular on issues related to the management of IRL subcontracts;
- o manage IRL close-down activities in the home office and in the field;
- o coordinate stateside management, procurement and contracting of short term international technical assistance;
- o represent the COP on issues of stateside management and administrative importance during the COP's absence;
- o stateside coordination of remaining two IRL international conferences, October 1993 (Bolivia) and May 1994 (Boston);
- o prepare a brief monthly report on IRL issues and activities.

84

ANNEX 4.

REVISED IRL BUDGET

SEPTEMBER 1991 - MARCH 1995

INTERACTIVE RADIO LEARNING
SUMMARY BUDGET - REPROGRAMMED FOR NO COST EXTENSION
(HOME OFFICE MANAGEMENT COVERED IN MULTIPLIER)
9/91 - 12/94
(8/4/93)ANNOCOST93

SUMMARY BUDGET	1991	1992	1993	1994	TOTAL	% ORIGINAL BUDGET
1. SALARIES (Schedule A)						
Expatriate Staff	11,814	82,119	76,366	45,148	215,447	71%
Local Staff	2,200	153,855	168,041	195,967	520,063	104%
TOTAL SALARIES	14,014	235,974	244,407	241,114	735,510	91%
2. CONSULTANTS (Schedule B)	0	25,917	52,363	86,115	164,394	108%
TOTAL PERSONNEL	14,014	261,891	296,770	327,229	899,904	94%
MULTIPLIER @ 2.3891	19,467	363,793	412,243	454,554	1,250,057	94%
TOTAL SALARIES & MULTIPLIER	33,481	625,684	709,013	781,784	2,149,961	94%
3. ALLOWANCES (Schedule C)	11,945	72,130	72,550	51,362	207,987	64%
4. TRAVEL (Schedule D)						
Field Staff	1,665	73,002	91,403	70,818	236,888	104%
Consultants	0	16,560	35,640	39,600	91,800	93%
Advisory Boards	0	0	20,822	32,013	52,835	224%
TOTAL TRAVEL	1,665	89,562	147,865	142,431	381,523	109%
5. OUTSIDE SERVICES & HONORARIA (Schedule E)						
Honoraria	0	0	11,400	7,800	19,200	80%
Training	0	7,200	12,800	21,900	41,900	121%
Temporary Services	0	6,000	6,000	6,000	18,000	225%
TOTAL OUTSIDE SERVICES & HONORARIUM	0	13,200	30,200	35,700	79,100	119%
6. EQUIPMENT (Schedule F)	9,800	137,850	42,150	152,350	342,150	102%
7. OTHER DIRECT COSTS (SCHEDULE G)	22,543	238,027	334,592	412,046	1,007,207	125%
TOTAL DIRECT COSTS	45,953	550,768	527,357	793,889	2,017,967	107%
TOTAL PROJECT COSTS	79,434	1,176,453	1,336,370	1,575,672	4,167,928	100%

INTERACTIVE RADIO LEARNING
REPROGRAMMED BUDGET - NO COST EXTENSION
(HOME OFFICE MANAGEMENT COVERED IN MULTIPLIER)
9/91 - 12/94
(8/4/93)ANNOCOST93

