Three of the papers in this collection present the separate models--school based, employer based, and home-community based. Titles of the five papers are: (1) "Facts and Fantasies of Career Education" by Gorden I. Swanson, (2) "Strategies for Implementing Career Education: A School Based Model" by Aaron J. Miller, (3) "Employer Based Career Education (EBCE)--A Model Developed At The Far West Laboratory For Educational Research and Development" by Bela H. Banathy and Robert M. Peterson, (4) "The Home-Community Based Model (Model Three) Of The U.S. Office Of Education's Career Education R&D Program--A Synopsis" by Cornelius F. Butler, and (5) "A Summary Of A Rationale For Education For Work" by Jerome Moss, Jr., Brandon Smith, and George Copa. Two points covered in the speeches that may be of special interest to program planners are the basic career education elements and the career education curriculum model. (JS)
Career Education: Papers Presented at the 1972 Annual Meeting of the American Educational Research Association

LaSalle and Palmer House Hotels
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One of the paradoxes of the American scene is the extent to which we regard our education as an enormous success while at the same time we face the haunting reality that for many, education contributes rather minimally to that end. It has effected the jargon of education resulting in such terms as "upward bound", "new horizons", "educational renewal", and "career education". These terms identify programs whose invested energy is somehow expected to redress the balance or tilt toward more advantage for those whose hope is vested in education.

Career education is one of the newly popular terms for designating the revival of some educational measures which have had earlier advocates on the educational scene. It also contains some elements which are new to the current emphasis.

Career education is almost impossible to define and its implementation is subject to many interpretations and numerous compromises. It has been subjected to endless combinations of pressures and preferences to reflect the alternative views of its advocates and its sideline observers. It also exists in three forms, commonly called models, including a school-based form, an employer-based form, and a home-based form. More will be said about these later.

In the absence of a clean and tidy definition to which all can agree, it may be possible to describe some purposes of career education which describe its intent. The following purposes are given in the hope that the agreement which they summarize can be increasingly shared among alternative forms:
1. To provide students with an instructive environment and some learning goals which will allow them to relate their education to the world of work - its scope, its significance, and its opportunities.

2. To provide students with an opportunity to engage in occupational exploration including work experience, specialized instruction, and career decision-making leading toward a preferred life-style and career pattern.

3. To provide an opportunity for students to exit and reenter the educational system or the labor force or to be instructed in both, as needed, in order to make initial or subsequent progress toward specific career goals.

Purposes, such as those outlined above, are generally unacceptable in the American educational system. They require a system-wide commitment to compulsory education rather than a mere acquiescence to the statutory provisions of compulsory attendance. They require accountability and responsibility for the instructive processes of decision-making as well as its consequences and its training needs. Finally, they are expensive; there is no way to embrace the purposes of career education without encountering significant additional costs.

And the requirements of career education are even more formidable than can be described by an exposition of purposes. There are some essential features without which career education would compromise its own purposes. They are as follows:

1. Career education is for all students. It is not an approach to educational "streaming" nor is it an effort to deal more effectively with one dimension of the occupational hierarchy than another. This need to include all students is a feature considered essential to the goals of justice and equality of opportunity in education.
2. Career education is included as an instructional objective at all grade levels - from kindergarten through adult and continuing education. It is not regarded as a postponable educational activity. Integrated into the regular curriculum, career education is regarded as an approach to enriching the traditional disciplines whose primary function is to describe a part of the world's reality, including the world of work.

3. Career education is intended to provide job-entry skills to all students prior to or upon completion of compulsory school attendance. Twenty percent of those who enter fifth grade drop out before the completion of twelfth grade. Sixty percent of those who enter fifth grade do not pursue post-high school training. Job-entry skills are needed by almost everyone at some stage in career progress - either as an earning opportunity for later stages or as an earning opportunity within a terminal choice. Job-entry skills are an essential feature of career education.

4. One hundred percent placement is both a feature and a goal of career education. Placement may be in a job or in a program of education or training which is additionally preparatory. The placement feature has a double purpose: (1) to insure that career education is goal oriented for all students and (2) to insure that the educational system is willing to accept the burden of its own casualties. Implied in the latter is the need for the educational system to engage in successive placements of the same individuals including those who drop out of post-high school educational programs and those who choose to intersperse adult education with work. Placement is a demanding feature of career education. It provides its most important basis for accountability.
The question of definition arises again. The purposes and features described above are not a description of means; they are a description of ends. Career education requires a careful delineation of ends and means. It is this need for delineation that prompts many of the advocates of career education to accept a quick and easy definition. If one accepts the foregoing purposes and features of career education, there is an implied departure from tradition which is tantamount to a revolution. No school system has fully embraced the purposes and features described above and no teacher education program is prepared to provide personnel for such a commitment.

The means needed to achieve career education are also difficult. Organizational and structural changes may become a prerequisite for many communities.

The description of career education in this paper is essentially the one advanced by the U. S. Office of Education and its Advisory Groups. As mentioned earlier, the U. S. Office of Education has proposed and committed public funds to three forms of career education, popularly called models—a school-based form, an employer-based form, and a home-based form. It is not known whether these are intended to be competitive alternatives or mutually supporting dimensions of an overall scheme. If it is intended that the three forms can complement each other, the overall strategy for this intent has not been revealed. The competitive intent was implied by the U. S. Commissioner of Education when he suggested that the employer-based form might be financed by the tax credits, a much-abused system of revenue and a most difficult finance plan to rely upon for publicly supervised education programs.

The Revival of Earlier Emphases

At the outset of this paper it was observed that career education consisted of a revival of some earlier educational emphases and some which are new. What educational emphases have been revived by the current press
toward career education? What education reforms of the past are revived in contemporary career education?

First, the arguments which prompted the Morrill Acts of the 1860's are alive again in career education. The Congressional intent of the Morrill Acts was to reform the occupational hierarchy and the access of working classes to it. An equally important intent was to expand educational opportunity for the lower economic classes. The educational leadership prompting Morrill legislation did not come from universities. University leaders were the enemies rather than the friends of the Land Grant Movement. But university leaders soon became the custodians of the Land Grant intent and the expected ambivalence prevented the full realization of the intent. The revolution which prompted the Land Grant legislation had a very short life. Substituting for this have been a number of grant-in-aid programs whose accommodation in universities is usually referred to as a "land grant philosophy".

