There currently exist four alternative ways of delivering or facilitating career education goals, including the school-based, employer-based, home community-based, and residential-based models. The school-based Comprehensive Career Education Model (CCEM) is being developed in six local school districts, and its current objective is to develop and test a career education system (K-12) in these districts. During the 1972-73 school year, it is anticipated that 85,000 students at all grade levels will be exposed to approximately 100 curriculum units. The employer-based model is designed as an out-of-school alternative to career education for students aged 13-18. The goal of the home community-based model is to offer a career-oriented educational program to out-of-school youth and adults who want additional learning opportunities. This career-oriented program will be strongly supported by career development centers located in the community. The residential-based model is being designed to offer education as well as family life, community, health, and economic development services to disadvantaged individuals and families drawn from rural areas. Some of the implications of these models are discussed. (SB)
Notations on Career Education
Models Extracted from
Presentation by

Robert E. Taylor

CAREER EDUCATION: IMPLICATIONS FOR
INCREASED EDUCATIONAL RELEVANCY

PRESENTED AT THE CENTRAL NEW YORK SCHOOL STUDY COUNCIL
CAREER EDUCATION CONFERENCE, OCTOBER 20, 1972; SYRACUSE, NEW YORK
The Career Education Models

What is being done to further refine and help develop career education concepts? Many school districts are already well underway in implementing them. The U. S. Office of Education's research and development initiatives to facilitate career education are substantial and yet varied. They should ultimately make an empirical contribution to shaping and further defining career education. The federal government projects that more than 104 million dollars will have been made available through a variety of programs for research, development, and the implementation of career education concepts by the end of 1972.

There now exist four alternative conceptualizations of career education or, more accurately, four alternative ways of delivering or facilitating career education goals. In a research and development sense, the four models may be viewed as alternative means of delivering on our career education commitments.

The four models are

1. Comprehensive Career Education Model - the school-based model
2. The employer-based model
3. The home community-based model
4. The residential-based model
The School-Based Model

The U.S. Office of Education has designated The Center for Vocational and Technical Education, located at The Ohio State University, as the prime contractor to develop, test, and install the school-based Comprehensive Career Education Model. The model is being developed in six local school districts selected by the Office of Education. They are: Mesa, Arizona; Los Angeles, California; Jefferson County, Colorado; Atlanta, Georgia; Pontiac, Michigan and Hackensack, New Jersey. The development network encompasses many diversities. There are variations in the size of school districts, geographic settings, and the cultural and ethnic mix. The network involves the staff and students from 114 school buildings as more than 3,600 teachers and administrators work with 85,000 students in this development effort. The CVTE Model I staff consists of 66 professional and 37 supporting staff, 84 of which are at The Center headquarters and 19 residing at the LEA's.

For the purposes of the school-based Comprehensive Career Education Model, Career Education is defined as a comprehensive educational program focused on careers, beginning with the entry of the child into a formal school program and continuing into the adult years.

The current objective of the CCE model is to develop and test a career education system (K-12) in these districts. Present funding limits development to K-12; however, we hope to
begin development of 13 and 14-year programs in at least one site.

As the prime contractor for the CCE model, we were obligated to have programs "up and running" in the six sites during the 1972-3 school year. The general project strategy is to further refine and operationally define in terms of student outcomes the conceptualization of the school-based model. The conceptualization views the school enterprise K-12 as an integrated whole - concerned with optimizing individual career development and concurrently enhancing knowledge of self and self-actualization. Again, let me emphasize we are concerned with capacitating individuals for all life roles.

During the 1972-73 school year, it is anticipated that approximately 100 curriculum units will be field tested in the six Local Education Agencies cooperating in this project. These units will be tested in the 114 school buildings at all grade levels. The majority of the 85,000 students in these participating CCEM attendance areas will be exposed to new Career Education curriculum units or some facet of Career Education. As the project moves into subsequent years, more students will be exposed.

Before these units will be installed in the participating LEA's this coming year, all of the schools administrators and participating teachers will have completed some level of Career
Education orientation or in-service training. This is true of other professional personnel within these CCEM districts who are working with some component of the project.