SCHEDULE A - FIELD STAFF:	1991 SALARY/UNIT		1991 UNITS	1991 COST	1992 UNITS	1992 COST	1993 UNITS	1993 COST	1994 UNITS	1994 COST	1991 - 1994 UNITS	1991 - 1994 COST	%
	(FTE)	(%FTE)	PM	(PRORATED)	PM	(PRORATED)	PM	(PRORATED)	PM	(PRORATED)		(PRORATED)	
EXPATRIOT STAFF	INFLATION FACTOR			0%		5%		5%		5%			
CHIEF OF PARTY - FRYER	3,938 MTH	100%	3	3.0 11,814	12	12.0 49,619	8	8.0 34,733	0	0.0 0	23	23.0 96,166	
CHIEF OF PARTY - FITZGERALD	3,250 MTH	100%	0	0.0 0	0	0.0 0	4	4.0 14,333	12	12.0 45,148	16	16.0 59,480	
HEALTH EDUCATOR - FITZGERALD	3,095 MTH	100%	0	0.0 0	10	10.0 32,500	8	8.0 27,300	0	0.0 0	18	18.0 59,801	
SUBTOTAL EXPATRIOT STAFF:				3 11,814		22.0 82,119		20.0 76,366		12.0 45,148		57.0 215,447	71%
LOCAL STAFF (SUBCONTRACT)	INFLATION FACTOR			0%		0%		4%		5%			
MANAGEMENT TEAM													
EXECUTIVE DIRECTOR PARI	1,890 MTH	90%	0	0.0 0	0	0.0 0	4	3.6 7,108	12	10.8 22,391	16	14.4 29,499	
TECHNICAL COORDINATOR PER	1,800 MTH	90%	0	0.0 0	12	10.8 19,440	8	7.2 13,539	0	0.0 0	20	18.0 32,979	
ADMIN ASSISTANT PER	450 MTH	100%	0	0.0 0	12	12.0 5,400	12	12.0 5,641	12	12.0 5,923	36	36.0 16,965	
COORDINATOR, FYA	1,389 MTH	15%	0	0.0 0	11	1.7 2,293	12	1.8 2,569	12	1.8 2,697	35	5.3 7,558	
ADMINISTRATOR, FYA	754 MTH	15%	0	0.0 0	11	1.7 1,245	12	1.8 1,397	12	1.8 1,467	35	5.3 4,109	
SUBTOTAL:				0.0 0		26.1 28,377		26.4 30,255		26.4 32,478		78.9 91,110	
CURRICULUM TEAM													
CHIEF, CURRIC/PRODUCTION	1,500 MTH	90%	0	0.0 0	12	10.8 16,200	12	10.8 16,924	12	10.8 17,770	36	32.4 50,894	
CURRICULUM DEVELOPER (AC/JL)	500 MTH	100%	0	0.0 0	9	9.0 4,500	11	11.0 5,500	12	12.0 6,300	32	32.0 16,300	
CURRICULUM DEVELOPER (AC)	500 MTH	50%	0	0.0 0	3	1.5 750	12	6.0 3,134	12	6.0 3,291	27	13.5 7,175	
CURRICULUM DEVELOPER (BF)	500 MTH	50%	0	0.0 0	12	6.0 3,000	0	0.0 0	0	0.0 0	12	6.0 3,000	
CURRICULUM DEVELOPER (HA)	500 MTH	50%	0	0.0 0	12	6.0 3,000	12	6.0 3,134	12	6.0 3,291	36	18.0 9,425	
CURRICULUM DEVELOPER (SU)	500 MTH	50%	0	0.0 0	2	1.0 500	12	6.0 3,000	12	6.0 3,150	26	13.0 6,650	
CURRICULUM GUIDE EXPERT ( )	500 MTH	50%	0	0.0 0	0	0.0 0	4	2.0 1,000	2	1.0 500	6	3.0 1,500	
CURRICULUM GUIDE EXPERT ( )	500 MTH	50%	0	0.0 0	0	0.0 0	4	2.0 1,000	2	1.0 500	6	3.0 1,500	
BILINGUAL EDUC SPECIALIST ( )	500 MTH	100%	0	0.0 0	0	0.0 0	0	0.0 0	6	6.0 3,000	6	6.0 3,000	
BILINGUAL EDUC SPECIALIST ( )	500 MTH	100%	0	0.0 0	0	0.0 0	0	0.0 0	6	6.0 3,000	6	6.0 3,000	
HEALTH SPECIALIST/ANTHROPOLOGIS	500 MTH	100%	0	0.0 0	11	11.0 5,500	11	11.0 5,500	12	12.0 6,300	34	34.0 17,300	
SUBTOTAL:				0.0 0		45.3 33,450		54.8 39,192		66.8 47,102		166.9 119,744	
RADIO TEAM													
RADIO SUPERVISER (MS)	500 MTH	50%	0	0.0 0	0	0.0 0	11	5.5 2,750	12	6.0 3,150	23	11.5 5,900	
RADIO DIRECTOR (OR)	500 MTH	100%	0	0.0 0	12	12.0 6,000	12	12.0 6,268	12	12.0 6,582	36	36.0 18,850	
RADIO ENGINEER (MB)	500 MTH	100%	0	0.0 0	12	12.0 6,000	12	12.0 6,268	12	12.0 6,582	36	36.0 18,850	
RADIO ACTOR - ADULT (LP)	589 MTH	25%	0	0.0 0	6	1.5 884	12	3.0 1,847	12	3.0 1,940	30	7.5 4,672	
RADIO ACTOR - ADULT (PC)	589 MTH	25%	0	0.0 0	6	1.5 884	12	3.0 1,847	12	3.0 1,940	30	7.5 4,672	
RADIO ACTOR - ADULT (MB)	589 MTH	25%	0	0.0 0	6	1.5 884	12	3.0 1,847	12	3.0 1,940	30	7.5 4,672	
RADIO ACTOR - ADULT ( )	589 MTH	25%	0	0.0 0	0	0.0 0	0	0.0 0	12	3.0 1,768	12	3.0 1,768	
RADIO ACTOR - CHILD (RU)	211 MTH	25%	0	0.0 0	4	1.0 211	12	3.0 660	12	3.0 693	28	7.0 1,563	
RADIO ACTOR - CHILD (MC)	211 MTH	25%	0	0.0 0	0	0.0 0	0	0.0 0	12	3.0 632	12	3.0 632	
SUBTOTAL:				0.0 0		29.5 14,863		41.5 21,489		48.0 25,226		119.0 61,577	
IMPLEMENTATION & EVALUATION TEAM													
CHIEF, IMPLEM & EVAL	1,500 MTH	90%	0	0.0 0	12	10.8 16,200	12	10.8 16,924	12	10.8 17,770	36	32.4 50,894	
STATISTICIAN	500 MTH	50%	0	0.0 0	11	5.5 2,750	12	6.0 3,134	12	6.0 3,291	35	17.5 9,175	
REGIONAL COORDINATOR LPB	600 MTH	100%	0	0.0 0	12	12.0 7,200	0	0.0 0	0	0.0 0	12	12.0 7,200	
REGIONAL COORDINATOR CBB	600 MTH	100%	0	0.0 0	12	12.0 7,200	12	12.0 7,522	12	12.0 7,898	36	36.0 22,620	