Also revived in career education is the struggle to introduce vocational education into all educational streams. This struggle is best identified with the careers of three men - David Snedden, an educational administrator; Charles Prosser, a lawyer; and John Dewey, a philosopher. Although they disagreed on details of implementation, all believed in vocational education as a means of liberalizing education. Snedden was an advocate of integrating occupational education into the general curriculum. Prosser argued for social efficiency and the need for all students to prepare for useful employment. Dewey saw vocational education as a means of democratizing education. The careers of all three were instrumental in introducing vocational legislation in the early years of the century.

A third focus revived by the current fashion of career education, notably the earlier work of the National Education Association through its Educational Policies Commission and the work of the American Vocational
Association through its various resolutions and reports. The work of the Educational Policies Commission entitled Education for All American Youths published in 1944 was an early approximation to present views about career education. The continuous effort of the American Vocational Association to broaden the base of vocational education is likewise a revived focus of the current emphasis in career education.\(^4\)

Even more central to the new emphasis is the prior work of the National Advisory Committees in vocational education. Of particular interest is the Report of the President's Panel of Consultants (1963) and the Reports of the now functioning National Advisory Council on Vocational Education. In their Reports No. 1 and 3, the latter has implored the federal government to exercise leadership in career education and it has proposed guidelines for implementation.

The New Dimensions of Career Education

These are a few of the educational emphasis which have experienced a revival in the current interest in career education. But there are also some new dynamics and some new dimensions which add interest and concern for career education. What are some of these new dimensions?

The first involved the contributions of educational research over the past decade. Before identifying these contributions I would like to say that I have considerable reserve about crediting research with generalizable truth. Most educational research yields conditional truth and it is extremely difficult to identify that which is generalizable. Yet it is a professional obligation, nevertheless, to search for the generalizable truths emerging from research and to ask, "what does this have to say to us"? In spite of reserve noted above, I shall attempt to summarize in the form of statements the research of the last decade as I view it. The observations are as follows:
1. **Children have a higher capacity for learning and instruction at earlier ages than was heretofore understood.** This conclusion has been reinforced by numerous studies and it has resulted in the recent emphasis in Early Childhood Education. The source of this discovery is world-wide. Early childhood education is practiced everywhere. It has important applicability to career education. As demonstrated in a number of exemplary programs, career education is completely applicable to early childhood programs. In fact, it is an essential element of many exemplary programs.

2. **The achievement of learning goals is in direct proportion to the amount of time invested in teaching and learning by students and teachers and to the effectiveness of such invested time.** This rather mundane observation is tantamount to a particularization of the obvious. Yet it is the only generalizable truth which emerges from the enormous plethora of research completed in reading, mathematics, science, languages, and other subjects. Gimmicks, gadgets, and games have been created, all useful in winning the interest of students, but the most important independent variable has been time. This should lead to a further conclusion, namely, that the most valuable educational asset is student time and the most valuable educational methodologies are those which make most effective use of student time. If career education is an important educational goal, it must be regarded as unreachable unless there is a commitment of student and teacher time.

3. **Education is not culturally irrelevant; its subcultural variations are significant.** This conclusion, drawn from the landmark studies of the equality of educational opportunity, has become an important educational force. As observed by Goldhammer, students worth educating are not socially and culturally homogeneous. Nor are
they oriented to any particular segment of the occupational hierarchy. It is also apparent that many of the success-related outcomes of the educational process are essentially non-cognitive; they relate to social relations, to the socialization process and to the status transmitting influence of work roles.\(^7\) The norm-referenced character of education is thus important in new ways and particularly as it relates to a society which has opted for a policy of differentiated incomes, subscribed to the goal of equality of opportunity and motivated by a status-oriented hierarchy of occupations.

There are other conclusions which may be drawn from the research of the last decade to provide a new view of career education. Perhaps it would be useful to add the work in Adult Education or some of the developments in Vocational Education. Those cited above are so sharply relevant to career education that they cannot be omitted. They add substantially to the arguments of those who advocate career education.

A second new dimension to career education is provided by the frightening realization that there are limits to growth.\(^8\) The interacting consequences of continued exponential growth of population, food production, industrialization, pollution, and consumption of non-renewable resources will, it is argued, lead to calamities and the need for zero growth within 50 years. Discussions of this possibility have not had wide currency in the field of education even though the present crop of 10th graders will reach retirement age by that time.

What are the implications of zero growth or near zero growth for education? Unlike expansion, it means that the poor cannot become richer without the rich getting poorer. The ladder to success is a comforting hope if expansion permits the ladder to become longer so that those on the higher rungs may also climb. Zero growth invites a wholly new basis for social conflict, a conflict which will more sharply divide the rich from the poor and more carefully identify the educational system as its battleground.
A second implication will involve the educational assumptions surrounding student selectivity. Under conditions of expanding growth, the educational systems select and reward those individuals and institutions with a high capacity for expansion and it tends to discourage and diminish those qualities and attributes which maintain a static or declining role. This basis of selectivity and reward for expansionism will not continue to function smoothly with the approach of zero growth.

Finally, full employment, even with a healthy commitment to the work ethic, may be impossible to sustain without a great deal of underutilized labor. The present inability to control inflation, which is fake expansion, is a symptom of this problem.

What then are the likely consequences to career education arising from zero growth or near zero growth? Certainly it will be difficult to accept and its difficulty will be greater for the poor than for the affluent. Education will get blamed (as it did for sputnik) and career education may be identified as a part of the problem rather than a part of its solution. Career education can easily become identified with the least remunerative jobs in a community. If so, the possibility of zero growth will add new hazards to career education.

There are many other new elements of career education including cluster concepts, curriculum, and instructional management possibilities. These will not be mentioned here. Let us go on to the fantasies.

**Fallacies and Fantasies in Career Education**

The fallacies and fantasies surrounding career education must be discussed as matters of judgement and preference. There is no standard against which to measure these judgements and preferences. Career education has been the subject of much exhortation but very little analysis; much rhetoric but little reflection. Yet it is an extremely complex concept and its implementation is still at stages of trial. The fallacies and fantasies listed hereunder are
expressions of a single view and a view with limited boundaries of tolerance. They are as follows:

1. Except at a temporary stage of installation, career education cannot be implemented at a single level of education. The concept requires movement elements which expand and extend throughout and beyond the elementary and secondary years. The purposes of career education, as described in this paper, cannot be achieved by a partial program of career education.

