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    The overall purpose of this study was to identify the descrip-
tive factors that make up a workable Career Education Concept and to
apply this criterion to the development of a Career Education Com-
ponent in the teacher education program.

    The study was designed to meet four specific objectives:

    (1) To identify potential factors of Career Education.

    (2) To develop a research instrument for measuring

        the response of educators relative to the importance

        of each identified Career Education descriptive factor.

    (3) To identify the importance of selected Career Education

        descriptive factors to professional educators who have

        demonstrated an awareness of and an interest in the

        Career Education concept.

    (4) To utilize the findings to develop a suggested Teacher

        Education model in Career Education.

The first objective was met by making a survey of contemporary literature to identify the descriptive terminology in current use in reference to Career Education. This included sources such as E.R.I.C., dessertation abstracts, periodicals, and recent publications on the subject. This was followed by extensive interviews with those involved in the promotion and implimentation of Carrer Education. A total of 190 statements of potential descriptive factors were identified from the above sources.

The second objective was realized in two steps. First, by submitting the original list to a jury panel of experts made up of individuals in Career Education, Vocational Education, Teacher Preparation and general Education, who eliminated any duplications or ambiguous statements, thus reducing the total number of descriptive factors to 103. In the next step these factors were submitted by mail to 19 individuals who had distinguished themselves as leaders in Career Education. These experts evaluated each of the descriptors by accepting, modifying or rejecting it. From the results of this process a 72 item questionnaire was created using a modified Delphi technique. This final instrument was field tested before being submitted to the 170 members of the study population.

To accomplish the third objective the study utilized a population made up of state directors of Career Education in each of the 50 states, Deans of Education in each of the Land-Grant colleges and universities, and certain other individuals who have shown themselves interested in furthering the concept of Career Education, from each of

the following areas: Public Schools, U. S. Office of Education,

State Departments of Education, Centers for Vocational Education,

Business Groups, and the International Office of Education.

The results of this test indicated:

1. There were certain descriptive factors considered

   important and essential to the concept of Career

   Education by respondents throughout the United

   States.

2. There was no significant difference in the way

   the respondents from all service areas viewed

   these descriptive factors.

Objective four was reached by identifying certain descriptive

factors of Career Education as being of real importance for inclusion

in a teacher education program. Basic to the interrelationship

and use of these factors, the study revealed, is the implication

that none of them operate in isolation, but each is a part of a

developing multi-dimensional concept. In the development of an

innovative teacher education curriculum it is essential to recognize

that while certain descriptive factors are best introduced in Phase

I or Phase II (sophomore or junior year), the Career Education con-

cept cuts across all levels of teacher education and should be

viewed in that light.

Descriptive Factors of Career Education
Applied to a Teacher Education Model

by

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CHAPTER I

INTRODUCTION

> A challenging theoretical task for basic researchers
> in any discipline -- perhaps an essential step for
> forther progress -- might consist of constructing a
> paradigm of the concept of Career Education, suggest-
> ing its essential properties and its implications for
> the reform of schooling.
> — Donald E. Crawford

In July 1973, three hundred educators from forty states, Canada

and Puerto Rico, gathered in a conference at Rutgers University in an

effort to outline the factors which make up the multi-faced concept

of Career Education. (19)   According to Sidney Marland (47), if

Career Education is to be the revolutionary instrument in education

that the times demand, its concept must be more clearly identified,

and this, he says, must be done "by hard and urgent debate across the

land by teachers, laymen, students and administrators." In harmony

with this challenge, the basic foundation of this study is to identify

the descriptive factors that make up a workable Career Education con-

cept and apply them to a teacher education model.

Statement of the Problem

The progress of the development and acceptance of the Career

Education concept is being hindered by a lack of understanding of

what this new trust in education embodies. Most definitions of

Career Education that have been advanced are descriptions of pro-

gram applications rather than actual conceptual definitions. As a

consequence, the interpretations of the concept vary with each

individual that confronts Career Education. Some interpret the con-

cept as a new name for the older, narrower concept of Vocational

Education. Others view Career Education as all of education, while

still others either locate themselves somewhere between these two

points on the conceptual spectrum or are content to operate without

any definition.

The principal problem confronting educators is to thoroughly

examine the Career Education concept and to identify the factors that

should be included in a working definition, and to develop teacher

preparatory programs that incorporate this concept in the training

of personnel. It is critical that solutions to this problem be

sought with urgency.

