THE DEVELOPMENT OF A BILINGUAL PROGRAM IN PUBLIC SCHOOLS IS A PUBLIC PRIVILEGE AND RESPONSIBILITY. THE LANGUAGE TEACHERS, SPECIALISTS, AND ADMINISTRATORS HAVE THE INITIAL RESPONSIBILITY, WITH THE SCHOOL BOARD BEING FULLY ACCOUNTABLE TO THE GENERAL PUBLIC. THE FIRST STEP IN THE PROGRAM'S DEVELOPMENT SHOULD BE THAT OF STATING GENERAL OBJECTIVES, OF WHICH THERE SHOULD BE THREE—SKILL IN TWO TONGUES, SATISFACTORY LEARNING IN ALL SUBJECTS, AND PERSONAL DEVELOPMENT. STUDENTS OF DIFFERENT LANGUAGE BACKGROUNDS SHOULD BE INTEGRATED FOR BEST RESULTS WITH BILINGUAL PROGRAMS. A SELECTED BIBLIOGRAPHY IS INCLUDED, AS WELL AS A LIST OF MATERIALS WHICH ARE IN USE OR UNDER CONSIDERATION IN THE BILINGUAL PROGRAM IN LAREDO, TEXAS. THIS PAPER WAS DELIVERED AT THE ANNUAL CONFERENCE OF THE SOUTHWEST COUNCIL OF FOREIGN LANGUAGE TEACHERS, EL PASO, TEXAS, NOVEMBER 4-5, 1966. (ES)
METHODS AND MATERIALS

Theodore Andrissing, Chairman
University of Texas
Austin, Texas

Jack Dabbs
Texas A & M College
College Station, Texas

Chester C. Christian, Jr.
University of Texas
Austin, Texas

Victor Cruz-Aedo
United Consolidated Public Schools
Laredo, Texas

Joseph Michel
University of Texas
Austin, Texas
**Bilingualism: Programs, Methods and Materials**

**SUMMARY OF REPORT**

This report comprises two statements on the development of a bilingual program in public schools: “Suggested Objectives for a Bilingual Program,” by Chester C. Christian, Jr., and “Tentative Guidelines for a Bilingual Curriculum,” by Dr. Joseph Michel; one materials list contributed by Victor Cruz-Aedo; and a bibliography on bilingualism prepared by Dr. Jack A. Dabbs.

In the introduction of the Christian report it is made clear that effecting the bilingual school program is a public privilege and responsibility. It should be clearly defined for school boards and superintendents, who will have final responsibility in implementing it. Finally, a judicious, well-defined set of objectives is in order in view of newer concepts in language learning in the mid-twentieth century.

Fifteen objectives, or guidelines, follow: (1) There is the need for defining and understanding language as a set of spoken and written symbols of communication. (2) Language must be recognized as a cultural medium. (3) Language, as a mother tongue, is an obvious vehicle for human relations and for learning various subjects. (4) There must be awareness of the relationship of the mother tongue to the learning of second languages. (5) Language has both personal and intercultural values, and its development is to the national interest. (6) There should be promoted the idea that a child at age six already has authentic knowledge of his own idiom and is ready to learn a second. (7) We must recognize language as a medium for learning other subjects. (8) We must launch a bilingual program of progressive, psychologically sound steps in order to advance the above objective. (9) Upon reaching grade six, students of both language backgrounds should be able to function in all subjects of the curriculum. (10) At the end of grade twelve, English-speaking students should have reached Level VI of the second language. (11) By the end of grade six, non-English-speaking students should be able to function in both tongues with equal ease. (12) Pride in the mother tongue and its culture is essential. (13) There must be launched a “pilot” bilingual program to be compared eventually with the traditional monolingual program. (14) The above must be judged objectively. (15) Experimental conclusions must be made available.

At the outset of “Tentative Guidelines for a Bilingual Curriculum,” Dr. Michel states the great need for recognition of bilingual communities, where such a program can cope with and utilize a culture so unlike the Anglo-Saxon. He then advances three general objectives of bilingualism: skill in two tongues, satisfactory learning in all subjects, and personal development.