2. The organizational and structural problems of American education are still too formidable to accommodate a majority of students in programs of career education. Schools which are too small to establish a comprehensive vocational program are also too small to implement the requisites of a career education program. The major cities of the North and the East have opted for specialized vocational high schools, thus leaving the remainder of the schools rather badly organized to provide for the job-entry skill requirements of career education. The skill center or the area vocational school concept is not well distributed across the country. The capacity of the educational establishment to accommodate career education is thus very limited, a problem which is not attacked by any of the forms of career education.

3. Career education which does not rely upon expanded vocational and adult education opportunities will both a fallacy and a hoax. Career decision-making which is not followed by career training opportunities cannot survive as a part of programmed career education. Worse, if career education is followed by placement in the least remunerative jobs of the community with no opportunity for retraining or upgrading, then career education will be identified with sustained poverty rather than sustained opportunity. An expansion of vocational
and adult education is essential to the survival of the concept of career education.

4. The costs of implementing career education have been grossly underestimated. Current appropriations are providing for some exemplary elements of a limited number of partial programs. Full implementation of career education for only its vocational training and placement aspects would cost from 10 to 15 multiples of current state and federal appropriations.

5. Career education is not an emphasis which is unique to the American scene. It is a statutory program in Sweden with an operational history of more than five years. It has functioned in the USSR for more than three years as a combined school and employer based program. As an employer-based form it functions in England as a type of adult education. It is being advanced by UNESCO under the rubric of "Lifelong Education". With a variety of interpretations, career education is a world-wide movement.

Summary

The purposes and features of career education are more demanding and formidable than any which have been advanced by any system of education. It is unlikely that any school system has fully implemented it. The concept is not new, it is drawn from previous programs and previous advocates.

There are some elements which are new including a supportive research base, some economic relationships which require some changing assumptions and some administrative spokesmanship at the highest levels.

Also included are fantasies and fallacies about the organizational, economic, and conceptual capacity of the American educational system to absorb more than a superficial commitment to career education.
NOTES


4See Education For All American Youth (1944) and Education For All American Youth, Revisited (1952). National Education Association, Educational Policies Commission. See also the AVA Convention Resolution on Career Education, 1966.


STRATEGIES FOR IMPLEMENTING CAREER EDUCATION:

A SCHOOL BASED MODEL

By

AARON J. MILLER

Coordinator of Field Services & Special Projects,
and Associate Professor of Vocational-Technical Education

The Center for Vocational & Technical Education

The Ohio State University

Columbus, Ohio

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STRATEGIES FOR IMPLEMENTING CAREER EDUCATION:
A SCHOOL-BASED MODEL

When one considers the development and operation of a system of education, there are a number of approaches that can be taken. One approach would be to develop a system such as those presently found in many public schools. Unfortunately, many of these systems are disjointed and incremental. Some are based upon the teaching of a variety of educational disciplines for their own sake, with no other uniform purpose than the completion of some 13,000 to 15,000 aggregated hours to qualify the student for exiting from the system.

Another approach would be to select a unifying theme for the system. This theme might be any worthy goal for student development that could be achieved through infusion of the total curriculum. Notable examples might be citizenship or spiritual development. For the purposes of the Comprehensive Career Education Model project, the unifying theme selected was "Career Development--A Common Need and Experience Shared by Everyone in our Society."

Before a program in Career Education can be developed, Career Education must be defined. While the term has been an attractive one, there have been few attempts at defining Career Education in specific operational terms.

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. It is comprehensive
in that it:

1. Progresses from early childhood into the adult years.

2. Involves all students regardless of their post-secondary school plans.

3. Involves the entire school program and the resources of the community.

4. Unites the student, his parents, and the schools, the community and employers in a cooperative educational venture.

5. Provides the student with information and experiences representing the entire world of work.

6. Supports the student from initial career awareness, to career exploration, career direction-setting, career preparation and career placement, and provides for placement follow-through, including re-education if desired.

At the present time, the school-based CCEM is funded to address program requirement from Grades K through 12. However, this does not mean that a Career Education system should be limited to K through 12. Career Education extends through adult education and should encompass the needs of career development, re-development, career entry, and re-entry from pre-school through the entire career life of the individual. For the objectives of this project, the program requirements are to structure an educational program for Grades K-12 around the career development of each student which:

1. Restructures the entire educational program around the student's real life developmental needs.

2. Integrates the academic knowledges and skills with occupational training.

3. Assures that each exiting student will be prepared for a further
Career Education program and for entry into an occupation.

4. Provides for each student a program relevant to his becoming a self-fulfilled productive and contributing citizen.

5. Incorporates community resources and non-school educational opportunities.

A CAPSTONE EFFORT

The initial planning information provided to The Center for Vocational and Technical Education at The Ohio State University indicated that a "capstone" effort would be an appropriate strategy for conducting this developmental project. That is, it was assumed that there were many school districts or local education agencies (LEAs) presently engaged in Career Education activities. It was reasoned that after identifying several pilot test sites, a prime contractor could provide these LEAs with the professional expertise necessary to constitute a "capstone" for their career development efforts. Furthermore, if additional curriculum units or support systems were needed to complete the LEA programs, these were assumed to be readily available from a variety of other school districts currently involved in Career Education activities.

For a "capstone" concept to be viable, certain assumptions must be made. These are:

1. That a clear definition exists among all participating school districts, the U. S. Office of Education, and participating agencies.

2. That there exist many Career Education curriculum units or components and that these are available in validated, transportable form.
Initial investigation by the prime contractor indicated that neither of these assumptions was valid. A uniform definition of Career Education did not exist among agencies. Additionally, while many Career Education components existed, these curriculum units and activities were generally unvalidated and were not easily transportable to other sites for pilot testing and installation.

A REFINED CCEM PROJECT STRATEGY

A refined project strategy called for the conceptualization and operational definition of a Comprehensive Career Education Model. This operational definition had to be developed so that a consensus could be gained among all participating agencies. Once this common agreement of an operational definition of Career Education was obtained, the project could proceed with assessing the quality of "in-place" Career Education units at the pilot testing sites. Also, work could begin in conducting a national search to identify existing "on-the-shelf" Career Education curriculum units, or those units available at other school districts and state departments of education not a part of the pilot test group.