The Major Problem of this study is that of identifying the

descriptive factors that make up a working definition of Career

Education and the recommended point in the teacher preparatory

curriculum where these factors should be introduced.

Purpose of the Study

The overall purpose of this study is to identify the descriptive

factors that make up a workable Career Education concept and to apply

this criterion to the development of a teacher education program in
Career Education or a Career Education component in teacher educa-
tion.

Objectives

This study is designed to meet the following specific objec-
tives:

1. To identify potential descriptive factors of Career
   Education.

2. To develop a research instrument capable of measur-
   ing the response of educators relative to the
   importance of each identified Career Education
   descriptive factor.

3. To identify the importance of selected Career
   Education descriptive factors to professional
   educators who have demonstrated an awareness of
   and an interest in the Career Education concept.

4. To utilize the findings to develop a suggested
   teacher education model in Career Education.

Rationale for the Study

Career Education today is a general and highly symbolic concept.
Because of this, there are many divergent views as to what it is and
what it should accomplish. (45)

Some look upon it as preparation for work, equating it with vocational education. (35)   The fact that the Educational Index, as late as 1972, listed Career Education under the heading of Vocational Education indicates that this is quite a generally accepted opinion. (15)   Typical of the advocates of the "vocational only" definition are the comments of T. Anne Cleary, Executive Director of Examinations of the College Entrance Board, who considers the current interest in what is being called Career Education as possibly the strongest return to the vocational theme since the 1930's. (7)

Morris Shiparo supports this by advocating mandatory occupational courses for all students, believing this to be the key to the success of the Career Education concept. (62)

Kenneth B. Hoyt states that Career Education should be looked upon only as the "preparation-for-work component" of education. (37)

There seems to be, however, some agreement that Career Education is more than Vocational Education. In fact, except for those who are involved solely with Vocational Education, most authorities argue for expanding rather than narrowing the Career Education concept. However, the statement by Sidney Marland (47), Sterling McMurrin (53), and Lawrence P. Davenport (14) that "All education is Career Education," seems to be entirely too broad, too general to be workable or to permit it to be universally accepted. John W. Letson (43) warns that leaving this concept too generic in definition will result in confusion and the danger of "this truly significant effort"

following the path of other promising, but now forgotten, innovations.

Many efforts have been made to get the Career Education ball rolling. Twenty individuals representing varied disciplines -- anthropology, law, political science, sociology, mathematics, vocational education, psychology, philosophy, business, labor, and counseling, were called together by Marland in 1973. These persons, selected for their reputations as objective scholars or practitioners as well as for their credentials which disallowed any known prejudices about Career Education, were asked to read much that had been said and written about Career Education and to turn their specific talents and disciplines to a careful scrutiny of the proposition as it was emerging. Marland reports:

> The panel assembled and heard us, read our works,
> viewed our halting starts, asked us tough questions,
> and return to their familiar and several environ-
> ments to think about the idea. Then at our invita-
> tion they wrote about the idea. . . Together the
> essayists gave the notion the clothing of their
> varied disciplines.

It is not surprising that the concept of Career Education proved to be "too large an idea in its ultimate potential to be neatly catalogued, defined, and prescribed." (51)

Efforts to define, describe or demonstrate the Career Education concept have not been solely confined to the Office of the U. S. Commissioner of Education. Several states such as Florida, Georgia, Ohio, Oregon, and Michigan have been working on the development and implementation of Career Education programs. Each state has attempted

to build on the research and expertise of the others, yet there does

not seem to be a common body of research or research effort which is

directed toward the delineation of this concept. As Dale Parnell

said, "It is imperative that each state not be required to re-invent

the wheel." Work which is needed is "the identification of priority

human needs and the building of a solid, clearly stated philosophic

base for Career Education around these needs, and to identify and

validate what is really working in American education." (57)

The problem of the definition of the Career Education concept

is not confined to the concern of American educators. Raymond D.

Warner, the specialist in Career Education in Western Europe, has

reported that the French government in 1971 passed a law concerning

Vocational-Technical and Continuing Education which constitutes the

French approach to what might be termed Career Education. Warner

says:

> Believing that each citizen should have the
> opportunity to acquire the knowledge necessary
> to lead a life that is fully human, that is to
> say, sufficient formal education to enable him
> to contribute in some way to the development of
> the society in which he lives, the 5th Republic
> has formally stated that it considers its
> responsibilities to provide such opportunities
> to be 'uno obligation nationale'.