Present projections indicated that besides the Career Education curriculum units being developed during the coming year, approximately 50 supporting documents which describe and provide guidelines for the implementation of supporting systems and services will be completed. Upon completion, these documents will be made available through the National ERIC system.

The school program could be viewed as facilitating individual progress through career awareness, orientation, exploration, and preparation. There will be opportunities for individuals to recycle -- to refocus career goals based on exploration and increase knowledge of self.

A modified Delphi technique was used to develop the matrix consisting of 8 major elements of career education which is extended vertically through the grades. These have been fractionated into 32 supporting themes from which there have been established 1,477 goals.

Approximately 3,000 student performance objectives have been written to attain the goals which support the themes which hopefully will allow us to deliver on the eight basic program elements.

Please understand that the 3,000 student performance
objectives do not represent the total curriculum. Current objectives in math, science and language arts, for example, are still viable. The performance objectives in careers are designed to introduce polarity toward career development throughout the school program.

The 8 basic elements are:

1. Self Awareness - Self Identity
2. Educational Awareness - Educational Identity
3. Career Awareness - Career Identity
4. Economic Awareness - Economic Understandings
5. Appreciations, Attitudes - Self - Social Fulfillment
7. Skill Awareness and Beginning Competence - Employment Skills
8. Employability Skills - Career Placement

Concurrently with matrix building, a national inventory of materials and programs (treatments) has been undertaken which produces the prescribed outcomes and is congruent with the model. Simultaneously, a diagnosis will be made of programs in the six site schools to determine what portions of the models are already in place and operating. Prescriptive treatments will be formulated, carefully evaluated against desired outcomes, and recycled if necessary. The iterative cycle of diagnosis, prescription, treatment, assessment, accepting, rejecting and recycling is the central project strategy. To insure that
career education is transportable as "infusion units," the curriculum or treatment units are designed according to a uniform format. In a standardized format, units can be pilot tested, refined, installed, and transported to other appropriate settings with some assurance of quality control.

Concurrently, benchmark data to establish the present state of affairs -- student, school and community -- have been assembled and analyzed. A contract was let with The Institute for Educational Development, an affiliate of the Educational Testing Service at Princeton, which serves as an outside summative evaluator to complement and reinforce the formative evaluative capacity of the project staff and assessed the prime contractor.

Let me share with you the results of a study recently completed by The Institute for Educational Development. The study was specifically designed to identify the attitudes toward career education of pupils in grades 4-6, in grades 7-12, staff and parents in each of the six cities in which the CCEM model is currently being tested. Approximately 3,000 pupils in grades 4-6, 3,000 pupils in grades 7-12, 4,000 staff members and 3,000 parents were asked to respond to a series of attitudinal statements pertaining to career education. Some typical examples of the statements asked of the four specific populations and corresponding degrees of agreement include:
1. **Pupils in grades 4-6** (22 Statements Total)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percent Agreeing</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Students should be taught about jobs in school</td>
<td>69</td>
</tr>
<tr>
<td>b. School should teach me things I can use on a job</td>
<td>69</td>
</tr>
</tbody>
</table>

2. **Pupils in grades 7-12** (49 Statements Total)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percent Agreeing</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Every student should have at least one paying job before graduating from high school.</td>
<td>71</td>
</tr>
<tr>
<td>b. Students should be told about different jobs and job requirements during the study of every subject in every grade.</td>
<td>70</td>
</tr>
</tbody>
</table>

3. **Professional Staff** (49 Statements Total)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percent Agreeing</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Most people finish high school not knowing what kind of career they prefer</td>
<td>82</td>
</tr>
<tr>
<td>b. Most high school graduates are not prepared to enter the business world</td>
<td>81</td>
</tr>
</tbody>
</table>

4. **Parents** (48 Statements Total)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percent Agreeing</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Most people finish high school not knowing what kind of career they prefer</td>
<td>79</td>
</tr>
<tr>
<td>b. Every student should graduate from high school with a salable skill he can use on a job</td>
<td>75</td>
</tr>
</tbody>
</table>

