Twelve different career education bilingual (Spanish-English) curriculum units were the results of a project designed to develop educational materials, for use in classrooms, which would simultaneously provide career information to the Spanish-speaking migrant student at the elementary level. Each curriculum unit, containing three booklets, was developed at different levels of student reading ability--Level A (nonreader), Level B (beginning reader) and Level C (advanced reader), for a total of 36 different books (modules). Each book was designed as a self-contained learning module comprised of a teacher manual, two student activities, and a set of criterion referenced tests. These materials were field tested using a national advisory panel, and 78 teachers and 1,488 students from seven states representing three major migrant streams--western, central, and eastern. The students were representative of the two main Spanish-speaking groups, Mexican-American and Puerto Rican. Results showed that the objectives of the project had been met and that the materials (1) are useful for interstate, intrastate, or settled out migrants, (2) are useful for non-migrant Spanish-speaking students, including those beyond the sixth grade, (3) can be infused by teachers into the traditional school curriculum, or by parents, resource teachers, and teacher aides in separate programs, i.e., summer school, (4) are useful over a wider geographical area due to their bilingual quality, and (5) have a demonstrable ability to help the student relate positively to his local school and home environment. (IA)
AN EXECUTIVE SUMMARY

A TECHNICAL REPORT

DEVELOPMENT OF CAREER AWARENESS MATERIALS FOR SPANISH-SPEAKING MIGRANT CHILDREN

GRADES K-C

By

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INTRODUCTION

The USOE funded contract, "Career Awareness Materials for Spanish-speaking Migrant Children, Grades K - 6", was awarded to Educational Factors, Inc., (EFI) of San Jose, California, in July 1974. The purpose of this project was to develop educational materials, for use in the classrooms, which simultaneously provided career information to the elementary student and also addressed itself to the specific requirements of a discrete section of the population defined as the Spanish-speaking migrant child.

Under this two-year contract, EFI has developed a series of twelve different career education bilingual curriculum units. Each curriculum unit contains three booklets (modules) developed at different levels of student reading ability: Level A--non-readers, Level B--beginning readers, and Level C--advanced readers, for a total of 36 different books (modules). Each book is a self-contained learning module comprised of a teacher's manual, two student activities, and a set of criterion referenced tests. All materials are developed in both English and Spanish languages on a simultaneous, page-by-page basis.

During the development of this material, EFI conducted field testing in seven states representing both the three major migrant streams; western, central and eastern, and the two main Spanish-speaking groups of students; Mexican-American, and Puerto Rican.
The field testing provided valuable input for the final design and, in addition, provided project staff with a rewarding insight into the great need and desirability for this type of material in the classrooms.

Background studies completed as part of the contract yielded a series of research reports which provided the basis for selecting criteria upon which material related to careers and migrants could be judged. Literature searches revealed influential factors affecting career decision by farm labors. Careers and occupations within career clusters were isolated, reflective of migrant lifestyle and potential employment.

Working from research and practical experience, a nationwide advisory committee developed a set of criteria which became the guidelines for developing the teacher/learner modules.

The EFI project staff and teachers from five states prepared a series of materials for field testing in June of 1974.

The materials developed were as follows:

Twelve different bilingual career education curriculum units. Each curriculum unit contains three (3) modules developed at different levels of student reading ability:

Level A - nonreader
Level B - beginning reader
Level C - advanced reader

Each module contains: a teacher edition; two (2) student activities; and, a set of criterion referenced tests.
Field testing occurred in seven states with 78 teachers working with 1489 students. An eighteen-item questionnaire (OMB # 51-75084) was utilized to solicit teacher evaluation of the materials. Teachers were asked to evaluate:

- General usability of the materials in the classroom. (Eight questions.)
  A uniformly positive response was generated by respondents. Format with Spanish/English parallel presentation and vocabulary was seen as excellent. Levels of language and infusion processes were rated good.

- Adequacy of the modules of exploration of the world of work. (Three questions.)
  Teachers saw the career concepts as realistic and well related to specific and recognizable occupations. Responses were at the 90% level or above.

- Format, layout, and illustration. (Seven questions.)
  Teachers validated the format with 92% or more of the responses in the good to excellent range.

The teacher questionnaire met the designated purpose in that the responses:
- validated initial project research findings;
- confirmed staff and advisory board perception of what students required to function effectively in the classroom setting;
- confirmed the value of organizing materials around student reading ability rather than age/grade level;
- confirmed the value of efforts to develop a Spanish/English structure useful in more than one geographical setting;
- reenforced other research suggesting that more guidance and placement for migrant children should take place at the teacher or school building level.  