With this knowledge of nearly all available Career Education curriculum units, one could identify gaps in the conceptualized CCEM program. Once these gaps were identified, units could be selected to fill the gaps; or if appropriate units did not exist, limited development could take place to fill the gaps. Once a complete set of curriculum or treatment units was selected and refined, the set of units comprising the CCEM program could be pilot tested and Local Education Agency personnel could be trained to install and implement the program.
OPERATIONALLY DEFINING CAREER EDUCATION

The first task of the project staff was to review existing Career Education literature, to investigate the previous work of theorists and practitioners in the area of Career Education, and to examine the work of career development and human development specialists in an effort to determine the durable elements of a Career Education system. Following this procedure, a set of elements was identified and tested with advisory groups. It is acknowledged that there may be many sets of elements which identify or describe Career Education. However, the set identified in Figure 1 comprises the elements selected for use in this project.

The elements listed in Figure 1 must lead to certain identified outcomes. For example, the element of Career Awareness, which is the student's knowledge of the total spectrum of careers, must lead to his eventual Career Identity. That is, Career Identity being defined as understanding one's potential roles within the world of work. Other Career Education elements and their associated goals include the elements of: Self-Awareness, which leads to Self-Identity; Appreciations and Attitudes, which leads to Self-Social Fulfillment; Decision-Making Skills, which leads to Career Decisions; Economic Awareness, which leads to Economic Understanding; Skill Awareness and Beginning Competence which leads to Employment Skills; Employability Skills, which leads to Career Placement; and Educational Awareness, which leads to Educational Identity.

Once these elements were identified, a Matrix was developed that could provide an operational definition of Career Education. This is the definition upon which the program for the school-based CCEM is built. An illustration of the CCEM Matrix is shown in Figure 2.
BASIC CAREER EDUCATION ELEMENTS

CAREER EDUCATION ELEMENTS

CAREER AWARENESS
Knowledge of the Total Spectrum of Careers

SELF AWARENESS
Knowledge of the Components that Make Up Self

APPRECIATIONS, ATTITUDES
Life Roles--Feeling Toward Self & Others in Respect to Society & Economics

DECISION-MAKING SKILLS
Applying Information to Rational Processes to Reach Decisions

ECONOMIC AWARENESS
Perceives Processes in Production, Distribution and Consumption

SKILL AWARENESS & BEGINNING COMPETENCE
Skills--Ways in Which Man Extends his Behaviors

EMPLOYABILITY SKILLS
Social & Communication Skills Appropriate to Career Placement

EDUCATIONAL AWARENESS
Perceives Relationship between Education & Life Roles

Element Outcomes

CAREER IDENTITY
Role or Roles Within the World of Work

SELF IDENTITY
Know Himself--Consistent Value System

SELF SOCIAL FULFILLMENT
Active Work Role
Satisfying Work Role

CAREER DECISIONS
Career Direction, Has a Plan for Career Development

ECONOMIC UNDERSTANDING
Solve Personal & Social Problems in an Economic Environment

EMPLOYMENT SKILLS
Competence in Performance of Job-related Tasks

CAREER PLACEMENT
Employed in Line with Career Development Plan

EDUCATIONAL IDENTITY
Ability to Select Educational Avenues to Develop Career Plans

Figure 1
### CAREER AWARENESS

<table>
<thead>
<tr>
<th>CAREER IDENTITY</th>
<th>SELF IDENTITY</th>
<th>SELF-SOCIAL FULFILLMENT</th>
<th>CAREER DECISIONS</th>
<th>ECONOMIC UNDERSTANDINGS</th>
<th>EMPLOYMENT SKILLS</th>
<th>CAREER PLACEMENT</th>
<th>EDUCATIONAL IDENTITY</th>
<th>ELEMENT OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELEMENTS OF CAREER EDUCATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 2**

**Columns:***
- K
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

**Rows:***
- CAREER AWARENESS
- SELF AWARENESS
- APPRECIATIONS, ATTITUDES
- DECISION-MAKING SKILLS
- ECONOMIC AWARENESS
- SKILL AWARENESS
- EMPLOYABILITY SKILLS
- EDUCATIONAL AWARENESS

**Legend:**
- Up arrow indicates upward progression.
- Down arrow indicates downward progression.
The CCEM program Matrix contains the eight Career Education elements along one axis, with Grades K through 12 positioned along the other axis. The individual Matrix cells are filled with individual Career Education goals for that grade level.

Based upon these goals, general performance objectives are developed that will achieve the identified goals. This program development Matrix presently consists of 32 pervasive themes that are more definitive threads of the eight elements and that extend across all grade levels. Within these themes are some 1,500 goals and 3,000 general performance objectives. This program development Matrix describes and defines Career Education in an operational way.

The goals and performance objectives were developed jointly by The Center for Vocational and Technical Education staff, the professionals at the Local Education Agencies (pilot test sites), and numerous outside consultants.

A modified Delphi technique was used to develop the Matrix goals and objectives, which were then tested and refined through many iterations.

An example of the levels of specificity in the Matrix is shown in Figure 3. In this example, the element is Career Awareness. This is one of the eight basic Career Education elements. Under this element there are five pervasive themes which extend across all grade levels. One of these themes is element theme number 14 which is: "The student will understand that 'career' involves progression through stages of preparation for the performance of occupational roles and they involve a change in basic vocational direction."

Within the Matrix cell for this element and theme at the fifth grade level, there are certain goal statements relating to this theme and to the associated performance objectives. A sample goal statement for element
**ELEMENT**  
Career Awareness

**GRADE** 5

**ELEMENT THEME NO.** 14

**ELEMENT THEME**  
The student will understand that "career" involves progression through stages of preparation for and the performance of occupational roles and may involve a change in basic vocational direction.