81

REGIONAL COORDINATOR SRZ	600 MTH	100%	0	0.0	0	12	12.0	7,200	12	12.0	7,522	12	12.0	7,898	36	36.0	22,620	
EVALUATION/TRAINING ASST. LPB	500 MTH	50%	0	0.0	0	0	0.0	0	12	6.0	3,134	12	6.0	3,291	24	12.0	6,425	
EVALUATION/ADMN LPB	500 MTH	50%	0	0.0	0	0	0.0	0	0	0.0	0	12	6.0	3,000	12	6.0	3,000	
REGIONAL SUPERVISOR FYA CBB	439 MTH	15%	0	0.0	0	11	1.7	724	12	1.8	819	12	1.8	860	35	5.3	2,404	
REGIONAL SUPERVISOR FYA SRZ	439 MTH	15%	0	0.0	0	11	1.7	724	12	1.8	819	12	1.8	860	35	5.3	2,404	
REGIONAL SUPERVISOR FYA TAJ	439 MTH	15%	0	0.0	0	11	1.7	724	12	1.8	819	12	1.8	860	35	5.3	2,404	
REGIONAL SUPERVISOR FYA SRE	351 MTH	15%	0	0.0	0	11	1.7	579	12	1.8	649	12	1.8	682	35	5.3	1,911	
REGIONAL ASSISTANT FYA CBB	368 MTH	50%	0	0.0	0	11	5.5	2,026	12	6.0	2,272	12	6.0	2,386	35	17.5	6,685	
REGIONAL ASSISTANT FYA SRZ	368 MTH	50%	0	0.0	0	11	5.5	2,026	12	6.0	2,272	12	6.0	2,386	35	17.5	6,685	
REGIONAL ASSISTANT FYA SRE	184 MTH	50%	0	0.0	0	11	5.5	1,012	12	6.0	1,129	12	6.0	1,186	35	17.5	3,327	
SUBTOTAL:				0.0	0		75.4	48,365		72.0	47,018		78.0	52,369		225.4	147,752	
MEDIA EXPERT/ARTIST	600 MTH	100%	0	0.0	0	0	0.0	0	0	0.0	0	12	12.0	7,200		12.0	7,200	
ADMINISTRATIVE TEAM																		
CHIEF, ADMINISTRATION	1,500 MTH	90%	0	0.0	0	12	10.8	16,200	12	10.8	16,924	12	10.8	17,770	36	32.4	50,894	
ACCOUNTANT	500 MTH	100%	0	0.0	0	12	12.0	6,000	12	12.0	6,268	12	12.0	6,582	36	36.0	18,850	
BILINGUAL ADMIN ASST TO COP	550 MTH	100%	4	4.0	2,200	12	12.0	6,600	12	12.0	6,895	12	12.0	7,240	40	40.0	22,935	
SUBTOTAL:				4.0	2,200		34.8	28,800		34.8	30,087		34.8	31,592		108.4	92,679	
SUBTOTAL LOCAL STAFF (W/O SUPPORT STAFF):				4.0	2,200		211.1	153,855		229.5	168,041		266.0	195,967		710.6	520,063	104%
TOTAL FIELD STAFF (W/O SUPPORT STAFF):				7.0	14,014		233.1	235,974		249.5	244,407		278.0	241,114		767.6	735,510	91%