Efforts have been made in Canada and some of the emerging

African nations as well as in India to implement some version of the

Career Education concept into the education of the masses. India,

for example, has traditionally followed the British system where

students follow either a formal, academically-based program or enter

a vocationally tracked program, and no opportunity is provided for

experience in both areas.

In recent years, nothing in education, especially in American

education, has been introduced with such instant acclaim and recogni-

tion as Career Education. However, writers now are beginning to

indicate that unless research is undertaken soon to outline the

parameters of this concept, that the concept itself is in danger of

disappearing entirely. Cleary outlines her views along this line

by:

> Career Education, as a broad vision of education
> and indeed of life, faces many difficulties and
> invites many misinterpretations. Indeed, if
> research is not seriously undertaken, the concept
> is likely to fail very quickly. At the very least,
> Career Education as a total of the organization of
> the school program needs to be much more fully and
> exactly explained and debated than it has been. (7)

Gordon Swanson of the University of Minnesota has concluded

that Career Education is a captivating concept, but that society

would be better served if this concept could capture more immediate

attention of researchers. (68)   Spradley strongly supports this

position by saying: "Finally, I suggest a conceptual clarification

of Career Education be sought immediately." (64)   Donald E. Crawford

is of the opinion that since the identification of the Career Educa-

tion concept remains diverse, with much in common to enrich the

basic concepts for study and analysis, he challenges scholars to

debate the merit of these concepts and to suggest improvements. Only

in this way can a final identification of the descriptive factors of

the concepts in Career Education be arrived at. (11)

This study, although recognized as only a limited effort to explore this field, is intended to provide one base for other researchers to use in future research, development and sophistication of the Career Education concept.

Despite the divergent views being expressed in the literature and elsewhere, it is felt that this study will show that there are certain basic descriptive factors considered essential by most of the individuals concerned, to the concept of Career Education.

Definitions of Terms

In order that terms used frequently throughout this study may be understood within the context, definitions are provided. Other terms or phrases used are considered to be self-explanatory.

Adult Education

Learning activities organized and taught in a systematic manner to persons 16 years of age or older who enroll on a voluntary, part-time basis. This includes all those who desire further organized education not leading to a high school diploma, a one or two year vocational-technical degree or a baccalaureate or higher degree.

Analysis of Variance

An inferential statistic designed to measure the difference between three or more group means. 1-way ANOVA indicates one independent variable, 2-way ANOVA indicates two independent variables, etc.

Competence

Is the specific ability or capability needed to perform a particular duty or action.

Common Variance

Is defined as the sharing of variance by two or more elements. In such a sharing, the elements are highly correlated and measure some trait in common.

Life Role

A social expected or customary part or parts, each performs throughout life. In our society the expected norm for living out one's life is attached to a vocational or economic role, a social role, a citizenship role, an avocational role, an ethical role, and the role that is an important part of us throughout life, that of the learner.

Occupation

The regular activity which is usually considered one's work or method of gaining a living.

Technical Education

Programs devoted to instruction and training in occupations above the craftsman or trade levels, but generally not professional in nature. The courses include mathematics and science and qualify persons for employment in paraprofessional positions and as technicians, engineering aides, and production specialists.

Vocational Education

That preparation which gives job entry-level skills, knowledge, and attitudes. Vocational education is one part of Career Education and in that articulation generally works with the rest of the school curriculum to fulfill student needs in terms of the economic life roles.

Summary

Recent public statements and publications indicate that Career Education is an emerging concept seeking definition. The future of this concept will remain obscure until research is completed which indicates the parameters of this concept and, thus, its place in the American educational curriculum. That is what this study is all about.

CHAPTER II

RELATED LITERATURE

Background

Credit for coining the term "Career Education" and initiating

the Career Education movement is often given to Sidney P. Marland.

