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RADIO SCHOOLS, MEXICAN STUDIES AND THE ALER PROPOSAL

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LARO-IS

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INTRODUCTION

Has anyone in Mexico conducted a study on "radio-schools" so similar to the one proposed by ALER that this latter may be deemed duplicative?

A total of 17 pertinent Mexican studies were identified by IDRC/LARO-IS and are listed at the end of this paper. Only one of them was found to fit the strict definition of Radio Schools utilized* and to be of a scientific nature**. This is a most recent study of Juan Braun on the Huayacocotla Radio Schools, which is still at the stage of unpublished draft (3). Nothing in this study bears any resemblance to what ALER wishes to do: a non-evaluative systemic survey to inventory the orientation, structure and functions of all Radio School institutions of Latin America, so as to help their organizational improvement. The rest of the Mexican studies include some non-scientific writings*** on the same Huayacocotla Radio Schools

* A multimedia communication strategy for non-formal distance education that consists of, in essence, a stable group of persons of different ages and either sex, who meet, regularly, frequently, and voluntarily, to listen to and analyze, with the guidance of trained auxiliaries, over the air radio transmission expressly prepared for them in one or more central production nucleus.

** Scientific literature on Radiophonic Schools is that produced by research, characterized by the systematic search for knowledge on the Radiophonic Schools based on the use of methods and instruments of observation, measurement, and analysis of a specific object, appropriate for the obtainment of results that, in addition to being empirically verifiable, are repeatable, generalizable and accumulative. In the following text this literature is sometimes referred to simply as scientific or research.

*** Non-scientific writings on Radiophonic Schools are those which obtained knowledge by means of procedures different from those that characterize the use of the scientific method. In the following text this literature is referred to simply as organic or non-scientific literature.

and some scientific studies on educational radio formats other than the Radio Schools, such as the very important Tarahumara evaluation of Sylvia Schmelkes de Sotelo (12) and the Peter Spain (16) study on the use of radio for primary school level training in the State of San Luis Potosí. Interesting as the former seem to be and valuable as the latter are, neither pertains to the basic territory of the Radio Schools, some are eminently evaluative, and none matches the ALER purposes. This is shown in the detail below.

SUMMARY REVIEW

The only Radiophonic Schools in Mexico, about which there is literature available, be it scientific or not, that fits with the strict definition of Radiophonic Schools, are those of the Huayacocotla. Four pieces of literature were identified about them: three in the category of non-scientific literature and one in that of scientific research. Their references are summarized below. Also included in this review are some important pieces of research on educational radio that do not fit with the strict definition of Radiophonic Schools but warrant

attention given the fact that the doubts on the duplicative nature of the ALER study were raised specifically in regard to Mexico.

Huayacocotla Radiophonic Schools / Research and Organic Literature

Three pieces of organic literature were identified that address the Huayacocotla schools:

SISTEMA EDUCATIVO RADIOFONICO DE MEXICO A.C.-
Escuelas Radiofónicas de Huayacocotla. Revista del
Centro de Estudios Educativos (Mexico) 2 (1): 95-100.
1972.

This article describes the legal and administrative structure of SER -The Radio Schools of Huayacocotla-, their policies and objectives, coverage and programs. In addition, it provides information on the grassroots organizations of the schools, selection and training of auxiliars and financial support. A brief descriptive evaluation of the achievements of the SER since their initiation in 1964 is included.

MEZA CASAS, Rosa María. Informe del Sistema Educativo Radiofónico de Mexico, A.C. - Escuelas de Radio Huayacocotla. In Seminario de Directores de Escuelas Radiofónicas de América Latina, 20/Sutatenza, Colombia; 18-23 Sept. 1972. v. 1, pp. 151-165.

This article describes the SER, created in 1964 to serve the social development needs of rural communities in Mexico. It focuses on three ethnic groups of the states of Veracruz, Puebla, Hidalgo and Querétaro. At the time of the report, educational radio programs included 80 centers with 2000 pupils, 13 to 16 years old. Program contents were literacy, agricultural training, economics, health education, housing, community organization and recreation. Field work was ensured by supervisors training in annual courses. Some difficulties had been detected dealing with migration of agricultural workers, diversity of dialects, and lack of transportation.

RIVERA VASQUEZ, Bertha. Educación Popular en la Sierra de Huayacocotla. Tesis. Mexico, D.F., Tesis Impresiones Vega, 1973. 114 p.-

This thesis treats the phenomena of "popular" education in the Huayacocotla region from an anthropological perspective. It contains a short section on the Huayacocotla Radiophonic Schools with information similar to that in the two references above. In addition, it includes examples of scripts from the radio courses.