**GOAL STATEMENT**

<table>
<thead>
<tr>
<th>Bl.0 The student will recognize that some jobs have unique specific requirements for success.</th>
<th>Bl.1 Given a list of skills required for success in some jobs, and a list of personal interests, skills, aptitudes, etc., the student will list in writing one or more examples of match or mismatch of job success requirements and individual variables.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cl.0 The student will understand the relationships between present job experience and those of the future.</td>
<td>Bl.2 Given instruction, the student will classify specific job requirements into job clusters on the basis of unique or similar requirements or types of requirements.</td>
</tr>
<tr>
<td>Dl.0 The student will apply basic responsibilities and performance standards for any job in general vocational situations.</td>
<td>Cl.1 Given a class interview with a worker, the student will compare the things that the class is studying with the skills the worker had to learn before he could perform his job and thus understand the relationship of present experiences to future goals.</td>
</tr>
<tr>
<td></td>
<td>Cl.2 Given a list of jobs and school activities, the student will match jobs with school activities necessary for the job and understand their relationships.</td>
</tr>
<tr>
<td></td>
<td>Dl.1 Given instruction, the student will list acceptable behavior when applying for a job and role play to illustrate this behavior.</td>
</tr>
<tr>
<td></td>
<td>Dl.2 Given a list of behaviors, the student will be able to classify those always acceptable and those sometimes acceptable.</td>
</tr>
<tr>
<td></td>
<td>Dl.3 Given the opportunity to observe one occupation, the student will be able to describe four specific duties of that worker.</td>
</tr>
</tbody>
</table>

Figure 3 24
theme number 14 at grade 5 would be goal statement D1.0 which says:
"The student will apply basic responsibilities and performance standards
for any job in general vocational situations." One general performance
objective related to this goal is performance objective D1.3 which
states: "Given the opportunity to observe one occupation, the student
will be able to describe four specific duties of that worker."

With these goals and performance objectives developed by grade levels,
appropriate curriculum or treatment units may be selected, and refined or
developed to deliver these goals at the various grade levels.

THE DELIVERY SYSTEM FOR CAREER EDUCATION

If Career Education is to be transportable as "infusion units," the
curriculum or treatment units must conform to some standard format. In a
standardized format, units can be pilot tested, refined, installed, and
transported to other appropriate settings with some assurance of quality
control. In the Comprehensive Career Education Model, both a standardized
format and guidelines for curriculum unit revision or development
have been designed. These guidelines and format specify the following
components of a Career Education unit:

1. A teacher's guide which specifies:
   A. The rationale for the unit.
   B. Intended use of the unit by suggested grade level, subject
      area(s), time, grouping, and special considerations.
   C. Goals and Performance Objectives.

2. Teaching procedures:
   A. Learning activities
   B. Resources
   C. Performance evaluation
3. Teaching Materials
4. Evaluation Procedures
5. Specifications for In-service Training of the teacher or persons implementing the unit.

For purposes of the school-based CCEM project, these treatment or curriculum units may vary in length up to 20 classroom hours. These units will then be used as "infusion units" in existing curricula. For example, a 20-hour Career Education unit for tenth grade mathematics might infuse a 150-hour mathematics sequence.

PRESENT PROGRAM DEVELOPMENT STATUS

The first group of Career Education units has been selected and placed in the hands of the professional personnel at the six pilot test sites. These Local Education Agencies have contracted to refine a number of specific units according to a standardized guide and format developed collectively by the Center for Vocational and Technical Education and representatives from the pilot test sites. As these units are refined, the Center for Vocational and Technical Education will systematically monitor the progress and provide uniform quality control for the pilot test sites.

After the units have been refined, they will be pilot tested at the respective refinement sites. Those units that meet the basic minimum criteria for success will be selected to provide a first core of CCEM units to be installed at all six pilot test sites. Following selection of the core units, an in-service training program for the teachers and installation staff will be conducted. This in-service training will begin in the summer of 1972 and will continue throughout the 1972-73 school year to prepare teachers and professional staff for CCEM installation. The
installation of the first CCEM units will begin in September of 1972.

SUMMARY

The school-based Comprehensive Career Education Model project, conducted by the Center for Vocational and Technical Education as a prime contractor of the U. S. Office of Education, is working with six pilot school districts in the development of the CCEM model. These six districts are Pontiac, Michigan; Jefferson County, Colorado; Los Angeles, California; Mesa, Arizona; Atlanta, Georgia; and Hackensack, New Jersey.

The present project plans are to continue to identify appropriate career oriented curriculum materials and educational strategies that will be refined, individually pilot tested, and validated in the six school districts and eventually will be installed in all six test sites. Installation will begin in September of 1972 for the 1972-73 school year.

After validation of the CCEM curriculum materials and program strategies, the results of the model—including curriculum materials and back up systems—will be made available to other interested school districts for their installation and adoption.
CAREER EDUCATION REFERENCES


Employer Based Career Education (EBCE)*

A Model Developed at the Far West Laboratory for Educational Research and Development

Bela H. Banathy and Robert M. Peterson

The Far West Laboratory for Educational Research and Development has a contractual arrangement with the Office of Education to study the feasibility of Employer Based Career Education (EBCE) and engage in design and pilot work in order to test feasibility.

Our initial analysis indicated a requirement for four sequential phases:

- an exploratory analysis of the notion of EBCE (Phase One)
- in-depth feasibility studies in the various key areas of EBCE (Phase Two)
- some advanced design work (Phase Three), and
- pilot experimentation and field test (Phase Four).

During Phase One we have asked five questions:

- why Career Education in general and why EBCE in particular
- to what issues -- problems -- needs should EBCE respond
- what are desired outcomes of EBCE
- given outcomes: what might EBCE look like
- what are issues and areas one should explore and study in assessing the feasibility of EBCE?

In response to the last question we have identified some twenty-five areas which indicated a requirement for in-depth study and analysis.

Seven of the areas related to input studies, six to the curriculum model, eight studies focused on support systems and interface studies and the rest on the identification of R&D requirements and R&D work.

During Phase Two we have conducted an in-depth study of feasibility in the areas identified and concluded that the conceptual model that has emerged as the outcome of our studies has proved itself to be feasible and worthy of pilot testing.

We are now in the advanced design phase (Phase Three) and are making arrangements for pilot testing the model (Phase Four).
I. THE EBCE CONCEPT

The EBCE model to be implemented by Far West Laboratory is defined by the seven basic features listed below. These features have been derived from earlier documents issued by the Office of Education, from analytic and conceptual studies at Far West Laboratory, and from discussions held with members of the Office of Education Task Force on Career Education.

1. **Total secondary program.** EBCE will be a comprehensive educational program, combining academic, vocational, social, and personal preparation of the student. It is intended as an additional option for the junior-high and high-school student, rather than as a supplement to the public school or other programs.

2. **Cross-section of students.** The program is designed to attract and serve a cross-section of youth, ages 13 to 18. It will not be a specialized program for a particular subset of students, such as drop-out, college-bound, or economically disadvantaged, but is intended to accommodate all of these sub-groups. During the first year of operation, the Far West program will concentrate on ages 16 and 17, but will ensure that the student body is heterogeneous with respect to sex, race, and college-bound versus non college-bound.