It was found that no city has a monopoly on positive attitudes toward career education. All six agree not only that it is desirable but also agree point by point and feature by feature.
All correlations are significant at the .001 level or above. The correlations are highest for young children in grades 4-6, suggesting that children are much the same everywhere, especially until they have had enough life experiences to polarize their opinions. The correlations for elementary school children ranged from a low of .92 between Atlanta and Hackensack to a high of .98 between Mesa and Jefferson County. The implication is that there is nothing in the attitudes of young children in the six cities to require a difference in CCEM components.

High school students in the six cities also agree about career education, but not quite so closely as elementary school children. Correlations between cities range from .73 between Atlanta and Jefferson County to .95 between Hackensack and Pontiac.

What is perhaps of even greater interest to the CCEM project staff is that there are only negligible differences in teacher attitudes among the six cities. Correlation for these school staffs range from .93 between Atlanta and Mesa to .98 between Jefferson County and Mesa. Here again, there is nothing in the attitudes of the professional staff to demand a unique conception of career education for any city. And there is nothing to prohibit a similar content in in-service training programs. Moreover, the data suggests that CVTE could assemble
working parties of professionals from all six cities in confidence that they would perform harmoniously on the project.

It is equally clear that parents in these six cities agree about career education. Correlations for parents range from .80 between Los Angeles and Mesa to .99 between Jefferson County and Mesa. This implies that community information and community involvement programs can be developed in a common design for use by all cities. It also suggests that a concept which is invented and used successfully in one city will probably work in the other five.\textsuperscript{16}

Extensive staff development programs are initiated in the six cooperating school districts at the present time in an effort to train Local Educational Agency personnel to install and implement this program. Full-time interdisciplinary development teams employed in the participating schools under the project and from The Center are at work in the six cooperating school districts. A central planning, management and consulting staff is headquartered at The Center. Extensive involvement of school and community personnel characterizes the development process. A more long-term research and development program will be evolved to work toward a totally integrated and valid model.

The joint effort of a national research and development Center and six LEA's operating in a consortium should not be viewed as just another curriculum development program, but rather as a systematic research and product engineering effort.

In addition to our responsibilities as prime contractor for the school-based model, The Center in cooperation with University Council for Educational Administration and the College of Education, The Ohio State University, is conducting a series of National Conferences for Deans of Colleges of Education, education professors and educational faculty teams. The purpose of these conferences is to further acquaint college and university deans and professors with the emerging concepts of career education for the various functions of colleges of education and aid them in developing a plan of action. The conferences which were held in April and May, were designed to aid deans and educational professors in their work on career education with school administrators. These two conferences were forerunners to a series of six regional conferences which are beamed at faculty teams. Primary purpose of the regional conferences is to consider needed modifications and redirections across departments and functions of colleges of education to optimize their work in career education. Additionally, The Center, in consort with the University Council for Educational Administration, has organized a joint task-force to study the
problems of educational administration preparation, particularly as it relates to career education and occupational education elements. This commission has been appointed and has begun its work. Their reports, hopefully, will have long-term implications for pre- and in-service programs for educational administration personnel.

The Employer-Based Model

The goals of the employer-based model are (1) to provide an alternative educational program for students, age 13-18, in an employer-based setting, (2) to unify the positive elements of academic, general and vocational curricula into a comprehensive career education program, (3) to increase the relevance of education to the world of work, and (4) to broaden the base of community participation, particularly by involving public and private employers and directly and significantly in education.

The program will be operated by a consortium of businesses and other organizations, both public and private.

In the design and implementation of this out-of-school alternative to Career Education, a number of fundamental problems have confronted the contractors. These are:

1. Business and industry are not equipped to educate, they are not academicians.
2. Employers do not wish to cause a rift between business and education.

3. Business and industry feels that young people are undisciplined and uninterested. Furthermore, it may be too early for them to choose a career.