Bilingual skill should be developed by taking the mother tongue first and then advancing to the second language. Both the mother language and the second language should be used as media of instruction, bringing about an efficacious double-exposure to subject matter.
Personal adjustment becomes a reality when the non-English-speaking student finds that his mother tongue is used and respected in the school.

Dr. Michel then broaches the subject of the need for integrating students of different language backgrounds, suggesting three scheduling plans: I. Employing Spanish half of the day, English the other half. II. Gradually mixing the English language students with the Spanish, as in the case in a nearly monolingual group in Miami. III. In a school of one hundred per cent Spanish student population, one moves progressively from one-fourth Spanish — three-fourths English to the reverse proportion.

Next, the application of the two languages in various subject areas is analyzed.

**English Languages Arts and Foreign Languages:** One should move progressively from the mother tongue to the second, which can be “insinuated” (French sense of the word) through the media of pleasurable experiences, as games and music, and finally employed as an actual reading and writing vehicle.

**Social Studies, Health, and Safety:** Same progressive and eventual presentation of cultural values and intercultural understanding through the two idioms.

**Arithmetic and Science:** With competent bilingual teachers, this culture-free area can be presented effectively in both idioms.

**The Arts and Physical Education:** The very actions involved in these areas make for rapid second-language learning.

Success in all of the above four areas depends, of course, on the availability of competent bilingual teachers.

When the time comes for the evaluation of such a program, objectives well-defined in advance must be re-examined objectively. Especially competent teachers must have participated in the program. Significant evaluation results must be widely disseminated.

Dr. Michel concludes that such a program can be effected without changing the basic curriculum (though some flexibility is desirable). The desired result is the development of a “coordinate bilingual” who fits easily into the American scene.

The preliminary list of materials prepared by Victor Cruz-Aedo of the Laredo schools comprises language and other subject textbooks (written in Spanish, as a Spanish arithmetic) now in use, teachers' manuals, books for potential future use, testing material, songs and stories of the well-known Cri-Cri series, and the usual visual aids.

Dr. Dabbs' bibliography gives us a summary of a number of significant books on bilingualism over the entire world and embracing more than the mere Spanish-English problem. Of particular interest are those articles and books which seek to show the role of bilingualism in cultural development, in the growth of intelligence itself, and the use of the learner's mother tongue in beginning formal education.
A Selected Bibliography on Bilingualism

JACK A. DARSIB

The following list includes only the most significant items with respect to the thoroughness of treatment or those which illustrate new steps in the development of studies on the subject. After the usual bibliographical data are comments which indicate the reason for inclusion in this list. In order to show development of the studies, the items are listed by the year of publication.

1. PINTNER, R., & KELLER, R. Intelligence tests of foreign children. *J. Educ. Psych.*, 1922, 13, pp. 214-222. Concluded monolinguals lower on Stanford-Binet; socio-economic factors were not considered; bilingualism not well defined.


4. WANG, S. L. A demonstration of the language difficulty involved in comparing racial groups by means of verbal intelligence tests. *J. Appl. Psych.*, 1926, 10, pp. 102-106. Showed monolingual American groups superior, but had no controls for age or socio-economic class.


7. RIGG, M. Some further data on the language handicap. *J. Educ. Psych.*, 1928, 19, pp. 252-257. Showed monolingual American groups superior, but had no controls for age or socio-economic class.

8. PINTNER, R. The influence of language background on intelligence tests. *J. Soc. Psych.*, 1932, 3, pp. 235-240. Tested 3 bilingual groups and 3 monolingual groups in NYC. One group showed monolinguals superior; one showed no difference; one showed monolinguals inferior. Bilingualism was determined by family name!

was not well defined. Concluded no reliable differences.


12. SPOERL, DOROTHY T. The academic and verbal adjustment of college-age bilingual students. *J. Genet. Psych.*, 1944, 64, pp. 139-157. Tested bilingual freshmen in a college matched for sex, age, intelligence, and social class. No significant differences were found; but within the same IQ group the bilinguals did better in school work.

