ABSTRACT

The booklet describes the approach to career education for hearing impaired students developed by the Kendall Demonstration Elementary School (KDES) in the District of Columbia. The KDES model is described in terms of project direction and the seven model components: planning, staff development, program development, curriculum development, pilot/field tests, and revision. Project development and redevelopment processes are graphically depicted. The project's products are divided into four working documents and four curriculum materials. Working documents, which include an orientation manual to career education, provided the underlying structure for the program. Curriculum materials include an introduction to career education role playing for preschool, primary, and elementary department students; a career awareness program; four basic career education curriculum materials; and two career exploration simulations. (CL)
MODEL FOR THE KDES CAREER EDUCATION PROGRAM
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Model for the
KDES Career Education Program

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Mr. Ben Provance
KDES Coordinator for Career Education

Ms. M. Delia Neuman
Project Director
FOREWORD

This document—the second revised version of the Model for the Total Kendall Demonstration Elementary School Career Education Program originally published in 1976—reflects the experience gained by two agencies in cooperatively planning and implementing a comprehensive, well-integrated career education program for hearing impaired students at the elementary level. This experience has enabled the Kendall Demonstration Elementary School (KDES) and the National Center for Research in Vocational Education of The Ohio State University to refine the steps and procedures outlined in the original Model and to describe a more precise pattern for the development of a comprehensive career education program for hearing impaired children from ages five through fifteen.

The major purposes of this document are (1) to provide information on the steps and procedures found to be successful in developing the KDES career education program and (2) to describe the products that have resulted from that effort. It is anticipated that the document can be used both by KDES faculty and staff to gain a broad perspective on the KDES career education program and by other educators of the hearing impaired who might be contemplating the initiation of similar programs.
INTRODUCTION

In the spring of 1976, the Kendall Demonstration Elementary School (KDES) and the National Center for Research in Vocational Education began a collaborative effort to infuse career education concepts and materials into the ongoing KDES program. Funded by grants both from the Pre-College Programs Division of Gallaudet College and directly from KDES, the KDES/National Center Career Education Project has involved a variety of strategies designed to develop a comprehensive career education program for KDES that could also serve the needs of other elementary programs for the deaf.

One of the first undertakings of the project was the preparation of a document delineating the strategies to be involved in the development of the KDES career education program. The following section of this document presents current thinking on the nature and implementation of each of those strategies. The final section describes the products that have resulted from project efforts.
MODEL FOR THE KDES CAREER EDUCATION PROGRAM

Figure 1 graphically presents the seven components of the model for the KDES comprehensive career education program: planning, staff development, program development, curriculum development, product development, pilot/field test and revision, and evaluation. As can be noted from an examination of this figure, many areas of overlap exist among these components. This overlapping represents a deliberate effort to mesh planning, product development, and implementation of the program into the ongoing KDES instructional program. In essence, by the very nature of the program, product development and program planning and implementation occur simultaneously so that career education concepts and curriculum materials do not exist in isolation but are infused into existing curriculum areas.

Figure 2 presents the steps and processes for the implementation of the model presented in Figure 1. As this figure implies, a variety of mechanisms designed to ensure extensive KDES faculty and staff involvement have been incorporated into the implementation process. These mechanisms are described below.

Project Direction

The Career Education Task Force is a representative group of teachers and specialists charged with the task of determining
Figure 1
MODEL FOR KDEC CAREER EDUCATION PROGRAM

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Figure 2

STEPS AND PROCESSES FOR THE IMPLEMENTATION OF THE KDES CAREER EDUCATION PROGRAM

<table>
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<tr>
<th>PROCESSES</th>
<th>IDENTIFY NEEDS</th>
<th>PLAN PROGRAM</th>
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<tr>
<td>1. Develop staff awareness</td>
<td>4. Identify goals in scope and sequence</td>
<td>7. Adapt and develop products to meet career development needs of KDES students</td>
<td>8. Involve staff in training for product use</td>
<td>9. Pilot and/or field test products</td>
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<td>2. Conduct needs assessment</td>
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the direction of career education at KDES. Chaired by the KDES Coordinator for Career Education and responsible directly to the Dean of KDES and the Administrative Management Team, the group has responsibilities for career education policy formation and review, staff development, project goal setting, and overall project direction. Specific duties of the group include in-service preparation of faculty in the area of career education, revision of project working documents as required, and long-range planning. In addition, the group determined the nature and scope of the career education curriculum materials developed in conjunction with the National Center for Research in Vocational Education.