4. Employers question their involvement. After all, educators are being paid to do the job.

5. Employers are in business to make a profit. This program offers them no economic advantage.

6. Labor unions feel that the program may be counter productive to their apprenticeship programs.

7. There are legal implications involved in employing students below a certain age and paying students in a training situation.

At the present time four organizations have contracts to independently develop Employer Based Career Education Models. These contracts are being pursued independently in an effort to develop independent alternatives within the Model II concept. These organizations are Research for Better Schools (RBS), Inc., Philadelphia, Pennsylvania; Farwest Laboratory for Educational Research and Development, Berkeley, California; The Northwest Regional Educational Laboratory, Portland, Oregon; and the Appalachia Educational Laboratory, Charleston, West Virginia.
The model has the capability of operating on a year-round basis and will provide for open entrance and exit of students. It is anticipated that the program will be operated by a consortium of public and private employers. Each consortium will encourage the assistance and active support of such diverse community elements as unions, schools, parents, PTA's and chambers of commerce. The program will emphasize educational experiences that take place in a variety of settings such as laboratories, production lines, parks, museums, hospitals and construction sites. The aim is to make the community the classroom. Guidance counselors and prospective employers will, together with each student, plan a learning program consistent with individual interests and objectives. Research for Better Schools, Inc., has some 2 dozen staff people on board now. This should expand to about 33 when the project is fully underway. 100 students were expected in October 1972 at Philadelphia. The Far West Laboratory for Educational Research and Development has about 18 staff on board now devoted to this project. It hopes to expand to 30 later. It currently has about 10 student enrollees in Oakland, California; it planned to have 50 by September 1972 and a total of 75 by January 1973. The Northwest Regional Educational Laboratory currently has a staff of about 20 working on Model II. Twenty-five students were expected in September 1972 at Tigard, Oregon. The laboratory's goal is 50
students by February 1973. The Appalachia Educational Laboratory will have approximately twenty-five students participating during the late Fall of 1972.

All of the Employer Based Career Education programs have a common program format in that the programs provide both the career skill development in real life occupational setting in business and industry, and the related academic training in the educational setting of a school.

The original conception was that the academic training could be offered along with the skill training in the plant or office of the business or industry. Further investigation and study has indicated, however, that this is unrealistic—at least at the present time. Most businesses and industry are not geared-up to provide the related academic training and do not wish to be responsible for the component of the program. Hence, academic training must be offered in a conventional school setting or under some sort of separate educational institution. It seems to be a consensus that this training can eventually move to the location of the employer, so that the total program can be offered as a true and separate alternative to the public school system.

The Home Community-Based Model

The goals of the Home Community-Based Model is to offer a
career-oriented educational program to out-of-school youth and adults, who, for a variety of reasons, are not participating in regular school programs or who want additional learning opportunities.

The primary strategy for reaching the out-of-school youth and adult population will be through mass media. Once adults are motivated through the mass media, agencies and programs must be set up that can handle the needs of these adults. These needs include central screening, counseling, training, and placement. This necessitates working with employers and other national/regional/local organizations which will participate in the guidance and operation of the program.

This program will attempt to use mass media to attract the attention of the adult based population to the program, to be used to assess the Career Education interests of the target population, to provide the target group information about existing Career Education alternatives and resources, and to provide, where appropriate, skills related to engaging in Career Education.

The Home Community-Based Model will consist of a comprehensive career-oriented program centered on individualized learning programs. It will be strongly supported by career development centers located in the community which will provide tutorial, testing, and referral services aimed at identifying and develop-
ing career interests. Although the character of the home community-based model is flexibly conceived to the extent that it can be shaped by the interests of any community, the essential components will remain the same--a comprehensive career education base, counseling and tutorial services, and a multi-media support services.

In July 1971, the Education Development Center in Newton, Massachusetts entered into a contract with the Office of Education to carry out a program of research and technical support relating to a Home-Community-Based Model of Career Education. From July to October, EDC's work consisted of the identification of potential target populations, forms the Model might take for these populations, and analysis of similar programs.