13. DARCY, NATALIE T. The effect of bilingualism upon the measurement of the intelligence of children of preschool age. *J. Educ. Psych.*, 1946, 37, pp. 21-44. Tested U. S. preschool children (Italian parentage); matched age, sex, social class. Monolinguals scored higher on Stanford-Binet, lower on Atkins test. Children were very young (2-6).


15. JONES, W. R., & STEWART, W. A. Bilingualism and verbal intelligence. *Brit. J. Psych.*, 1951, 4, pp. 3-8. Tested children in Wales; found bilinguals inferior; tests were translated into Welsh, but not converted to Welsh cultural milieu.


18. WEINREICH, URIEL. *Language in contact: Findings and problems*. Publications of the Linguistic Circle of New York, 1953, No. 1. Reprinted Mouton (The Hague), 1964, pp. 148. Has an almost complete bibliography of bilingual studies (658 items, but not all deal with bilingualism) as of the date of printing. Studies the problems from all angles. Perhaps the most important work on the subject to its date.

19. JOHNSON, G. B. Bilingualism as measured by a reaction-time


22. HAUGEN, EINAR. Bilingualism in the Americas: A bibliography and research guide. Publication of the American Dialect Society, No. 26, Nov., 1956. Bibliography pp. 123-156, lists about 700 references, not all directly pertinent. After the description of existing situation, studies the mechanics of language contact and examines the bilingual individual, the bilingual community, and contemporary research. As a textbook most valuable work to date.


30. Modern Language Journal, March, 1965. Contains articles by Theodore Andersson, Joshua A. Fishman, A. Bruce Gaarder, et al. Issue was devoted primarily to articles on bilingualism, as a goal to be fostered. Together with work by Weinreich and Haugen these three constitute a basic working library for further studies.


Suggested Objectives for a Bilingual Program

CHESTER C. CHRISTIAN, JR.

Education in our country is a public responsibility. Educators are accountable to the public and our classes are open to citizens, who can easily get permission to visit them. And every taxpayer has the right to understand all aspects of the education which he is helping to support.

Initial responsibility for language education belongs with language teachers and specialists. They must be prepared to justify their planned program to the school administrators, who are in turn responsible to the school board. It is the school board which in the last analysis is answerable to the public for local educational policy and practice.

Bilingual education was common in our country between about 1840 and World War I and is an accepted practice in many parts of the world today. But in our mid-twentieth-century thinking about education it represents a new concept. We must therefore rethink both our theory and our practice to be sure that they fit our present and future requirements. And as we launch new bilingual programs, we must proceed cautiously and in an experimental spirit, for we are yet far from knowing everything that we need to know in order to plan and carry out a sound and effective bilingual program.

The first step is to state the objectives of such a program. Primary responsibility for stating the objectives and for accomplishing them rests on the language teachers; but, since they cannot succeed without help, the school system as a whole must share the responsibility.

SUGGESTED OBJECTIVES

1. To understand and explain the nature of language as a learned and shared system of arbitrary vocal or written symbols with which people communicate.

2. To understand and explain the role of language to express and reflect culture, that is, the thoughts, feelings, behavior, and values of a group of people living together.

3. To understand and explain the nature of the mother tongue as an essential instrument for expressing one's personality, relating to one's family and cultural group, and learning about the world outside.

4. To understand and explain the relation of the mother tongue to a second language (spoken as a mother tongue by others in the community) and to foreign languages (spoken natively by foreigners and studied as a subject in school).

5. To understand and explain the contributions of language learning to personal development, to intercultural understanding, and to the national interest.

6. To understand and explain the normal process of language learning:
for example, that a child of six has already learned to understand and speak authentically his mother tongue; that he is ready to learn to read and write his mother tongue; and that he is ready to learn to understand and speak a second language.

7. To understand and explain the difference between studying a second language as a subject and using it as a medium of teaching and learning.