3. **Control outside the schools.** The educational program will not be based in the existing public schools. It will be controlled at both the policy level and the operational-management level by an organization outside the public school system. Initially this control will be provided by Far West Laboratory. As soon as practicable, control will be transferred to a consortium of public and private employers -- those who supply the real-life settings and resources used in the learning process.

4. **Career exploration.** Each learner in the program will be exposed to a variety of careers in order to provide him with reasonably
diverse and substantial experience on which to base his selection of a career path.

5. **Individualized.** The learning process will be tailored to the individual student's interests, abilities, pace, and style. He will participate, in a very real sense, in planning his learning program and will assume increasing responsibility for his own education.

6. **Performance based.** Learning objectives for each student will be in terms of required or desired competencies, and his educational progress will be judged on the basis of his ability to demonstrate those competencies. The emphasis is on acquired skills and knowledge rather than on the process by which they were acquired.

7. **Cost-comparable.** A major design criterion is to achieve favorable cost-benefit relationships so that the resultant system is comparable in cost with the public schools and is economically feasible.
II. EDUCATIONAL GOALS OF EBCE

The purpose of EBCE is to prepare each student for the diverse roles of a competent adult. Students will be exposed to real-life experiences during their "school years" in order to acquire the understanding, attitudes, habits and skills they will need to survive and prosper in a complex, rapidly changing technological society.

The concept of Career Education focuses on several major needs of students, in terms of preparation for choosing and attaining their career (life) goals:

1. **Self-awareness.** Each student should be helped to acquire knowledge and understanding of himself -- his goals, abilities, interests and values so he will be able to realistically plan and pursue his life path.

2. **Self-sufficiency.** Each student should be helped to develop the necessary knowledge and skills to maintain good health and proper hygiene; to manage efficiently personal finances and other resources; to accept responsibility for and function comfortably in a sequence of mature social roles; and to pursue self-fulfilling goals in his personal development.

3. **Decision-making skills.** Each student should be helped to develop his ability to gather information, analyze it critically, and make judgments and decisions based upon the available information.

4. **Social skills.** Each student should be helped to develop the skills required to communicate effectively with other persons, develop understanding and tolerance of individual and group differences and values, and work cooperatively with others in group endeavors.

5. **Basic cognitive skills.** Each student should be helped to develop skills of logical analysis as well as the ability to read, write and compute. These skills are essential to personal development, continued education, and work satisfaction.
6. **Career skills.** Each student should be exposed to a broad range of occupational, avocational and leisure activities, so that he has the information and experience necessary to make rational career choices in each of these realms. Each student should be encouraged to develop some minimal skills representative of vocational/avocational areas that interest him as bases for further growth and development, and to choose a specific career path.

7. **Skills of employability.** Each student should be helped to develop basic skills essential to seeking, acquiring and maintaining employment so that he may compete more successfully for available job opportunities.
III. THE EBCF CURRICULUM

A. There is a set of characteristics that defines the EBCF Curriculum and establishes EBCF as an alternative to existing schooling.

1. The EBCF Curriculum is integrated. The prevailing practice is to structure education into academic, vocational, and general education domains and furthermore to divide these domains into subject matters. The EBCF Curriculum Model integrates vocational, avocational and leisure pursuits with the intellectual, social and personal development domains. (See Figure 1).

2. Curriculum is built around the individual. One of the key dimensions in which the model is an alternative is that while existing schooling is built around classes of students, the EBCF model is designed around the individual learner.

The prevailing practice of schooling today is to provide a generalized curriculum which is derived from stated educational goals. Attempts made to adjust curriculum to the individual learner cope -- at best -- only with differences in learning rate. Curriculum content, its context, and method of presentation are identical. Career, however, is unique to a given individual and the individual is also a unique being. Applied to education, the uniqueness notion of career and individuality will lead us to design curriculum in which not only the mode but also the content and the context of the experience are tailor-made to fit the individual.

3. Another key characteristic of our curriculum is that learning is never context free; it is provided within the functional context of real life situation. Life situations are vocational, avocational, leisure and other involvements which the learner may pursue and which -- in an important way -- provide situational framework of his learning experience. These situations are the functional contexts in which learning takes place.
COGNITIVE COMPETENCE
- Cognitive skills and cognitive heuristics
  - Communication skills (verbal, reading and writing)
  - Quantitative skills
  - Skills of problem solving and decision making
  - Skills of logic

SELECTED CAREER/LIFE COMPETENCES
- Information/orientation about all viable careers/activities (vocations/avocations/leisure)
- Exploration of various career clusters (self-selected)
- Representative skills attained in self-selected areas
- Skills and attitudes of employability
- Entry level skills acquired in one or more vocations/avocations

SOCIAL COMPETENCE
- Skills and attitudes relevant to effective group membership
- Leadership behaviors, such as:
  - Get and give information
  - Get to know—and how to use—the resources of the group
  - Evaluate
  - Plan and make decisions
  - Know the characteristics of members of the group
  - Keep the group agreeable to members
  - Control and correct
  - Counsel
  - Represent the group
  - Set examples
  - Share leadership

PERSONAL COMPETENCE
- Information/knowledge base
  - For decision making
  - Self-sufficiency in maintaining life, health, property
  - Acquisition of sense of own uniqueness
  - Knowledge of self
  - Positive self-image
  - Knowledge of life styles
  - Own life style
  - Habit of self-actualization

CAREER EDUCATION: A CURRICULUM MODEL

SELECTED CAREER/LIFE COMPETENCES
(Vocational/Avocational/Leisure)

- Information/orientation about all viable careers/activities (vocations/avocations/leisure)
- Exploration of various career clusters (self-selected)
- Representative skills attained in self-selected areas
- Skills and attitudes of employability
- Entry level skills acquired in one or more vocations/avocations

REPRESENTATIVE CAREER/LIFE SITUATIONS

Multiple Vocational/Avocational/Leisure/Personal/Activities (Individual & Group Activities)
e.g.: Work experience
Public service
Community action
Recreation
Personal development

INTERACTIVE

Figure 1
in the four competence domains (intellectual, social, personal and vocational/avocational/leisure). Life situations are here and now rather than something in the distant future for which we need to be prepared. The notion is that the best way to prepare for the future is to help the individual to acquire competences which enable him to perform successfully in life situations now.