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CONCLUSIONS

The objectives of the project have been met. Specifically, thirty-six (36) curriculum units have been developed to meet the needs of Spanish-speaking migrant children in the elementary school grades.

* The materials are equally useful for:
  
  Category I - interstate migrants;
  Category II - intrastate migrants;
  Category III - settled out migrants.

* The materials are useful for non-migrant Spanish-speaking children.

* The curriculum units are suitable for infusion into traditional curriculum.

* The development of the materials as self-contained units for use by parents, resource teachers, and teacher aides as well as by classroom teachers is pedagogically sound.

* The development of materials in units that relate directly to the child's "concept bank"; i.e., his family value view of his environment directly affects, in a positive manner, the students ability to function in a classroom setting.

* Consideration of the factors of the larger universe of the migrant child; i.e., travel over thousands of miles a year, gives the materials a demonstrable ability to help the migrant child relate to his local environment.

* Consideration of the factors of time as viewed by the Spanish-speaking migrant child, i.e., today oriented, gives the materials a demonstrable ability to help the child relate to his local school environment - frequently tomorrow oriented.
* The evolved format of the materials, which include teacher information and criterion reference tests in association with student activity materials, satisfies the request by teachers for materials that can be evaluated at the classroom level.

* The development of language from Spanish to English as well as from English to Spanish makes the materials useful over a wider geographical area. Teacher and parent comments were uniformly favorable. Puerto Rican, Cuban, Mexican-American teachers and parents responded in a similar manner. The inclusion of supplemental Spanish vocabulary lists for teachers helped make the materials useful in different areas throughout the United States.

* The ultimate development of materials at Levels A, non-reader, Level B, beginning reader; and, Level C, fluent readers, instead of grade levels solved a series of heretofore thorny student placement problems.

  - Teacher appreciation of the child's ability to handle certain adult concepts modified the teacher's previous perception based on language only.

  - The correlation of word use in the materials to a standardized reading list helped the teachers relate student performance to grade equivalency.

  - The relationships between Levels A, B, and C materials allowed the teacher to present materials responsive to the larger universe of the migrant child - in comparison to the smaller universe of the locally-based child - helped the migrant child adapt to a variety of school settings.

  - The selection of a format which facilitates local reproduction of the materials is cost-effective for use with migrant students. The students move in and out of a
given school on short notice. Materials for a mobile population, therefore, must be made readily available on short notice.

The development of materials suitable for use by the child and his family as well as the school and the student helped dramatically in meeting the unique needs of migrant students.

Field testing of materials suggest that the materials are useful with migrant children beyond the sixth grade, particularly for non-English dominant students.

Selection and orientation of teachers to participate in development of these materials clearly established the inadequate preparation of teachers regarding concepts of career education and the world of work. Elementary level teachers have not received sufficient training in the concepts of career education, nor do they demonstrate understanding of early career choices facing the predominantly Spanish-speaking migrant child.
It is recommended that USOE continue the work begun under this project by extending the development of the materials through the "career exploration" levels normally associated with grades 7, 8, 9, and 10.

The migrant child is more aptly described as a young socialized adult who is forced to make adult decisions regarding the world of work at an earlier age than his non-migrant peer. It is, therefore, imperative that career "exploration" materials be provided to migrant children concurrently with career "awareness" materials. For the migrant child, the holding power of the school is challenged at the junior high school level.

It is recommended that research be undertaken to determine strategies that will enable junior high schools to relate their curriculum more closely, or more directly, to conditions affecting the local world of work - particularly in those areas where agriculture demands increasing quantities of small unit energy sources, i.e., children.

The pattern emerged, throughout the time period of this project and throughout the various regions in which these materials were developed, that the emerging scarcity of large scale energy sources, i.e., oil shortage, will increase the demand for small unit energy sources - manpower. The invitation of manpower from Mexico by the State Department is impacting the border school districts. This impact is being noticed in categorical and supplementary funded programs throughout the migrant mainstreams from, for example, Texas to the State of Washington. Throughout the southwestern and western parts of the United States, teachers comment that the migrant child reaches sufficient physical development to be attractive to agriculture during the ages associated with grades 7, 8, 9, and 10. More support is urgently required for this increasingly significant student population.
It is recommended that USOE develop a "handbook" for use by teachers who are confronted with problems of infusing "world of work" materials into junior high school curricula.

Teachers have consistently revealed, throughout the project, that they need assistance when they are required to satisfy the special needs and requirements of younger students confronting the world of work, especially junior high school students in general -- migrant students in particular.