Only one scientific research piece on the Huayacocotla schools was identified:

BRAUN, Juan Ricardo. Las Radio-Escuelas de Huayacocotla, Mexico y la Participación Campesina, s.l., 1977 (primer borrador).-

This study purports to examine the relationship between adoption of innovations and participation in Radiophonic Schools. A random sample of 20% of

heads of households was taken and a questionnaire applied, in addition to 35 non-structured interviews with community leaders. The data was analyzed using percentages and simple correlations of Pearson. It concludes: that participation in the Radiophonic Schools was positively related to adoption of innovations, that the adoption of innovations tends to vary with age sex and level of education; that participation in Radiophonic Schools varies with demographic, economic and communication levels. This unpublished study is affected by some serious limitations in regard to sample size and representability, thereby restricting the generalizability of the findings.

Additional Literature on Educational Radio in Mexico

As explained above, the only RADIOPHONIC SCHOOL, about which literature is available, scientific or not, that fits the definition of RADIOPHONIC SCHOOL employed in this literature review were those of the Huayacocotla. However, there are a number of other significant experiences in the use of educational radio (or television) in Mexico, which are the subject of scientific literature. The first of these are the Tarahumara Radio Schools.

The Tarahumara Radio Schools commenced in 1955. Although inspired by the ACPO (Colombia) model, they do not fit with the definition of RADIOPHONIC SCHOOLS as they are concerned solely with formal primary school education, and

in some cases they operate with a boarding school type system for the Indian students. In 1970, after 15 years of operation, the Tarahumara schools directors came to the conclusion that an evaluation of their objectives, activities and results was imperative. For this purpose they contacted the Center of Educational Studies in Mexico City. The CEE conducted this evaluation in 1971, under the coordination of Sylvia Schmelkes de Sotelo. The results of the evaluation have appeared in various forms, in different publications, in addition to other works which attempt to translate the findings of the study into plans and projects to restructure the Tarahumara Radio Schools.

SCHMELKES DE SOTELO, Sylvia. Investigaciones sobre las Escuelas Radiofónicas de Tarahumara (Mexico). Revista del Centro de Estudios Educativos (Mexico) 1 (3): 125-131. 1971.-

This is the first reference to the study. It is a preliminary report of the background, justification, objectives and design of the study.

LLAGUNO, J.A. Informe sobre las Escuelas Radiofónicas de la Tarahumara. Mexico, Escuelas Radiofónicas de la Tarahumara. In Seminario de Directores de Escuelas Radiofónicas de América Latina, 26/Sutatenza, Colombia; 18-23 Sept. 1972. v.1.pp. 167-187.-

In 1972, P. José A. Llaguno, Director of the Tarahumara Schools presented this report to the II Seminario de Directores de Escuelas Radiofónicas en América Latina in which, in addition to reporting on past and present activities of the Tarahumara schools, he presented a summary of the findings of the Schmelkes study and described the projected changes in the orientation of the schools on the basis of the results of this.

Several versions of the complete CEE (Schmelkes) study, in both Spanish and English have since appeared in different publications:

SCHMELKES DE SOTÉLO, Sylvia. Estudio de Evaluación aproximativa de las escuelas radiofónicas de la Tarahumara, Mexico. Revista del Centro de Estudios Educativos (Mexico) 2(2): 11-36. -

_____. The radio schools of the Tarahumara, Mexico; an evaluation. Washington, D.C., Academy for Educational Development. Information Center on Instructional Technology, 1973. 66 p. -

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_____. Las Escuelas Radiofónicas de la Tarahumara y sus posibles Reformas. In Fundación Friedrich Ebert, Mexico, D.F. Educación y medios de comunicación masiva. Mexico, D.F., Fundación Friedrich Ebert, 1973. 29 p.

This study evaluates the efforts of the Jesuit missionaries in the Tarahumara region to reach the widely dispersed Indian children and provide them with an early education that would encourage them to enroll in conventional schools after the fourth grade. It reveals that the radio schools have been most useful to those who were not disadvantaged, and provides information on the relative utility of formal schooling. It concludes that the actions of the radio schools make integration of the rural Indians into the national culture and economy even more difficult. The evaluation consists of a complex research design, including a random sample of students, interviews with directors and teachers of the schools and parents of the students, and achievement tests for students, combined with detailed socio-economic information on families and the area. Suggestion for a drastic reform of the schools is presented by CEE after the indepth analysis of their effects.

As part of the drastic reforms recommended by the CEE study, the CEE organized a meeting in 1972 in order to study the application of the methods of Freire to the Tarahumara Schools.

SCHMELKES DE SOTELO, Sylvia. Seminario sobre Freire y su adaptación al proyecto de Tarahumara. Revista del Centro de Estudios Educativos (Mexico) 2 (1): 95-100. 1972.-

The objectives of this seminar were to identify new methods for selecting and training future teachers. For this purpose teachers were brought together to learn about the methods of Freire, examine examples of the application of these and come

to conclusions regarding their adaption to the Tarahumara schools.