8. To incorporate these understandings into a well integrated bilingual program in which the mother tongue and the second language are taught in psychologically proper order and relation and with steady progression.

9. To enable English-speaking and non-English speaking pupils to progress without grade retention and by the end of grade six to reach grade-level achievement in all subjects of the curriculum.

10. To enable English-speaking pupils to achieve a minimum all-round proficiency in the second language as follows: at the end of grade six, Level I on the Brooks scale; at the end of grade eight, level II, at the end of grade nine, level III; at the end of grade ten, level IV; at the end of grade eleven, level V and at the end of grade twelve, level VI.

11. To enable non-English-speaking pupils by the end of grade six to achieve an all-round proficiency in their mother tongue such as will permit them to pursue their studies with approximately equal ease in their mother tongue and in their second language.

12. To cultivate in all pupils a pride in their mother tongue and in the culture it represents and an understanding of the culture represented by the second language.

13. To design carefully an experimental pilot program in such a way as to compare the educational results of such a bilingual program with those of a similar monolingual program.

14. To provide for objective evaluation, preferably by outside personnel, of this pilot experiment.

15. To disseminate significant conclusions resulting from the experiment.
Preliminary List of Materials

Víctor Cruz-Aedo

The following materials are either in use or under consideration in the bilingual program in the primary grades of the Nye Elementary School of the United Consolidated Independent School District of Laredo. Most of the materials in use have been obtained from Mexico.

I. BOOKS IN USE

Lechuga, *Aritmética de Primero*
Hernández, Ruiz, *Aritmética de Primero*

II. BOOKS FOR TEACHERS

Velasquez, *Spanish-English Dictionary*

III. BOOKS UNDER CONSIDERATION

*Amigos de Aquí y de Allá*, Dallas, Texas: Laidlaw Brothers, Inc., 1962.
*Por Esos Caminos*, Dallas, Texas: Laidlaw Brothers, Inc., 1963.
*Una Mirada al Pasado*, Dallas, Texas: Laidlaw Brothers, Inc., 1965.

The following list was prepared by the English Section, Curriculum
Division, Department of Education, of the Commonwealth of Puerto Rico, San Juan, Puerto Rico.

- *La Ciencia en Nuestra Vida*, Ginn and Co., 1957

IV. TESTING MATERIAL

Lee Clark Reading Readiness Test, 1962 Revision.
Science Research Associates, Inc., *Primary Mental Agility*
- *General Ability* K-2, 2-4, 4-6, K-12 (and with Spanish instructions).
- *Achievement* 1-2, 2-4, 4-6 (and with Spanish instructions).


V. TEMAS MUSICALES, CUENTOS Y CANCIONES (CINTAS)

* Cuento
** Canto

Parte 1: Tema Musical de Cri Cri
  - Un Grillito Convertido en Señor *
  - Di Porqué **
  - Desacuerdo de Cri Cri *
  - Che Araña **
  - Arte de Reír *
  - Negrito Bailarín *

Parte 2: Tema de Cri Cri (Polka)
  - Encuentro con un Publicista *
  - Lunada **
  - Los Negocios Imposibles *
  - El Teléfono **
  - Triste Fin de una Promoción *
  - Bombom 1 **

Parte 3: Tema de Cri Cri (Cigaresca)
  - Tratado de Lluvia *
  - Llueve **
  - ¿Quién dijo Aburrirse? *
  - Jota de la “J” **
  - Una Damita Difícil *
  - Tele **

Parte 4: Tema Musical (Los 4 Invencibles)
  - Cuatro Barbajones en Acción *
Campanitas **
Aventura Chinesca Interrumpida *
La Mariposa **
Cri Cri, Poeta Fracasado *
Casamiento de los Paloyos **

Parte 5: Tema de Cri Cri (Vals)
Modo de Flotar en el Agua *
Marina **
Un Mundo Submarino *
Valor de la Fantasía *
Marcha de las Letras **