Product Development

One of the chief outcomes of the project has been the development of a systematic method of collaboration that ensures that all project endeavors are grounded in expertise in the education of the hearing impaired as well as in expertise in career education theory. The process involves a number of steps through which both agencies—the National Center and KDES—have had the opportunity to share the responsibility for the creation and critical review of project activities and products.

The process of curriculum product design provides the most striking example of this collaborative method. Through it, design groups composed of KDES faculty worked with National
Center personnel on the design of each of the nine curriculum products developed through the project.

These design efforts focused on two areas: the development of original units and the redevelopment of parts of existing programs to meet the needs of the hearing impaired. Figure 3 presents the steps in the development of each original unit; Figure 4, the steps in the redevelopment of each selected part of existing programs. In general, the description below of the design process applies to both figures.

As a first step, the Career Education Task Force determined the nature and instructional level of the curriculum product to be designed; if it was appropriate, the task force also determined the goal area that the product would address. After these determinations had been made, the KDES Coordinator for Career Education designated a design group to work on the product with the instructional designer from the National Center and with specialists from several areas of KDES. Members of each design group generally included the Coordinator for Career Education, the representative to the Career Education Task Force from the appropriate instructional level, and two additional instructors from the designated instructional level. Other KDES personnel called upon to work in collaboration with the design group included specialists in the areas of sign language, reading, and language development.

To initiate the actual development or redevelopment effort,
Figure 3
PRODUCT DEVELOPMENT

Curriculum Needs Assessment

Determination of Instructional Level

Identification of Goal Area

Brainstorming Session

Development of Unit Plan

Design Group Response to Unit Plan

Development of Unit Draft (including supporting materials)

Design Group Response to Unit Draft

Production of Pilot Test Version of Unit

Pilot Test (KDES) and Unit Revision

National Field Test and Revision

Product Dissemination
Figure 4
PRODUCT REDEVELOPMENT

Identification of Product

Determination of Instructional Level

Brainstorming Session

Development of Product Plan

Design Group Response to Product Plan

Development of Product Draft (including supporting materials)

Design Group Response to Product Plan

Production of Pilot Test Version of Product

Comprehensive Product Testing

Product Revision

Product Dissemination
the design group and the instructional designer from the National Center participated in a brainstorming session that enabled KDES staff to contribute their initial ideas for the general design of the product and the development of resources and activities to support it. Using this framework as a base, the instructional designer prepared a development/redevelopment plan and submitted it to the design group for their reaction. Upon the design group's approval of the plan, the National Center developed a draft of the teacher's guide and of the student materials. These were reviewed by the design group and revised as necessary on the basis of members' suggestions.

Upon the National Center's completion of the pilot/field test version of the curriculum product, the role of the KDES design group changed and expanded. Usually each teacher involved in the design group served as a pilot/field test teacher for the product and thus gained first-hand experience in using the newly developed materials with students. In preparation for this experience, teachers received in-service training in using the product and all its components and in implementing the evaluation strategies employed in the data collection.

Evaluation was both formative and summative in nature. Student progress through the product was monitored by the use of performance objectives. Pre- and posttests were used to measure gain scores as a result of exposure to the product. In addition, teachers' and classroom observers' impressions of instructional
activities were solicited through various instruments. Decisions regarding product revision were made on the basis of an analysis of data from all these sources.

Revised versions of the products were placed for national field testing. Data gathered through this testing on the use of each product with diverse student populations provided the basis for additional revisions to be made before the final product was considered ready for dissemination to other programs for the hearing impaired.

In an effort to reduce the amount of time that can elapse between a product's development or redevelopment and its dissemination, the Career Education Task Force decided in the spring of 1979 to combine the pilot test and the field test for each curriculum product into one comprehensive test that would encompass both the KDES population and representative samples of students from other programs for the hearing impaired. All curriculum products developed by the project since 1979 were tested according to this new scheme.
PRODUCTS OF THE PROJECT

Products of the project effort can be grouped into two major categories: working documents and curriculum materials. Products within both categories are described in the following sections of this Model.