This is due largely to the fact that at the time he took over the

office of U. S. Commissioner of Education in 1971 he made his famous

speech, "Career Education Now," before the National Association of

Secondary School Principals and announced his intention of placing

major emphasis on the development of a new approach to Career Educa-

tion. (47)   This, however, was not the first use of the term

"Career Education". In 1970 the Assistant Secretary for Education

and U. S. Commissioner of Education, James E. Allen, is believed to

have coined the term which he used in his address before the National

Association of Secondary School Principals, as observed in the follow-

ing quotation,

> It is the renewed awareness of the university of
> the basic human and social need for competence that
> is generating not only increased emphasis today on
> career education but a whole new concept of its
> character and its place in the total educational
> enterprise. (3, p. 268)

The term "Career Education" did not make its debut without

debate nor has it, in fact, yet reached the place where its com-

prehensive coverage of the concept has been universally accepted

without question. The former U. S. Commissioner of Education,

Sterling M. McMurrin, for example, prefers the word <u>vocation</u> <u>to</u>

<u>Career</u>, feeling that the former has a depth and richness in its

meaning that the latter does not have. In using the term Vocational

Education he considers <u>vocation</u> as referring to the philosopher,

statesman, physician, scholar, and homemaker as well as the tech-

nician, mechanic, and laborer. (53) While some might agree with

his principle, the term Vocational Education has come to mean to the

average person manual and technical training only, making the newer

term preferable as it is more acceptable and meaningful to educators,

parents, students and others concerned.

Early History

While much has been written recently that suggests that this

is a new concept to education, it might prove helpful to take a back-

ward glance to establish the fact that the Career Education idea

(64), did not originate in the seventies. It is, in fact, as old as

man himself. As far back as history records, knowledge and skills

were passed on from one generation to the next by way of the work-

study plan. For many generations this father-to-son learning took

place in the family school. (71) The adult and the child lived in

the same world. (64)   The first formal schools, according to one

Bible commentator, were the schools of the prophets begun at Tamah

by the prophet Samuel, one of the judges of Isreal. The following

description of these schools, based on Bible references and early

Hebrew customs, indicates they were organized on a combined

vocational-academic plan.

> The pupils in these schools sustained themselves
> by their own labor in tilling the soil or in some
> mechanical employment. In Israel this was not
> thought strange or degrading; indeed, it was
> regarded as a sin to allow children to grow up in
> ignorance of useful labor. Every youth, whether
> his parents were rich or poor, was taught some
> trade. Even though he was to be educated for holy
> office, a knowledge of practical life was regarded
> as essential to the greatest usefulness. Many,
> also, of the teachers supported themselves by
> manual labor. (75, p. 47)

Gradually as the population of the earth increased, men began to live

in cities, new forms of government came into being, commerce and

trade expanded, and the peoples of the world became divided, broadly

speaking, into two classes -- the ruling class and the plebians.

The former held control of and enjoyed the fruits of the land while

the latter, living in abject poverty, did the work which produced

the former's affluence. Educational institutions were established,

purely academic in character, to disseminate knowledge suited and

available to only the "upper crust" of society, thus serving to

widen the gap between the two classes. (3)

The first signs of change began with the Industrial Revolution

in Europe, but the progress was almost negligible and it was left to

America to really start the moves which began closing the gap by

lifting somewhat the status of vocational training. In writing about

this period authors often refer to the efforts along this line made

by Benjamin Franklin who "included industry, history of commerce and

mechanics, integrated with more traditional academic subjects for the

'Public Academy' he proposed in 1759 for the youth of Philadelphia."
(41) "This move," Leonard Kunzman comments, was made with the idea
that "such a curriculum would lead to success in business and the
professions, thereby creating a viable middle class in America." (41)
It should be noted that these suggestions were for a proposed school
and did not necessarily mean they were put into effect at that time,
but it does reflect the thinking of certain leaders of that day.

While for years the sporadic attempts, such as the one
suggested by Franklin, had little effect on the educational systems
of that day, yet they did serve to promote interest in the practical
and mundane areas of learning, resulting in the setting up of some
specialized schools. (41) About the close of the 19th century an
emerging religious organization launched a plan of education which
has resulted in the establishment of the largest Protestant educa-
tional system in the world. (32) In all the schools of this church,
vocational education in varying degrees is a part of the general
curriculum. The counsel which laid out the "blueprint" for this
venture by the Seventh-Day Adventist Church, can be found in
principle in the book "Education." (75)

> Manual training is deserving of far more attention
> than it has received. Schools should be established
> that, in addition to the highest mental and moral
> culture, shall provide the best possible facilities
> for physical development and industrial training.
> Instruction should be given in agriculture, manu-
> factures, -- covering as many as possible of the
> most useful trades, -- also in household economy,
> healthful cookery, sewing, hygienic dressmaking,
> the treatment of the sick, and kindred lines.
> Gardens, workshops, and treatment rooms should be
> provided, and the work in every line should be under

the direction of skilled instructors.