In addition to the Tarahumara evaluation, three other significant studies are available that have been carried out in Mexico on the educational use of radio (or television).

HERNANDEZ LOPEZ, Ramón. *Sistemas de las Escuelas Radiofónicas de la Mixteca Alta Oaxaquena*. In *Fundación Friedrich Ebert. Educación y Medios de comunicación masiva*. Mexico, D.F., 1973.-

This is a description of a controlled experience for the utilization of radio for in-school primary education in combination with teachers in the Mixteca Alta Oaxaquena region. The experience proved to be both beneficial for the dispersed Indian population of the region and efficient in terms of media use.

SPAIN, Peter L. *A report on the system of radioprimeria in the State of San Luis Potosí, Mexico*. Washington, D.C. Academy for Educational Development. Information Center on Instructional Technology, 1973. 127 p. (AID Studies in Educational Technology).-

_____. _____. Stanford, Cal., Stanford University. Institute for Communication Research, 1973. 136 p.-

This is a study of Radioprimeria in Mexico. Radioprimeria began in the fall of 1970. It is a system by which classes are brought via radio to fourth, fifth and sixth grades to make up for the lack of teachers in these grades in the rural areas. The

study found a lack of supervision in the radioprimaria project, demonstrated by the fact that less than half the schools had an audible, functioning radio on the day they were visited. The study concludes, that even though the project was largely unsupervised and plagued with disorganization and equipment problems, children taught with radio did as well as children in the traditional classes, as measured by achievement scores. Yet a negative attitude toward rural life and rural education tended to cancel out any benefits from the system. Teachers and students alike were found to see education as a means of moving to urban areas where little opportunity existed for employment.

MAYO, John K., McANANY, Emile G. and KLEES, Steven J. The Mexican telesecundaria; a cost-effectiveness analysis. Washington, D.C., Academy for Educational Development, Information Center on Instructional Technology, 1973. 152 p.-

The telesecundaria system uses television to provide secondary school (grades 7-9) to students who, because of their distance from regular schools and other factors, would normally not be able to continue their education beyond primary level. The objectives of the study were to: (1) Evaluate the telesecundaria system and particularly its cost-effectiveness; (2) to suggest possible strategies for its improvement; (3) to make Mexico's experience with telesecundaria available to other nations who are also anxious to use television and other technologies to expand educational opportunity. The report includes: A description of the telesecundaria system; the methodology of the study; the input characteristics of the system -overall performance of telesecundaria students in comparison with regular secondary school students, and the student learning and attitudes as output of the two system-, related to inputs. General conclusions of the highly effective nature of telesecundaria for expanding educational opportunity are presented along

with suggestions for possible alternative for the use of television in Mexico.

Non-available Literature on Educational Radio in Mexico

ALVAREZ BALBOS Y ARENA, Elia. Estudio Preliminar de la estructura dinámica y tecnológica de SER de México. México, D.F. Julio 1968.-

ARANA DE SWADESH, F. Informe sobre la influencia que la radio ejerce en una comunidad indígena: Xoxcotla, Morelos. México, D.F., Friedrich Ebert Foundation Seminar on Rural Radio, December 1971. (mimeo.).-

LOZANO JIMENEZ, Blanca et al. Experimentación de la cartilla de alfabetización radiofónica para adultos. México D.F., Instituto Nacional de Pedagogía, 1976.-

NOGUEZ R., Antonio. Memorias de las Escuelas Radiofónicas de Chilpacingo. México, D.F., 1968. 17 p.-

ZULOAGA, Alberto. Audience reactions to a rural instruction in Central Mexico. M.S. Dissertation. Madison, University of Wisconsin, 1972.-

Of the non-available literature, Arana, Lozano and Zuloaga do not appear to address RADIOPHONIC SCHOOLS.

Alvarez seems to be a preliminary study of the Huayacocotla.

Noguez is perhaps the only study, although on a descriptive level, that touches on RADIOPHONIC SCHOOLS, but in no

way does it seem to duplicate any aspect of the ALER proposal.

CONCLUSIONS

1. In general, important research has been carried out on Radiophonic Schools and other forms of educational radio in Mexico.
2. The Huayacocotla descriptions and study are valuable as individual case studies on Radiophonic Schools.
3. The CEE study by Schmelkes of the Tarahumara is a highly complex, critical evaluation of the output of a system in relation to its stated goals in addition to an institutional description. However, it does not concern a Radiophonic School but rather the use of radio for primary school education.
4. Likewise, the Hernandez and Spain studies on "radioprimeria" projects and the Mayo, McAnany and Klees cost-effectiveness analysis of telesecundaria are all in depth evaluations of instructional use of media in formal schooling contexts rather than studies of Radiophonic Schools.

Thus, in summary, there have been no studies carried out by Mexican researchers, or in Mexico, that in any way duplicate the ALER proposal.

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