SCHEDULE B - CONSULTANTS:	1991 COST/ UNIT		1991 UNITS	1991 COST	1992 UNITS	1992 COST	1993 UNITS	1993 COST	1994 UNITS	1994 COST	1991 - 1994 UNITS	1991 - 1994 COST	%
	INFLATION FACTOR			0%		0%		5%		5%			
TECHNICAL MONITOR	6,362 MTH	100%	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	
FINANCIAL/CONTRACTS MONITOR	3,324 MTH	100%	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	
ECONOMIST	6,500 MTH	100%	0.0	0	0.0	0	0.0	0	1.0	7,166	1.0	7,166	
INSTITUTIONAL DEVELOPMENT SPEC.	5,417 MTH	100%	0.0	0	1.0	5,417	1.0	5,688	3.0	17,916	5.0	29,020	
EVALUATOR	5,417 MTH	100%	0.0	0	0.0	0	1.0	5,688	0.0	0	1.0	5,688	
PUBLIC HLTH/ENVIRON ADVISOR	4,000 MTH	100%	0.0	0	1.0	4,000	1.0	4,200	0.0	0	2.0	8,200	
PUBLIC RELATIONS/MEDIA ADVISOR	4,000 MTH	100%	0.0	0	0.0	0	2.0	8,400	2.0	8,820	4.0	17,220	
STUDIO DESIGNER/ENGINEER	4,000 MTH	100%	0.0	0	2.5	10,000	0.0	0	1.0	4,410	3.5	14,410	
APP RSRCHER/COMMUNITY HLTH ADVI	6,500 MTH	100%	0.0	0	1.0	6,500	2.0	13,650	2.0	14,333	5.0	34,483	
BILINGUAL ED ADVISOR	6,500 MTH	100%	0.0	0	0.0	0	0.0	0	2.0	14,333	2.0	14,333	
SOCIAL MARKETING ADVISOR	5,417 MTH	100%	0.0	0	0.0	0	0.0	0	1.0	5,972	1.0	5,972	
VIDEO ADVISOR	6,500 MTH	100%	0.0	0	0.0	0	1.5	10,238	0.0	0	1.5	10,238	
MIS ADVISOR	6,500 MTH	100%	0.0	0	0.0	0	0.0	0	1.0	7,166	1.0	7,166	
MPH GRAD STUDENT INTERN	1,500 MTH	100%	0.0	0	0.0	0	3.0	4,500	4.0	6,000	7.0	10,500	
(RA STIPEND NOT INFLATED)													
TOTAL CONSULTANTS:			0.0	0	5.5	25,917	11.5	52,363	17.0	86,115	34.0	164,394	108%
TOTAL PERSONNEL (STAFF & CONSULTANTS)			7.0	14,014	238.6	261,891	261.0	296,770	295.0	327,229	801.6	899,904	94%
MULTIPLIER	2.3891			19,467		363,793		412,243		454,554		1,250,057	94%
TOTAL SALARIES & MULTIPLIER				33,481		625,684		709,013		781,784		2,149,961	94%

SCHEDULE C - ALLOWANCES:	1991 COST/ UNIT	1991 UNITS	1991 COST	1992 UNITS	1992 COST	1993 UNITS	1993 COST	1994 UNITS	1994 COST	1991 - 1994 UNITS	1991 - 1994 COST	%
	INFLATION FACTOR		0%		0%		0%		0%			
CHIEF OF PARTY (FAMILY OF 3)												
POST DIFFERENTIAL	25% SALARY		2,954		12,405		8,683		0		24,041	
INTL RELOC: HHE(7200 LBS)+AUTO	17,000 O/W	0	0	0	0	1	17,000	0	0	1	17,000	
UNACCOMPANIED BAGGAGE (600 LBS)	1,200 O/W	0	0	0	0	1	1,200	0	0	1	1,200	
STORAGE PERSONAL EFFECTS	125 MTH	3	375	12	1,500	8	1,000	0	0	23	2,875	
FURN/APPLIANCE/SECURITY PACKAGE	0 UNIT	1	0	0	0	0	0	0	0	1	0	
RELOCATION (TEMP HOUSING)	123 DAY	0	0	0	0	0	0	0	0	0	0	
HOUSE RENT & UTILITIES	2,154 MTH	4.00	8,617	12	25,850	8	17,233	0.00	0	24	51,700	
SUBTOTAL			11,945		39,755		45,117		0		96,816	
HEALTH EDUCATOR (FAMILY OF 1)												
POST DIFFERENTIAL	25% SALARY		0		8,125		10,408		11,287		29,820	
INTL RELOC: HHE(7200 LBS)+AUTO	17,000 O/W	0	0	0.5	8,500	0	0	1	17,000	2	25,500	
UNACCOMPANIED BAGGAGE (250 LBS)	500 O/W	0	0	1	500	0	0	1	500	2	1,000	
STORAGE PERSONAL EFFECTS	125 MTH	0	0	10	1,250	12	1,500	12	1,500	34	4,250	
MOVING IN ALLOWANCE	5,000 UNIT	0	0	1	5,000	0	0	0	0	1	5,000	
RELOCATION (TEMP HOUSING)	49 DAY	0	0	0	0	0	0	0	0	0	0	
HOUSE RENT & UTILITIES	900 MTH	0	0	10.00	9,000	8	7,200	0.00	0	18	16,200	
HOUSE RENT & UTILITIES	1,500 MTH	0	0	0.00	0	4	6,000	12.00	18,000	16	24,000	
SUBTOTAL			0		32,375		25,108		48,287		105,770	
RESEARCH ASSISTANT (FAMILY OF 1)												
EXCESS BAGGAGE	75 R/T	0	0	0	0	1	75	1	75	2	150	
SUBSISTANCE ALLOWANCE	750 MTH	0	0	0	0	3	2,250	4	3,000	7	5,250	
SUBTOTAL			0		0		2,325		3,075		5,400	
TOTAL ALLOWANCES:			11,945		72,130		72,550		51,362		207,987	64%