Working Documents

Several documents developed in the early stages of the project provide the underlying structure for the KDEs career education program. Among these documents are the following:

Orientation to Career Education

This reference manual is intended to supplement workshops designed to introduce teachers and administrators to the concept and history of career education, the need for career education, alternative strategies for implementing career education in the classroom, and fundamentals of career development theory. The manual includes brief and comprehensive readings as well as a list of selected references to assist those who desire to pursue the subject in greater depth.
Model for the Kendall Demonstration Elementary School Career Education Project

This document presents information for use by educators interested in establishing comprehensive programs in career education. The document focuses on mechanisms for the planning and implementation of such programs as these have been found successful in the KDES/National Center collaborative effort. Many of the mechanisms can be generalized to other environments, particularly those related to the curriculum design stage of program development.

Scope and Sequence for Career Education at the Kendall Demonstration Elementary School

This collection of career education goals for hearing impaired elementary students provides a broad framework to be used by teachers in the ongoing educational process. The Scope and Sequence, which is based on a matrix of career education goals developed by the Arizona Department of Education, provides a selection of career education goals judged by KDES staff to be appropriate for their students. The goals are organized according to various career education themes—for example, self-awareness—and presented according to their appropriateness for various age groups.
KDES Resource Guide for Career Education

This publication provides an annotated and comprehensively indexed list of all KDES media materials that relate to the career education goal areas identified in the Scope and Sequence. The Guide enables teachers to select materials that will introduce or reinforce specific career education concepts in the classroom.

Curriculum Materials

Curriculum product design efforts during the project resulted in four kinds of products: an introduction to career education role playing for Preschool, Primary, and Elementary Department students; a two-part career awareness program for Primary Department students; a series of four basic career education curriculum units for Elementary Department and early Middle School students; and two career exploration simulations for Middle School students who are about to leave KDES and go on to secondary school. Each of these products is described below.

KDES Career Education Role-Playing and Simulation Resource Guide

Designed both to provide a variety of information teachers and others can use in its own right and to serve as a vehicle for integrating the various role-playing and simulation activities central to many of the curriculum products developed through KDES
and National Center collaboration, the Guide contains a bibliography of resources teachers might use to learn more about the general concepts related to role playing and simulation and about widely used methods for implementing these strategies; descriptions of strategies for implementing career education role-playing activities specifically with hearing impaired students; and a set of nine sample career education role-playing activities—and accompanying study prints—for use with hearing impaired students at the Preschool, Primary, and Elementary levels.

Career Awareness Learning Activities, Levels 1 and 2

This career awareness program for Primary Department students is based upon materials originally developed by the National Center's Alliance for Career and Vocational Education for use in public schools. In accordance with decisions made by KDEP personnel, concepts inherent in the original program were retained in the version developed for use by hearing impaired children aged five through nine but materials and strategies were greatly expanded to meet the variety of needs to be found among students in this target population.

Each of the two levels in the program consists of a teacher's guide and a collection of highly illustrated
teacher and student materials. Each level consists of (1) a number of initial clusters of activities structured toward the achievement of specific performance objectives and (2) a culminating cluster designed to integrate the concepts addressed in the initial ones. In the initial clusters, teachers are encouraged to select among activities designed at three basic levels--exposure, development, and application--to prepare their students to participate in the culminating cluster--a series of experience centers based on career areas and occupational fields drawn from the occupational clustering model used by the National Center.

In addition to the wide variety of materials provided for the experience centers, resources for this program include worksheets, transparencies, game cards, dot-to-dot cards, cards to stimulate and focus discussion, stories, riddles, materials students use to compile booklets recording their experiences with the program, and others. The descriptions below outline the characteristics that are specific to each level:

**Level 1: I Am Special**

The five initial clusters of this level focus on separate dimensions of self-awareness: physical makeup, the mind and the senses,
personal interests, feelings, and decisions. The sixth cluster brings all these aspects together as students work in five experience centers—a grocery store, a construction site, a doctors' office, a dance studio, and a restaurant—to explore the relationship of unique personal characteristics to occupations.