Parte 6: Tema de Cri Cri (Blues)
Una Familia Metódica *
El Ropavejero **
Más Equívocaciones de Cri Cri *
Rusiana **
Final Inesperado *
Las Brujas **

Parte 7: Tema de Cri Cri (Capricho Telegraphico)
Casa de Millones *
Cucurumbé **
Los Ensueños de Cri Cri *
El Jicote Aguamielero **
Mexicanismos y Preocupaciones *
Gato de Barrio **

Parte 8: Tema de Cri Cri (Tango)
Soñados en Gira *
Fiesta de Zapatos **
Tratado del Ruido *
La Patita **
Reciedumbre del Sexo Débil *
Cochinitos Dormilones **

Parte 9: Tema de los Cuatro Invencibles (Variación)
Más Barrabasadas de los Cuatro Invencibles *
El Ratón Vaquero **
Conmoción en el País de los Cuentos *
La Merienda **
Expulsión Musical de Ingratos *
La Maquinita **

Parte 10: Tema de “La Cacería”
Cazadores Antipáticos *
El Venadito **
Cri Cri Busca un Empleo *
Mi Burrita **
Editores Inaccesibles *
El Soldadito Cojo **

Parte 11: Tema de Cri Cri
Estupenda Quietud del Bosque *
¿Cómo te Va? **
Cri Cri Se Complica la Vida *
El Comal y la Olla **
Parte 12:
Tema Cri Cri (Galop)
Un Viaje de Cri Cri *
La Muñeca Pea **
Otro País Que No Está en los Altos *
Vals del Trompo (pieza de orquesta)
Inconveniencias de Ser Callado *
Negrito Sandía **

Parte 13:
Tema de Cri Cri (Vals en re)
Náutica Ínfima *
El Marinero **
¡Conozca Usted el Mundo! *
Papá Elefante **
Atleta Oficinista de Récord Único *
Jorobita **

Parte 14:
Tema de Cri Cri (Arrullo del Río)
Mananitas Mojadas *
El Chorrito *
Gustos de Cri Cri *
Baile de Muñecos **
Más Confesiones Sentimentales *
El Fantasma **

Parte 15:
Tema de Cri Cri (Gallegadas)
Atardecer Campestre *
El Perrito **
Una Noche Desastrosa *
Vals del Rey **
El Chivo Ciclista **

Parte 16:
Tema de Cri Cri (Tropical)
Cri Cri, Físico *
El Carrusel **
Cri Cri, Botánico *
La Guacamaya **
Cri Cri, Zoológico *
Marcha de las Canicas **

Parte 17:
Tema de Cri Cri (Chiapanecas)
Un Documento Interesante *
Gallegada **
Consejos Difíciles de Seguir *
Caminito de la Escuela **
Final Trágico, Sin Tango *
Los Caballitos **

Parte 18:
Tema de Cri Cri (Marcha)
Receta de Felicidad *
El Ropero **
Geografía Ingenua *
Chong-Ki-Fú **
Atenta Despedida de un Servidor *
Tango Medroso **
Adiós (Poema) Saltarian en Sol Bemol
VI. VISUAL AIDS

Flash Cards (Used extensively)
Flannel Graph (Materials in most teaching areas)
Transparencies (In preparation)
Movies (Spanish dialogue on tape being prepared)
Globes
Aquarium
Live Animals
Tentative Guidelines for a Bilingual Curriculum

JOSEPH MICHEL

THE NEED FOR BILINGUAL PROGRAMS

The term "curriculum" is generally used to designate a total school program or course of study, with its aims, scheduling, content, procedures, and evaluation.

The curriculum of the American school, normally designed for monolingual children, fails to take fully into account the child in our bilingual communities whose language and culture are different from those of our English-speaking children.

The following tentative guidelines are suggested to assist those school systems which desire to meet the needs of these neglected children. Our guidelines are based on observation, personal experience, and theory; but the final validity of bilingual programs will need experimental verification.

OBJECTIVES OF A BILINGUAL PROGRAM

The objectives of a bilingual program, which are proposed in another section, may be summarized as follows: (1) skill in two languages, (2) satisfactory learning in all subject areas of the curriculum, and (3) personal adjustment.