SCHEDULE D - TRAVEL:	1991 COST/ UNIT	1991 UNITS	1991 COST	1992 UNITS	1992 COST	1993 UNITS	1993 COST	1994 UNITS	1994 COST	1991 - 1994 UNITS	1991 - 1994 COST	%
	INFLATION FACTOR		0%		0%		0%		0%			
FIELD STAFF												
FRYER - CHIEF OF PARTY (FAMILY OF 3)												
INTERNATIONAL AIRFARES												
ASSIGNMENT/REPATRIATION (3)	1,200 O/W	0	0	0	0	3	3,600	0	0	3	3,600	
R&R - NASSAU (3)	1,300 R/T	0	0	0	0	3	3,900	0	0	3	3,900	
HOME LEAVE - SF, CA (3)	2,400 R/T	0	0	3	7,200	0	0	0	0	3	7,200	
INTERNAL US AIRFARE (SEE BELOW	800 R/T	1	800	0	0	1	800	0	0	2	1,600	
INTL CONSULTATION (TRAINING, HOME OFFICE, CONF, INTL ADVISORY BOARD)	1,800 R/T	0.0	0	2	3,600	2	3,600	0	0	4	7,200	
INTERNATIONAL PER DIEM												
ORIENTATION/CONSULTATION	148 DAY	5	740	40	5,920	35	5,180	0	0	80	11,840	
LOCAL TRANSPORT (TAXI,ETC)	25 DAY	5	125	40	1,000	35	875	0	0	80	2,000	
SUBTOTAL:			1,665		17,720		17,955		0		37,340	
FITZGERALD - HEALTH EDUCATOR/CHIEF OF PARTY (FAMILY OF 1)												
INTERNATIONAL AIRFARES												
ASSIGNMENT/REPATRIATION (1)	1,200 O/W	0	0	1	1,200	0	0	1	1,200	2	2,400	

R&R - NASSAU (1)	1,300 R/T	0	0	0	0	1	1,300	0	0	1	1,300	
HOME LEAVE - SF, CA (1)	2,400 R/T	0	0	0	0	0	0	0	0	0	0	
INTERNAL US AIRFARE (SEE BELOW	800 R/T	0	0	1	800	1	800	0	0	2	1,600	
INTL CONSULTATION (TRAINING, INTL ADVISORY BOARD)	1,800 R/T	0	0	1	1,800	2	3,600	2	3,600	5	9,000	
INTERNATIONAL PER DIEM												
ORIENTATION/CONSULTATION	148 DAY	0	0	20	2,960	30	4,440	20	2,960	70	10,360	
LOCAL TRANSPORT (TAXI,ETC)	25 DAY	0	0	20	500	30	750	20	500	70	1,750	
SUBTOTAL:			0		7,260		10,890		8,260		26,410	
RESEARCH ASSISTANT												
ASSIGNMENT	1,800 R/T	0	0	0	0	1	1,800	1	1,800	2	3,600	
LOCAL STAFF INTERNATIONAL TRAVEL												
AIRFARE (SEMINARS/ADVISORY BD)	1,800 R/T	0	0	2	3,600	6	10,800	6	10,800	14	25,200	
PER DIEM	148 DAY	0	0	14	2,072	46	6,808	46	6,808	106	15,688	
LOCAL TRANSPORT (TAXI,ETC)	25 DAY	0	0	14	350	46	1,150	46	1,150	106	2,650	
SUBTOTAL:			0		6,022		18,758		18,758		43,538	
STAFF TRAVEL IN BOLIVIA												
NATIONAL TRAVEL & PER DIEM	3,500 MTH	0	0	12	42,000	12	42,000	12	42,000	36	126,000	
SUBTOTAL FIELD STAFF TRAVEL:			1,665		73,002		91,403		70,818		236,888	104%
CONSULTANTS TRAVEL TO BOLIVIA												
AIRFARE	1,800 R/T	0	0	4	7,200	9	16,200	10	18,000	23	41,400	
PER DIEM	100 DAY	0	0	78	7,800	162	16,200	180	18,000	420	42,000	
LOCAL TRANSPORT (TAXI,ETC)	20 DAY	0	0	78	1,560	162	3,240	180	3,600	420	8,400	
SUBTOTAL CONSULTANT TRAVEL:			0		16,560		35,640		39,600		91,800	93%
ADVISORY BOARD TRAVEL												
INTERNATIONAL ADVISORY BOARD												
AIRFARE (MEAN US & INTL FARES)	1,000 R/T	0	0	0	0	8	8,000	9	9,000	17	17,000	
PER DIEM	148 DAY	0	0	0	0	24	3,552	27	3,996	51	7,548	
LOCAL TRANSPORT (TAXI,ETC)	25 DAY	0	0	0	0	24	600	27	675	51	1,275	
SUBTOTAL:			0		0		12,152		13,671		25,823	
NATIONAL ADVISORY BOARD												
AIRFARE IN BOLIVIA	150 R/T	0	0	0	0	17	2,550	17	2,550	34	5,100	
PER DIEM	100 DAY	0	0	0	0	51	5,100	17	1,700	68	6,800	
LOCAL TRANSPORT (TAXI,ETC)	20 DAY	0	0	0	0	51	1,020	17	340	68	1,360	
INTERNATIONAL AIRFARE	1,200 R/T	0	0	0	0	0	0	8	9,600	8	9,600	
INTERNATIONAL PER DIEM	148 DAY	0	0	0	0	0	0	24	3,552	24	3,552	
INTL MISC TRANSPORT (TAXI,ETC)	25 DAY	0	0	0	0	0	0	24	600	24	600	
SUBTOTAL:			0		0		8,670		18,342		27,012	
SUBTOTAL ADVISORY BOARD:			0		0		20,822		32,013		52,835	224%
TOTAL TRAVEL:			1,665		89,562		147,865		142,431		381,523	109%