The work should have a definite aim and should be
thorough. While every person needs some knowledge
of different handicrafts, it is indispensable that
he become proficient in at least one. Every youth,
on leaving school, should have acquired a knowledge
of some trade or occupation by which, if need be,
he may earn a livelihood. (75, p. 218)

A cursory glance at the foregoing paragraphs will show how
closely the author's ideas parallel those of today's advocates of
Career Education, and how amazing this is when it is realized that
this book was published in 1903.

A very brief survey of current literature reveals how wide-
spread and intense is the interest in Career Education.

There is "the sound of a going in the tops of the mulberry
trees" (33) for educators today indicating that the time has arrived
for action. A new concept -- Career Education -- has been intro-
duced into the policy circles of American education. The idea, which
has met with instant acclaim (5) is gaining momentum as it is being
accepted and implemented in many and widely separated areas of the
country. There are some, however, who caution against being too
sanguine about the success of the venture. (2, 72)

Garth Mangum states that "nowhere does one find organized
opposition to Career Education." He admits, however, that higher
education has manifested no interest. Also, many individuals feared
that it would not result in any significant change. A few groups
had begun to question certain positions in the program. This
"lingering skepticism" Mangum attributed to the unimpressive

durability of other innovations which had previously been introduced by educators, and gave as the immediate source of present stir the fact that the commitment had been made by Marland, the man with the power to allocate federal education funds. This, he considered, not only its current strength, but also a part of its vulnerability. Another source of vulnerability was that "many of the advocates of Career Education are not putting their money where their mouths are." Vocational educators were becoming anxious about what they were going to profit by the allocation of vocational education funds to the Career Education program. (72)

Nevertheless, Mangum concludes that there are reasons to believe Career Education is more than the personal logo of one commissioner of education, likely to last only as long as he. He expresses the confidence that a confluence of forces appears to make it a concept whose time has come. (72, pp. iii-v)

Reasons which have been given for the now slightly hackneyed time-has-come rationale include: 1. It has emerged at a time when dissatisfaction with educational practices and outcomes are at a peak, and 2. It promises to attack and improve some of the apparent sources of that dissatisfaction.

However, it is admitted that the success of the venture, like that of any other effort to cure an ill, will depend upon whether the diagnosis has been correct, the prescription proper, and the treatment competent. (5)

Despite some doubt and skepticism concerning the final success
of the Career Education concept, the following descriptive phrases,
taken from various sources between 1971 and 1974 tend to engender
confidence in the program and hope for its ultimate universal
acceptance and implementation: "an idea whose time has come" (22),
"an effort to attune education to the realities of our times" (22),
"a new and exciting adventure" (40), "a theme around which an entire
system of education can be unified" (31), "an attempt to humanize
education" (60), "a relevant education" (2), "a comprehensive educa-
tional program" (38), "the culmination of long-term trends and
extensive experimentation" (14), and perhaps the most often used,
"blending of the academic and vocational" (72), expressed by Marland
in homely terms as "an education designed to prepare students for
the attache case professions as well as lunch box occupations." (46)

These descriptive phrases, introduced here and expanded in the
following section are the opinions expressed by individuals who repre-
sent the: business man, lecturer, union official, psychologist,
historian, machine shop supervisor, psychiatrist, author, student,
anthropologist, education planner, mathematics teacher, counselor,
and school superintendent as well as administrators on the university,
college, junior college and community college levels; professors of
various disciplines, such as child development, psychology,
psychiatry, guidance and counseling, vocational and technical educa-
tion, teacher education, economics, political science, and career
education.

Each concept is introduced with a separate heading for additional organization and clarity for the reader.

A New Paradigm

Sidney P. Marland, U. S. Commissioner of Education, when writing the preface to Essays on Career Education closes his remarks with the following quotation from Keith Goldhammer. He explains that he did so because he feared that his own deep interest and close association with the Career Education idea might cause him to be guilty of having tunnel vision on the subject.