4. The educational experience projected in our model is performance based. The student will not be required to undergo an experience where he can already demonstrate competence and he will be allowed to move on whenever he has acquired the desired skill or knowledge.

5. This approach is in sharp contrast with the prevailing practice of assigning students to classes, requiring their attendance, and evaluating their performance on tests. In EBCE curriculum experiences are planned, programmed and monitored on a partnership basis involving the learner, the staff, and other resource personnel. Through such planning and programming, arrangements are being made in the environment of the learner to enhance mastery of the learning task. The learner is actively and intensively involved in planned experiences, and staff and other resources facilitate the success of the learner.

6. Responsive Learning Environments are created. The resource boundaries of the conventional school are set around the physical plant with only occasional excursions allowed beyond the boundaries of the plant. A student of a typical high school can legitimately spend all his school time within the physical boundaries of the school. In our model no such boundaries exist. The resources available to the learner are those of the larger community. New territories for learning are identified, developed and new learning environments created which respond to the learner's requirements in attaining specific learning.
As we look at the characteristics described above, we recognize that some of those have been implemented in various pioneering projects. The uniqueness of EBCE is that it brings together all these characteristics into one operational model for the attainment of outcomes that are specific to EBCE. This model projects a novel organization of an educational experience, and a new configuration of innovative educational approaches.

B. The Instructional and Learner's Systems

The curriculum characterized above is operationalized through the activation and interaction of two systems: the instructional and learner's systems.

The Instructional System presents:

- A content structure that is developed in the four curriculum domains (Figure 1). Through a process of progressive specification the content is defined at the most detailed-module-level by: (1) performance or experiential objectives, (2) objective relevant measures and (3) prerequisites.
- A set of exemplary (alternative) activities that represent ways by which objectives might be attained.
- An information system that provides easy access to information on (1) people, (2) materials and media, (3) procedures, and (4) territories that are available to EBCE and that can be organized to create the resources, environment, and procedures for potential learning activities.

The product of the Instructional System is a great variety of learning opportunities available to the learner.

The Learner's System introduces structures, operational arrangement, and resources by which the learner's activities can be planned, programmed, implemented, and monitored. The activity is built based on information
available from the instructional system, it provides for the student's EBCF experience in the context of real life in selected vocational, avocational, leisure and other life situations. Purposeful activities brought together and sequenced in time and organized into a situational scheme become the student's experience trail. The critical characteristic of the experience trail is that the learner always knows (1) what trail he is on, (2) why, (3) where it leads, (4) how far he has gone at any given time, and (5) what he has to do to make further progress along the trail.

The product of the Learner's System is personal growth and knowledge, competence, attitudes, and values that the student has acquired.
IV. CONCLUSION

The purpose of the Far West Laboratory's project is to develop and field test a pilot version of the model just described. We have analyzed, amplified, and refined the EBCE concept into a solid working idea of what we seek to build, and have completed a preliminary design, a blueprint specifying how to begin. We are ready to move from design to empirical development.

The model will take more concrete shape as we develop it in the field. We will use formative information gained through practical experience to modify the model as we go, retaining and improving what works, and discarding what does not. Our plan is to create a test bed in Oakland, beginning with a small sample of students, refining techniques, steadily developing and testing the evolving system.

Our goal is to develop a system that is exportable and repeatable. This requires systematically "looking through" the Oakland model, at every step along the way, to insure that the procedures and materials we develop will serve as an effective guide for future implementers.

If our model works, our end product will consist of more than a successful small-scale operation in Oakland. Our goal is to be able to provide a potential user with a complete set of guidelines, enabling him to decide whether and determine how to implement and operate an EBCE system including a full systems description, cost analysis, inventory of resources, plus the necessary documentation and supporting materials to facilitate implementation.
THE HOME-COMMUNITY BASED MODEL
("Model Three")

of the
U.S. OFFICE OF EDUCATION's CAREER EDUCATION R&D PROGRAM

A SYNOPSIS

Dr. Cornelius F. Butler
Deputy Director
Career Education Development Task Force
THE HOME COMMUNITY BASED MODEL

I A GENERAL DESCRIPTION

PURPOSE

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.

STRATEGY

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 developing 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 system.

DEVELOPMENTS-TO-DATE

In July 1971, the Education Development Center in Newton, Mass. 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 in 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.

It is expected that the model will commence feasibility testing in two urban areas in late summer, 1972.
II A HYPOTHETICAL FEASIBILITY TEST

A. OBJECTIVES

The objectives of the first year of feasibility testing:

1. To demonstrate the feasibility of the Home/Community Based Model in a medium-sized metropolitan area, and to provide specifications for variants of that Model for implementation in other cities.

2. To provide information, materials, and to develop a resource center for technical assistance to implementors of variants of the Model in other cities.

3. To develop methods and measures through which the effectiveness of the pilot model and its variants may be evaluated.

B. ASSUMPTIONS UNDERLYING THE HOME/COMMUNITY BASED MODEL

The design of the Home/Community Based Model is based on the following assumptions which reveal both the problem being address and the basis for approaching it:

1. There are substantial home community based populations - the aging, women, young people in transition - who have significant needs for career education, and who do not avail of existing resources for career education.

2. These populations may be reached through the mass media - in particular, through the use of television, radio and the press.

3. There is a limited but expandable capacity on the part of the existing service network (community colleges, continuing education programs, volunteer organizations, and the like) to respond to these people around career education issues.

4. There is a need for a central switching process to connect existing career education service agencies to one another and to the career education interests of home community based populations.

C. SPECIFIC GOALS

The specific goals of the Home/Community Based Model are these:

1. To reach home-community based populations presently not using career education resources.

2. To involve substantial numbers of them in career education and, by doing so, to expand their options for entering into the life of the community - through occupation, professional employment or through sustained volunteer activity.
3. To help agencies and individuals in the community, who could provide career education, to gain access to these populations; to integrate their efforts as they do so, and to become increasingly responsive to the emerging career education needs of these populations.

4. To identify those needed resources that do not exist in the community, and to recommend to the appropriate agencies, the development or provision of these services.

D. ELEMENTS

Use mass media to:
- attract the attention of home community based populations.
- probe the career education interests of these populations, and generate feedback about their needs.
- provide information about existing career education resources.
- inculcate certain skills related to engaging in career education.