SCHEDULE E - OUTSIDE SERVICES & HONORARIA	1991 COST/ UNIT	1991 UNITS	1991 COST	1992 UNITS	1992 COST	1993 UNITS	1993 COST	1994 UNITS	1994 COST	1991 - 1994 UNITS	1991 - 1994 COST	%

90

	INFLATION FACTOR		0%		0%		0%		0%			
HONORARIA (PER 3-DAY WKG MEETING)												
INTERNATIONAL ADVISORY BOARD	600 MEMBER	0	0	0	0	15	9,000	9.0	5,400	24	14,400	
NATIONAL ADVISORY BOARD	300 MEMBER	0	0	0	0	8	2,400	8	2,400	16	4,800	
SUBTOTAL			0		0		11,400		7,800		19,200	80%
TRAINING												
TEACHER TRAINING - HEALTH	4 PART	0	0	600	2,400	1400	5,600	1800	7,200	3800	15,200	
MASTER TEACHER TRAINING	25 PART	0	0	0	0	0	0	300	7,500	300	7,500	
TEACHER TRAINING - MATH	4 PART	0	0	1200	4,800	1800	7,200	1800	7,200	4800	19,200	
SUBTOTAL			0		7,200		12,800		21,900		41,900	121%
TEMPORARY SERVICES												
TRANSLATION/SECY/RADIO	6,000 YR	0.00	0	1.0	6,000	1	6,000	1	6,000	3.00	18,000	
SUBTOTAL			0		6,000		6,000		6,000		18,000	225%
TOTAL OUTSIDE SERVICES:			0		13,200		30,200		35,700		79,100	119%

SCHEDULE F - FURNITURE & EQUIPMENT	1991 COST/ UNIT	1991 UNITS	1991 COST	1992 UNITS	1992 COST	1993 UNITS	1993 COST	1994 UNITS	1994 COST	1991 - 1994 UNITS	1991 - 1994 COST	%
	INFLATION FACTOR		0%		0%		0%		0%			
COMPUTERS/PRINTERS/PERIPHERALS	3,200 UNIT	0	0	11	35,200	5.5	17,600	0	0	17	52,800	
SCANNER/DESKTOP PUBLISHING	1,000 UNIT	0	0	0	0	1	1,000	0	0	1	1,000	
CALCULATORS	125 UNIT	0	0	6	750	0	0	0	0	6	750	
CENTRAL PHONE SYSTEM	2,500 UNIT	1	2,500	0	0	0	0	0	0	1	2,500	
PHONE LINES	1,850 UNIT	0	0	1	1,850	0	0	1	1,850	2	3,700	
CASSETTE RECORDERS	50 UNIT	0	0	5	250	30	1,500	0	0	35	1,750	
OFF FURNITURE/PARTITIONS	300 UNIT	20	6,000	20	6,000	0	0	0	0	40	12,000	
4-WHEEL DRIVE VEHICLES	25,000 UNIT	0	0	0	0	0	0	2	50,000	2	50,000	
RADIO STUDIO EQUIP & CONSTRUC	65,000 UNIT	0	0	1	65,000	0	0	0	0	1	65,000	
PHOTOCOPIER	8,000 UNIT	0	0	1	8,000	0	0	0	0	1	8,000	
TELEFAX	1,000 UNIT	0	0	3	3,000	0	0	0	0	3	3,000	
CONFERENCE ROOM FURNITURE	400 UNIT	1	400	3	1,200	0	0	0	0	4	1,600	
VIDEO EQUIPMENT	5,000 UNIT	0	0	0	0	1	5,000	0	0	1	5,000	
OVERHEAD PROJECTOR	750 UNIT	0	0	0	0	1	750	0	0	1	750	
TYPEWRITERS	300 UNIT	0	0	5	1,500	1	300	0	0	6	1,800	
CAMERA	300 UNIT	1	300	0	0	0	0	0	0	1	300	
PORTABLE EXPOSITION BACKDROP	1,000 UNIT	0	0	0	0	1	1,000	0	0	1	1,000	
WHITE BOARDS	100 UNIT	6	600	1	100	0	0	0	0	7	700	
FIRST AID KITS & REFILLS	30 UNIT	0	0	0	0	0	0	350	10,500	350	10,500	
TWO WAY RADIOS	1,000 UNIT	0	0	0	0	0	0	20	20,000	20	20,000	
RADIOS	50 UNIT	0	0	300	15,000	300	15,000	1400	70,000	2000	100,000	
TOTAL FURNITURE & EQUIPMENT:			9,800		137,850		42,150		152,350		342,150	102%