> It is argued that Career Education constitutes a new, vitalizing thrust in education. There are, of course, those who will say that it is just another passing fancy and if we don't pay too much attention to it, it will go away and leave us undisturbed. The evidence mounts daily that this is not the general reaction. The increasing public and legislative reaction to Career Education is one of hope that a new paradigm for education operations has finally been found which will not only provide a basic return consistent with the anticipated human and financial inputs, but a relevance for youth which will help them find their social identifications and secure a sense of mission and destiny as participating members of society. (51)

A Unifying Entity

The idea that the entire educational system of education can be unified around the Career Education concept may sound pretentious, but Edwin L. Herr, Professor of Education, believes that it is neither premature nor impossible. In his discussions of Career Education as a unifying entity Herr asked a question and answers

it with a qualified yes.

> Is a wedding of self-knowledge, knowledge of
> environmental options, the acquisition of
> requisite skills by which effective strategies
> of planning for, coping with, and mastering
> the diversity of opportunities which this
> society affords possible within the context
> of educational experience? The answer is a
> qualified Yes: qualified by the purpose and
> system which is applied as well as by a broad-
> ening of the lines by which education and the
> larger society relate. (23, p. 65)

Louise J. Keller, writing on "Career Development - An integrated Curriculum Approach" points out that regardless of how long individuals stay in a college-sheltered environment, they eventually must face the realities of the world of work. Therefore, Keller reasons that,

> The educational system of the 1970's must find
> ways to develop students into productive,
> independent, rational persons who are productively
> employed and use their leisure time not only for
> fun but also for public service and self-actualiza-
> tion. The model by which the transition from an
> educational system subdivided into three domains
> (academic, vocational and general) toward a more
> realistic, human approach would be the sincere
> consideration of restructuring the curriculum
> around the concept of career development educa-
> tion. (40)

A Revitalizer of American Education

Gus Tyler, a union official, believes that by addressing itself to the concept of Career Education the school can prove its worth to society. "Career Education", he says, "can be a way to bring American education back to its senses and to prove to a nation that has grown.

skeptical about the value of schooling that education still is a sine quo non for an enriched life in a free society. But to do this the planners of Career Education should look first, not at their own economic and social needs, but at the socio-economic imperatives of the society. (71)

The needs for Career Education are urgent and obvious. Career Education builds on a sound philosophical and theoretical framework. It may well provide the vehicle for revitalizing the American educational enterprise and reestablishing its relevance and credibility with society.

The writing and teaching of Leon M. Lessinger, an Educational Planner, have focused on using modern management techniques to make schools responsive to individual needs as well as community concerns. His essays, "Disciplined Caring for Career Education", concerns accountability and humanism. In it he endeavors to demonstrate that "both these opposites are actually essentials that must be dealt with as equally important thrusts. If Career Education means caring for the individual student and developing his unique talents, this goal can be realized if school leaders plan systematically." (42, p. 232)

> In listing Career Education among its current
> priorities, the U. S. Office of Education, National
> Institute of Education, and many state boards and
> departments of education have dedicated themselves
> to a revitalization of both general education and
> vocational training.
>
> Through the marriage of both accountability and
> humanism in the form of disciplined caring, Career
> Education may yet achieve that most deeply prized
> American educational commitment: equal educational

opportunity <u>and</u> an education system that makes
that opportunity productive for each child. (42)

A Relevant Education

In an address on concepts, given at the Adult Education Summer
Conference at the University of Wisconsin, June, 1972, Dr. Gysbers
states that he would add to the regular educational program from
kindergarten through adult years, "knowledge of self, career plan-
ning, knowledge of work and leisure." This "total human development
program" he would call "Career Education." This type of program he
feels, holds the hope of overcoming the mindlessness which has been
built into traditional education and replacing it with a more open
and relevant education in which the learner is fully involved. (27)

Career Education should be available to the adult as well as
to the child, declares Garth L. Mangum, Professor of Economics. He
emphasizes the need for employers to cooperate with manpower programs
by providing on-the-job training. His idea of the Career Education
concept is expressed as follows:

> Career Education identifies a lengthy set of
> prerequisites for successful careers and
> attempts to contribute to their attainment:
> good mental and physical health; human relations
> skills; a commitment to honest work as the source
> of income; and a willingness to accept the dis-
> cipline of the workplace and to be motivated toward
> achievement in the work setting. It also requires
> all of the basic skills of communication and com-
> putation and a basic familiarity with the concepts
> of science and technology, plus a salable skill in
> demand in the job market. (44)

Arthur Hansen of the Michigan Department of Education explains

why Michigan needs to incorporate Career Education into the school

system.