As a consequence of this pre-pilot research, the Office of Education decided not to proceed with a national television version of the Home Community Model. It was decided, instead, to undertake a pilot effort in one or more cities. From November 1971 to March 1972, EDC devoted itself to the screening of potential pilot sites and began, in these sites, to test the feasibility of the Home Community Based Model it had so far developed. The Southwest Cooperative Educational Laboratory in Albuquerque, New Mexico has commenced planning for a Model 3 test site in Albuquerque by late Spring 1973. Staff assigned to this project at EDC presently number about 10. When fully
developed, total staff (including those in residence in the pilot community) will be 40 plus subcontractor staff. The target date for beginning activity was Fall 1972. Numbers of participants are difficult to estimate. Participants may drop in and out and some may be repeaters. Best estimates at present are 300 to 500 weekly.

The Residential-Based Model

The Mountain Plains Regional Education Center, recently established at the Glasgow, Montana, Air Force Base, will develop and begin to implement a resident career education program with services to disadvantaged individuals and families drawn from rural areas of Idaho, Montana, Wyoming, North Dakota, South Dakota and Nebraska who are trying to develop their economies. Program components in the residential-based model will include education, family life and community services, health and health services, economic development services, and research and evaluation activities.

Families selected for the program are provided free transportation to Glasgow, Montana. After arrival, they receive an orientation and an individually designed program is developed for each family. This program is called a "prescription." This prescription is based upon information from individual interviews, personal data, interests, needs, aptitude data, and
availability of facilities and activities. These prescriptions are changed as the families' needs change during their progress through the program.

The vocational preparation program in this model, includes preparation in the occupational areas of tourism, health, and public services. There are six instructional "cores" which have skills common to the three occupational areas. The cores are business and office, mobility and transportation, food services, facilities management, facilities operation, and educational and social services. These programs are designed to equip the participant for various levels of entry into an occupation. They do not necessarily qualify the person for the ultimate job that he desires; rather, they enable him to enter at a level of competency that coupled with further training, may qualify him for his ultimate occupational goal.

An important aspect of the Rural-Residential Model program is the concentration on the family. The program provides counseling, recreation, and home services for the families. Counselors work as teams with each family to coordinate their activities in the entire program. Services are provided that will give families training in home services such as money management, sewing, home care, home planning, food and meal planning, consumer education, creative hand work, personal grooming, and physical fitness. Also available is a program
for both meeting health needs and providing health education.

The average amount of time spent in a program by a family will be one year. Upon completion of the program, assistance will be provided in finding jobs for which program participants will be qualified. If necessary, assistance in relocating to the new job will be provided. Once families are relocated, follow-up through existing state office staffs will be provided, where needed, for the families.

Entire family units and individuals are now reporting to the training site so that each family member can develop an appropriate career role through employment, study, home management, or through a combination of these. Employment upon completion of the residency is guaranteed by the home state of each family. Experiences in developing and operating the Glasgow Center will be utilized in assessing the potential for other kinds of institution-based career education programs. When fully developed, the maximum load which is to be achieved by January 1, 1973 is estimated to be 200 disadvantaged low income families.

**Implications of the Alternative Career Education Models**

It is difficult, if not impossible, to assess the full range of implications for each of these models, let alone the synergism among them. However, the future implications of a successful school-based comprehensive career education model
are significantly magnified when considered in relation to the other three. In my judgment, all models are related to the school model. As previously indicated, career education incorporates a concept of an individual's lifelong entitlement to the educational opportunities required for career selection, preparation, and advancement. The school-based model may be viewed as the formative developmental program provided for all children and youth. The other models extend the concept beyond the formal school and provide educational opportunities for individuals through all of the successive stages of their lives. When fully developed and articulated, the various models will provide a variety of options for individuals who, for one reason or another, need to recycle their career activities, or who desire to advance in their career goals.

As now conceived, the models should provide opportunities for career development and preparation for any person, regardless of his age, regardless of the circumstances under which he must work and live, and regardless of the social or physical barriers he might face.