Bring together existing career education agencies to:
- coordinate their efforts to reach home-community based populations.
- tackle problems of accessing the target population.
- identify and attempt to fill gaps in service.
- respond effectively to the emerging career education interests.

Establish a central vehicle (the Career Education Extension Service) to carry out network functions:
- receive and interpret feedback from home community based populations.
- refer individuals to existing agencies.
- identify problems of access, and aid in their solution.
- identify services gaps and assist in meeting them.
- gather and disseminate information about promising approaches to career education and about the effectiveness of existing approaches to it.
- systematically integrate all of the above.

It is a central theme of the Model to orchestrate, through the Career Extension Service, the use of mass media and the existing career education resources in order to help them reach and respond to the career education needs of home-community based populations.

E. PROCEDURAL CONSIDERATIONS

The Model aims at encountering substantial numbers of people (measured in thousands rather than hundreds):
- the use of mass media implies contact with relatively large numbers of people.
- a project of this magnitude cannot justify itself economically unless it encounters and benefits large numbers of people.
feasibility testing of the Model requires operation at reasonable scale.
The implementor will work through existing career education agencies. To
do otherwise would be both extraordinarily expensive and undesirable.
If these agencies were already providing adequate services to the home
community based population, the model would be superfluous. Hence, there
is no alternative to an effort to enable existing agencies to become more
responsive to the interests and needs of home-community based populations.
Although many urban situated career education agencies have already in-
dicated enthusiasm for the project, problems and difficulties especially
in coordinating these agencies, are certain to arise when concrete efforts
get underway. The feasibility testing of the model would not overlook these
but would anticipate them and be accountable for a strategy and style of
activity which would facilitate their solution.
INTRODUCTION

"Work" has historically been and continues to be an important aspect of the life of each individual in our society. Because of the dynamics of the culture and the changing structure of the work force, there appears to be an urgent need to reassess the role of education in preparing individuals to assume productive and satisfying careers within the extant and emerging occupational structure.

The purpose of this project was to develop a rationale for "education for work" which would have implications for planning, developing and operating programs at all levels of education. The project was divided into the following three phases: Phase I: the context of education for work; Phase II: the concept of education for work; and Phase III: implications for a delivery system. Since all of the phases of the project are not complete, this paper will simply provide a brief summary of the progress that has been made up to this point.

PHASE I: CONTEXT OF EDUCATION FOR WORK

Social-Psychological Context

Society is perceived as an aggregate of individuals who possess a shared way of life. The ultimate goal of society is maximizing the self-actualization of each individual and improving the quality of their shared way of life. In this context, society is equally concerned with the separate and collective quality of life of individuals.

In order to maximize the mutual self-actualization of society and its constituent members, roles have been created (within group subsystems) which are the functional contexts in which individuals interact and through which they may self-actualize and improve their shared way of life. Individuals are expected to play one or more roles in a kinship, political, production, associational, religious and educational groups in order to achieve self-actualization for both the individual and society.

Education and Work Context

Given the purposes of society, education is perceived as a sequence of planned, organized learning experiences intended to change the behaviors of individuals in a manner that will facilitate their interaction in all of the roles they are expected to play and thus facilitate self-actualization.

Activities can be categorized as either income producing or income consuming. Income producing activities yield direct income (wages, salaries, earnings) or indirect income (income savings) and can result in either delayed or immediate
satisfactions. "Work" is defined as activities which produce, process or distribute goods and services and which result in immediate income production for the individual or his assigns. That is, from an economic point of view, individuals "work" to earn direct income or they "work" to save income either for themselves or someone they designate. Roles comprised primarily of work activities are "work roles".

Education for work is a sequence of planned, organized learning experiences intended to change the behaviors of individuals as they interact with each other in work roles.

An individual's "career" reflects his/her total work history. Individuals are likely to have many different jobs or positions throughout their lifetime due to technological changes and the horizontal and vertical mobility of individuals within the occupational structure.

**PHASE II: THE CONCEPT**

The concept of education for work deals with four major areas: (1) definition and purposes, (2) categories of education for work, (3) scope and persons to be served, and (4) educational and other relationships.

Education for work is a societal mechanism for providing planned learning experiences which are intended to influence the behavioral capacities of the individual in the work role throughout his/her career. The terminal objectives of education for work are to enhance the mutual actualization of both the individual and society through the individual's participation in a work role.

Self-actualization for an individual can be assessed, at any point in time, by his job satisfaction (congruence between needs of the worker and the need satisfiers of the job). Job satisfaction may be classified as intrinsic satisfaction (satisfaction with job content) and extrinsic satisfaction (satisfaction with the job context). Similarly, society's satisfaction with the worker may be assessed at any point in time by the extent to which society is satisfied with the worker's production. Both intrinsic satisfaction (worker performance) and extrinsic satisfaction (job relevance to societal need) should be assessed.

Since individual and societal actualization occurs over time, satisfactions must be measured at different points in time and trends or patterns of satisfaction considered in order to determine the degree to which the terminal objectives of education for work have been achieved.

There are two major categories of education for work: the first category can be called "general education for work", which consists of (a) "basic education" (educational experiences applicable to all work roles as well as to some non-work roles), and (b) "occupational education" (educational experiences relevant only to all work roles). The second major category is called "specialized education for work" and consists of (a) vocational education (for less-than-professional-level work roles), and (b) professional education (for professional-level work roles).
Under the current work ethic, society is obligated to provide general education for work to everyone. Society is also obligated to provide specialized education for work to those who wish to enter work roles (a) that can be learned most efficiently by planned, organized experiences, or (b) for which appropriate unplanned experiences are not available. Society must also satisfy the continuing need for specialized education for work throughout each individual’s work career.

Education for work must necessarily be closely coordinated with other educational activities as well as societal forces that influence the work role. The fact that many of the same behaviors are appropriate for work and non-work roles, and that the total self-actualization for an individual is the sum of his/her satisfactions across all of the roles played, demand that efforts for education for work be coordinated with planned learning experiences to prepare individuals for non-work roles.

PHASE III: IMPLICATIONS FOR A DELIVERY SYSTEM

Phases I and II provide the essential framework for developing an effective and efficient education for work delivery system. Although little progress has been made with Phase III, it is anticipated that it will deal with (a) program planning, (b) curriculum development, (c) program evaluation, and (d) program management and control. This section will set forth the value parameters within which empirical research can determine the most efficient means to obtain the prescribed terminal ends of education for work.