SCHEDULE G -	1991	1991	1992	1993	1994	1991 - 1994

OTHER DIRECT COSTS	COST/ UNIT	UNITS	COST	UNITS	COST	UNITS	COST	UNITS	COST	UNITS	COST	%
	INFLATION FACTOR		0%		0%		0%		0%			
STAFF & CONSULTANT TRAVEL RELATED EXPENSES												
DBA INSURANCE - LT	160 MTH	3	480	22	3,520	20	3,200	12	1,920	57	9,120	
DBA INSURANCE - CONS	186 MTH	0	0	4	746	9	1,678	10	1,864	23	4,287	
MEDIVAC INSURANCE - LT W/ FAMIL	170 YR	0.25	43	1	170	0.66	112	0	0	2	325	
MEDIVAC INSURANCE - LT SINGLE	78 YR	0	0	0.83	65	1	78	1	78	3	221	
MEDIVAC INSURANCE - CONS	17 MTH	0	0	4	68	9	153	10	170	23	391	
MEDICAL EXAMINATIONS - LT & FAM	250 PERSON	3	750	1	250	3	750	1	250	8	2,000	
SUBTOTAL TRAVEL RELATED EXPENSES:			1,273		4,818		5,971		4,282		16,343	73%

SUPPORT STAFF	(FTE)	(%FTE)	PM	(PRORATED)	(PM	(PRORATED)	(PM	(PRORATED)	(PM	(PRORATED)		(PRORATED)	
SECRETARY, CENTRAL OFFICE	450 MTH	100%	0	0.0	0	12 12.0	5,400	12 12.0	5,641	12 12.0	5,923	36 36.0	16,965
SECRETARY, CENTRAL OFFICE	450 MTH	100%	0	0.0	0	12 12.0	5,400	12 12.0	5,641	12 12.0	5,923	36 36.0	16,965
SECRETARY, FIELD OFFICE	300 MTH	100%	0	0.0	0	11 11.0	3,300	12 12.0	3,761	12 12.0	3,949	35 35.0	11,010
SECRETARY, FIELD OFFICE	300 MTH	100%	0	0.0	0	11 11.0	3,300	12 12.0	3,761	12 12.0	3,949	35 35.0	11,010
RECEPTIONIST/MTLS DISPATCHER	276 MTH	100%	0	0.0	0	8 8.0	2,211	12 12.0	3,464	12 12.0	3,637	32 32.0	9,312
CHOFFEUR/MESSENGER, CNTRL OFF	276 MTH	100%	0	0.0	0	6 6.0	1,658	12 12.0	3,464	12 12.0	3,637	30 30.0	8,759
CHOFFEUR/MESSENGER, FLD OFFICE	276 MTH	100%	0	0.0	0	11 11.0	3,039	12 12.0	3,464	12 12.0	3,637	35 35.0	10,141
CHOFFEUR/MESSENGER, FLD OFFICE	276 MTH	100%	0	0.0	0	11 11.0	3,039	12 12.0	3,464	12 12.0	3,637	35 35.0	10,141
PHOTOCOPIER OPERATOR	263 MTH	100%	0	0.0	0	12 12.0	3,158	12 12.0	3,299	12 12.0	3,464	36 36.0	9,921
OFFICE/GROUNDS MAINTENANCE	250 MTH	100%	0	0.0	0	12 12.0	3,000	12 12.0	3,134	12 12.0	3,291	36 36.0	9,425
GUARD	250 MTH	100%	0	0.0	0	8 8.0	2,000	12 12.0	3,134	12 12.0	3,291	32 32.0	8,425
SUBTOTAL:				0.0	0	114.0	35,505	132.0	42,228	132.0	44,339	378.0	122,072
	92 93/94												
FRINGE BENEFITS FIELD STAFF	0.299 0.369				0		10,616		15,581		16,360		42,556
SUBTOTAL FIELD SUPPORT STAFF:					0		46,121		57,808		60,699		164,629	153%