> For many Michigan youth, the public school system
> represents a bewildering succession of activities
> without a goal. . . The academic curriculum of many
> schools in Michigan is inadequate for about sixty
> percent of our high school youth whose next step
> is work. One way of rendering school experiences
> more relevant. . . is to organize the school
> curriculum around a career development theme. (28)

A Preparation for Career and Employment

The message of Thomas F. Green, an educational philosopher, in

his essay on "Career Education and the Pathologies of Work," is that

education for careers must be considered more important than educa-

tion for employment since a person's career may be quite different

from his job and much more important to his happiness and satisfaction

in life. Having a career, he says, is different from having employ-

ment, even steady employment over a lifetime. There is no reason

why anyone should find his career in or through his mode of employ-

ment at all. Applying this to the Career Education concept, he adds,

> Career Education should never be confused with
> vocational education insofar as that kind of
> question is directed toward training for jobs
> or for employment. Careers most certainly will
> not develop without employment, but neither
> should education for careers ever be confused
> with education for employment. They are therefore
> two educational tasks that need to be distinguished --
> education for work or careers, and education for jobs
> or employment. (26)

Frank Zeran views Career Education as a program which can pre-
pare one student to become an auto mechanic and another to enter

medical school. The goal, he says, is comprehensive learning --

coping with all spheres of existence -- work, leisure, intellectual

development and social involvements. . . Career Education involves

employers in a new alliance with educators and young people. Together

they plan and operate the program. (78)

In emphasizing the work component of Career Education, Ralph

C. Wenrich made the following observations:

> The strength of Career Education lies in the fact
> that it involves the total public and private
> system -- from kindergarten through the university --
> and all subject-matter areas in the curriculum. It
> also involves the total community in which schools
> operate, especially those agencies and organizations
> concerned with the work life of people.

He says the democratic ideal of equal educational opportunities

for all should not be interpreted to mean the same opportunities for

all, for no single curriculum can discover and develop the talents

of all. Career Education can be defined as the total process of

helping the individual to discover his own potential for work.

John Dewey, who served on the University of Michigan faculty

(1884-1894) was somewhat ahead of his time regarding the need for

educational reform. In his opinion the term "liberal education"

implied any education which "liberates" human beings as determined

by the quality of their total life experiences. Liberal education,

then must be defined in terms of life's problems as men face them;

it must have human orientation and social direction; and the content

must be relevant to the demands of modern society.

This rationalization is in harmony with Wenrich's personal

definition and explanation of Career Education.

> I have defined Career Education as education for
> work which is meaningful and satisfying to the
> worker. I have made a case for the fact that
> people need to work for a variety of reasons --
> economic, social, and psychological. But, above
> all, I want to make the point that work and life
> are closely interwoven and cannot be separated.
> Work and education should therefore be combined.
> Career Education is the means whereby individuals
> can be helped to realize their full potential
> through work. (74)

An End to Academic Snobbery

Commenting on Sidney P. Marland's first speech in support of

Career Education, the editor of Career Education -- Perspective and

Promise, makes this observation:

> The commissioner calls upon educators to purge
> themselves of academic snobbery. He cites the
> failure of general education and calls for a
> unification of the academic and vocational pro-
> grams into a broad, goal-directed Career Educa-
> tion. He says, 'Contrary to all logic and all
> expediency, we continue to treat vocational train-
> ing as education's poor cousin'. He urges an end
> to the division of educational programs into
> 'parochial enclaves,' which has resulted in the
> social quarantine of vocational education. He
> calls for a career education program which
> although solidly based in vocational education,
> is more than occupational training. (23, p. 33)

The following are Marland's own words on a plea to end destruc-

tive distinctions:

> I want to state my clear conviction that a pro-
> perly effective Career Education requires a new
> educational unity. It requires a breaking down

> of the barriers that divide our educational
> system into parochial enclaves. Our answer
> is that we must blend our curricula and our
> students into a single strong secondary
> system. Let the academic preparation be
> balanced with the vocational or career pro-
> gram. Let one student take strength from
> another. And, for the future hope of educa-
> tion, let us end the divisive, snobbish,
> destructive distinctions in learning that do
> no service to the cause of knowledge, and do
> no honor to the name of American enterprise.
> (48)

A Preparation for Life Roles

Career Education, according to Frank C. Pratzner, Professor in

Vocational and Technical Education, can be viewed as an attempt to

balance and synthesize the several components of the educational

system in order that the system might be more responsive to the

individual reasons and requirements for an education as an attempt

to humanize education. (60)