BILINGUAL SKILLS

Since one of our purposes is as nearly as possible to form and educate balanced coordinated bilinguals — children capable of thinking and feeling in either of two languages independently — instruction should, we believe, be given in both languages, first in the mother tongue and then in the second language.

LANGUAGE AS SUBJECT AND AS MEDIUM OF INSTRUCTION

Traditionally, foreign languages and even English have been taught in our schools as subjects to be studied. Our proposal to use both the mother tongue and the second language as media of instruction also will, we believe, result in much more effective language learning. English-speaking children, seeing other children and a teacher actually communicating in a second language — and in the classroom — will realize as never before that this second language is a real live language and will be stimulated to try to understand what is being said and to take part in the communication. The non-English-speaking children in turn, seeing their language respected and finding that in their own language at least they can shine, will, if our theory is sound, be motivated to learn as they have never been before.
LEARNING IN ALL SUBJECT AREAS

Educators in many parts of the world agree that, to be most effective, formal schooling must be initiated in the child's mother tongue. Only in it can a child understand fully what others are saying and express himself freely. Experiences in many countries supporting this view are reported in the UNESCO Monograph on Fundamental Education No. 8, entitled The Use of Vernacular Languages in Education (Paris, 1953). When, as we suggest, all subjects are taught not only in the child's mother tongue but also in his second language, there is double exposure, which adds to the learning effectiveness.

PERSONAL ADJUSTMENT

Perhaps the most important objective of the bilingual program is to enable all children to operate comfortably in two cultures. The non-English-speaking child who is suddenly taken from his home and introduced into the strange environment of the school experiences embarrassment and confusion. But if he is greeted in his own language by a teacher who is obviously a member of his own language community and finds that his language is used freely in the classroom and throughout the school, his situation is made less traumatic. If, in addition, he finds that as a member of a non-English-speaking group he is not treated as a second-class human being, the boost to his self-esteem is likely to result in all sorts of psychological and social benefits which are summed up by the term "personal adjustment."

TWO LANGUAGE GROUPS: MIXED OR SEPARATE?

In any given school in this part of the country there may be monolinguals in English, monolinguals in Spanish, and bilinguals of various shades between. Since children learn not only from their teachers but also from one another, we urge that whenever possible they not be separated by language. Grouping within the classroom for efficient learning is, of course, not the same thing as separation and is recognized as standard procedure.

BASIC PLANS FOR SCHEDULING

There are a variety of plans used in bilingual programs. We shall offer for consideration three variant programs, any one of which would, if selected, need to be adapted to local conditions.
PLAN I

One plan, essentially that of the United Consolidated Public Schools of Laredo, where few if any children are completely monolingual, mixes English-speaking and Spanish-speaking children in the same class under the direction of a bilingual teacher. The school day is divided into two parts, one of which is used for instruction in English and the other for instruction in Spanish. A school system which can afford it or which has a Title I or Title III ESEA grant can use team teaching by having one English-speaking and one Spanish-speaking teacher for a single mixed class, each one to teach in his own language about half of the time.

PLAN II

Another plan, that of the bilingual school in Miami, is designed for a community in which children enter school as monolinguals or very nearly. Here the children are separated by language in grades one and two and are brought together in grades three and following. A team of two teachers, one American and one Cuban, work closely together and are responsible for correlating the instruction in two sections. Each teaches only in his native language but to both English-speaking and Spanish-speaking children. In addition the Miami program uses a teacher aide to assist the two teachers especially in the art, music, and physical education activities.

PLAN III

In schools in which one hundred percent of the pupils are Spanish-speaking it might be appropriate, in order to make the children feel at home, to begin by doing, say, three-quarters of the instruction in Spanish and one-quarter in English, then gradually to equalize instruction in the two languages, and finally — perhaps in grades five and six — to do about three-quarters of the teaching in English and one-quarter in Spanish.