FIELD OFFICE OPERATING EXPENSES												
OFFICE & STUDIO RENT/UTIL (LA PAZ, COCHABAMBA, SANTA CRUZ)	2,400 MTH	2	4,800	12	28,800	12	28,800	11	26,400	37	88,800	
OFFICE MAINT & REPAIR	50 MTH	3	150	12	600	12	600	9	450	36	1,800	
STUDIO/COMPUTER MAINT & REPAIR	541 MTH	0	0	6	3,247	12	6,494	12	6,494	30	16,235	
COMMUNICATIONS	1,300 MTH	3	3,900	12	15,600	12	15,600	12	15,600	39	50,700	
COPYING/PRINTING	450 MTH	3	1,350	12	5,400	12	5,400	12	5,400	39	17,550	
POSTAGE/COURIER	200 MTH	3	600	12	2,400	12	2,400	12	2,400	39	7,800	
SHIPPING/FREIGHT	200 MTH	3	600	12	2,400	12	2,400	12	2,400	39	7,800	
SHIPPING/FREIGHT-END OF PROJECT	5,000 ALL	0	0	0	0	0	0	1	5,000	1	5,000	
VEHICLE GAS/MAINT/INSURANCE	250 MTH/AUTO	0	0	6	1,500	8	2,000	24	6,000	38	9,500	
MEETING EXPENSES	155 MTH	4	620	12	1,860	12	1,860	12	1,860	40	6,200	
RECORDING TAPE SUPPLIES	19 UNIT	0	0	400	7,600	0	0	300	5,700	700	13,300	
CASSETTE TAPE SUPPLIES	1 UNIT	2000	2,000	8000	8,000	3000	3,000	5000	5,000	18000	18,000	
OFFICE SUPPLIES	500 MTH	3	1,500	12	6,000	12	6,000	12	6,000	39	19,500	
COMPUTER SUPPLIES	250 MTH	3	750	12	3,000	12	3,000	12	3,000	39	9,750	
SUBTOTAL OPERATING EXPENSES:			16,270		86,407		77,554		91,704		271,935	109%

OTHER EXPENSES												
VIDEO PRODUCTION	10,000 UNIT	0	0	0	0	1	10,000	1	10,000	2	20,000	
MEDIA PROMOTION	2,000 ACTIVITY	0	0	1.0	2,000	4	8,000	6	12,000	11	22,000	
OFF & STUDIO INSTALATION	5,000 UNIT	1	5,000	0	0	0	0	1	5,000	2	10,000	
RADIO TRANSMISSION - HEALTH	711 GRADE	0	0	4	2,844	28	20,903	42	32,923	74	56,670	
RADIO TRANSMISSION - MATH	631 GRADE	0	0	56	35,336	116	76,856	130	90,438	302	202,630	
PRINT TCHR GUIDES - HEALTH	6,000 GRADE	0	0	0	0	2	12,000	3	18,000	5	30,000	
PRINT TCHR GUIDES - MATH	13,000 GRADE	0	0	4	52,000	0	0	5.0	65,000	9	117,000	

92

PRINT TCHR NOTEBOOKS	5,000 YEAR	0	0	0	0	0	0	1.0	5,000	1	5,000		
RADIO PACKAGES	4,000 TOTAL	0	0	0.75	3,000	0.25	1,000	0	0	1	4,000		
SUPERVISOR PACKAGES	2,000 TOTAL	0	0	0.25	500	0.75	1,500	0	0	1	2,000		
RESOURCE MATERIAL/MEMBERSHIPS	1,000 YR	0	0	1.0	1,000	1.0	1,000	1	1,000	3	3,000		
SEMINARS/TRAINING	4,000 WKSHP	0.0	0	1.0	4,000	3	12,000	4	16,000	8	32,000		
LAC CONFERENCE	40,000 CONF	0	0	0	0	1	40,000	0	0	1	40,000		
BOLIVIAN CONFERENCE ON SCHL BASED HLTH ED INTERVENTIONS	10,000 CONF	0	0	0	0	1	10,000	0	0	1	10,000		
SUBTOTAL OTHER EXPENSES:			5,000		100,680		193,259		255,361		554,300	130%	
TOTAL OTHER DIRECT COSTS:			22,543		238,027		334,592		412,046		1,007,207	125%	
TOTAL COSTS - ALL PROJECT (BY YEAR)			79,434		1,176,453		1,336,370		1,575,672		4,167,928	100%	
TOTAL COSTS - CUMMULATIVE			79,434		1,255,886		2,592,256		4,167,928		(71)	-0%	

'93'