Level 2: Needs and Wants
This level has four initial clusters focusing on personal needs and wants, family needs and wants, needs and wants at school, and neighborhood workers who meet needs and wants. In the fifth cluster, students assume the roles of workers who meet needs and wants by working in five different experience centers: a garden, a tailor shop, a firehouse, an art gallery, and a television studio.

Career Education Curriculum Units I - IV
All four career education curriculum units in this series are based on goals contained in the Scope and Sequence for Career Education at the Kendall Demonstration Elementary School. KDES personnel
determined the goal areas for which curriculum materials were most necessary, and the materials were developed to meet students' needs in these areas. Each of the four units consists of a teacher's guide and a variety of highly illustrated student and teacher materials. Each unit employs such learning strategies as role playing, discussion, and teacher explanation to introduce central concepts. Student understanding of these concepts is reinforced by such methods as experience centers, workbook exercises, and games. The brief descriptions below indicate the specific characteristics of each unit:

I. Feelings: Keys to Values

This unit serves as an introduction to values skills for students at the Elementary Department level. Instructional materials include transparencies, vocabulary cards, survey forms, student workbooks, labels, posters, and others. Through the unit students come to recognize that their feelings and the feelings of others relate to values.

II. Decisions! Decisions!

The second unit in the series, which serves as
an introduction to decision-making skills for students at the Elementary Department level, relies heavily on gaming to reinforce its concepts. In addition to games, the unit materials include workbooks, transparencies, sequence cards, cartoon booklets, and others. The unit is designed to assist students to recognize that they have choices in some situations, that there are reasons for making choices, and that decisions have personal consequences.

III. Coping with Conflicts

This introduction to conflict resolution skills was designed for students at the Middle School level and builds upon goals addressed in Unit I, *Feelings: Keys to Values.* Vocabulary from Unit I is reviewed through a comprehensive series of learning centers, each of which includes a variety of student-centered materials. Throughout the unit, students are given assistance in the development of their abilities to deal with and/or resolve problems that involve conflicts of feelings.
IV. Shooting for Goals

Unit IV, the culmination of the four basic career education curriculum units, provides an introduction to goal-setting skills for students at the Middle School level. The unit includes a wide variety of materials: student workbooks, game boards, materials for making mobiles and targets that are components of the unit, cartoon cards, script cards, biographies, and others. Student understanding of the nature of a goal, of the difference between long-range and short-range goals, of the need for goals, and of basic techniques for achieving goals are focal points of the unit.

Career Exploration Simulations

The two simulations in this program were redeveloped from materials originally prepared by the National Center's Alliance for Career and Vocational Education. Intended for use by hearing impaired students at the Middle School level, the redeveloped simulations introduce students to occupational fields selected by KDES personnel. Each simulation presents appropriate job-related vocabulary and provides opportunities for
students to explore work roles that are representative of occupations in the particular field. By actually performing in these roles, the students gain knowledge of occupations within the industry and become aware of their own interests and abilities, of the interests and abilities of the workers in the selected occupations, and of the ways in which their own interests and abilities might be related to those of the workers they study. Highly individualized, the simulations consist primarily of materials through which students move at their own paces—interacting with other students as the requirements of their work roles dictate and working under the close supervision of the teacher, who serves as facilitator and director of the simulation activities. The brief descriptions below suggest the specific characteristics of each simulation:

**Royal Palace Hotel**

This simulation of the hotel/restaurant industry enables students to assume the occupational roles of hotel cashier, maid, and room clerk and as hotel restaurant cook and waiter/waitress. A sixth role—that of the guest—provides the workers a focus for a
variety of tasks, including totaling and accepting payment for hotel bills, checking rooms, reserving rooms, planning meals, and taking orders for food.

**Shirttails**

This simulation of an aspect of retail trade involves students in the roles of buyer, clerk, manager, and salesperson in a jeans-and-tops shop that caters to teen-age customers. Students simulate many of the tasks associated with such an enterprise, including ordering and pricing clothes, figuring the store's expenses and profit, writing sales receipts, and filling mail orders.