COURSE CONTENT AND PROCEDURES

Here we would merely recommend the adaptation to the bilingual program of the best practices currently used in monolingual programs. The content of the elementary school program cannot vary greatly from state to state. As an example only we have used the graphic charts on pages 76 and 77 of the Texas Education Agency Bulletin Number 617, entitled Principles and Standards for Accrediting Elementary and Secondary Schools and Description of Approved Program Grades 1-6.
This chart shows graphically the minimum amount of time allotted to each of the areas in the elementary curriculum. Note the unscheduled block of time which permits flexibility in planning according to the needs of the local school.

INTERMEDIATE GRADES
MINIMUM: 30 HRS. PER WEEK

This chart shows graphically the minimum amount of time allotted to each of the areas in the elementary curriculum. Note the unscheduled block of time which permits flexibility in planning according to the needs of the local school.
ENGLISH LANGUAGE ARTS AND FOREIGN LANGUAGE

These together occupy nearly half of the school day. In the bilingual program this time would be divided between instruction in and through the mother tongue and instruction in and through the second language in a ratio which depends on local conditions. One would follow the usual procedure, first in the mother tongue and then in the second language, namely, that of extending the children's personal experiences by means of trips, pictures of all kinds, music, dance, games, books, activities, etc., all with a view to building reading readiness, leading in turn to reading and writing.

SOCIAL STUDIES, HEALTH AND SAFETY

The next biggest segment of the school day is occupied by Social Studies and Health and Safety considered together. Assuming the necessary language competence on the part of the teacher(s), we would recommend that the usual content of these areas be taught in both languages. The initial presentation would again be made in the children's mother tongue, to be reinforced by teaching in the second language. The teachers have, of course, an unusual opportunity in teaching social studies to present the two cultures in contact in such a way as to build mutual respect and understanding.

ARITHMETIC AND SCIENCE

In an experimental bilingual program in ten selected schools of the San Antonio Independent School District, Dr. Thomas D. Horn, of The University of Texas, has found that math and science concepts, being relatively culture free, have lent themselves particularly well to bilingual teaching, but once again success depends upon the language competence of the teacher(s).

ART, MUSIC, DANCE, AND PHYSICAL EDUCATION

These curricular areas, involving as they do action, are particularly appropriate for bilingual instruction provided the teacher has adequate language competence. The use of a bilingual teaching team would, of course, provide perfect conditions.

EVALUATION

Evaluation is essential in experimental or innovational programs as bilingual programs are still considered to be. We should like, for communities which are interested and can provide favorable conditions, to recommend the following points:
1) That they begin with a small pilot program.

2) That objectives be carefully defined in advance.

3) That the program be carefully designed as an experiment, that is, that bilingual instruction be compared with monolingual instruction, all other factors being kept constant.

4) That evaluative instruments and procedures be determined in advance and adhered to.

5) That a competent outsider be engaged to make an objective evaluation and to write a report.

6) That the results, if significant, be published and disseminated widely.

7) That highly competent and dedicated teachers be used.

TEACHERS AND MATERIALS

These have often been mentioned as the chief lacks of bilingual programs. The Committee on Teacher Recruitment and Preparation, the chairman of which is Professor Ray Past, of The University of Texas at El Paso, has prepared recommendations on the first of these, and Mr. Victor Cruz-Aedo of our Committee has prepared a report on the latter.

CONCLUSION

The guidelines presented here, though tentative, propose that schools in bilingual areas should give instruction in both the mother tongue and the second language of the children. The subjects of the curriculum remain the same but are adapted for the bilingual. As regards content, all courses, but particularly the social sciences and the language arts, should develop the bilinguality of the student by providing ample experience and language practice and varied cultural material and insight. The language goal is the creation of a balanced coordinate bilingual. A curriculum for the bilingual requires a teacher who is bilingually competent. It is imperative to have continuous experimentation in order to refine the guidelines here presented. In all cases flexibility is important. Finally, though one goal of the curriculum is a coordinate bilingual, it should be pointed out that he will live as a citizen of the United States.