Robert E. Taylor explained that at its present stage of develop-

ment (1972) Career Education must be viewed as a pervasive and evolv-

ing element; and the whole range of interactions and implications

inherent in its implementation impossible to fully explain at this

juncture. However, he felt it accurate to state that it is too big

and too powerful an idea to go away. His admonition was, "as

educators, as citizens, we must confront it, think it through, con-

sider it, shape it, evaluate it so that Career Education can more

effectively keep its promise of fully capaciting individuals for

their multiple life roles. (69)

Carvel Wood, Professor of Education, Oregon State University,

looks upon Career Education as relating to all phases of one's life,

involving the concept that each individual is called upon to perform

multiple, diverse, and sometimes conflicting roles throughout a life-

time, including among others: 1. the role of an individual as he/she

relates to institutions in society, 2. the role as a family member,

3. the role as a citizen, 4. the avocational role, 5. the economic

or occupational role, 6. the religious moral, ethical role. (76)

Edmund Gordon, Professor of Guidance and Counseling, agrees

with those who advocate the broad concept of Career Education to mean

educating for living rather than educating solely for earning a liv-

ing, an interpretation which doubtless gave rise to such facetious

but meaningful descriptive expressions as "womb to tomb", and "basket

to casket."

> Some writers see the world of the future as one
> where achievement through physical work will no
> longer be a prime requirement in our society.
> Utilization of leisure will emerge as a central
> problem. Rapidly changing technology is destroy-
> ing the lifetime career in a single vocation.
> Today's children, as adults, may change not only
> jobs but kinds of work many times. Consequently,
> they will be required to make quick adaptations
> to radically different work situations. The demand
> will be for trainability so that education may con-
> tinue at intervals throughout an individuals life.
> (24)

A Training for Adaptation to Change

Robert Jenkins, lecturer and school administrator of California

State University, believes that in today's world where there is a

great transience among people and their societal and career roles,

students must be trained to adapt to change in its many forms. The

results of such training, broadly speaking are:

> The student who has a positive and satisfying
> experience in school is one who establishes a
> purpose for his academic effort. His occupa-
> tional placement becomes part of his career
> development plans. He attains a satisfying
> and fulfilling life style in which jobs and
> occupations are a part of the total experi-
> ence. (39)

Edmund W. Gordon advocates educating for living rather than

educating solely for earning a living. (24)

Sterling McMurrin, former U. S. Commissioner of Education, does

not differentiate between liberal education and Career Education. He

sees the latter as an infusion of those phases of education which

heretofore have been segregated into separate systems, as a prepara-

tion for advocations as well as vocations. (53)

> Specifically, career education is designed to
> capacitate individuals for their several life
> roles: economic, community, home, avocational,
> religious, and esthetic. It recognizes the
> centrality of careers in shaping our lives by
> determining or limiting where we work, where
> we live, our associates, and other dimensions
> that are significant in defining our life style.
> Career Education should not be viewed as another
> "add on" -- it is not incremental or cross
> sectional, it represents an infusion throughout
> the curriculum -- it calls for a restructuring
> and reorienting of the total educational program.
> Career education, then, should be viewed as life-
> long and pervasive, permeating the entire school
> program and even extending beyond it. It is
> designed for all students. (69, p. 14)

A Provision for Planned Choices

Keith Goldhammer declares erroneous the charge that Career Education will lock students into their station in life. On the contrary, he contends, quite the opposite is true. As he views it,

> The great strength of Career Education lies in the degree in which the future is open-ended for each student. Every effort should be made to help each student realistically determine how he can maximize his potentialities to achieve the highest career level consistent with his aspirations. Career Education has the objective of helping him make his own decisions of how he fits in. (23)

It is Goldhammer's hope that this new educational plan will make provision for the past rhetoric of "democratic educational opportunities" to become the realities of the educational system. (23)

John W. Letson, Superintendent of the Atlanta Public Schools, is well known as a dedicated advocate of Career Education as a workable and urgent priority alternative to traditional public school education. He states unequivocally that the aim of Career Education is not to accomplish an early career choice. Neither does it envision vocation counselors giving a series of tests and then confidentially advising pupils which career direction to take. This, as he see it, would not only be poor vocational counseling but would be a definite departure from the goal of Career Education. It is Letson's opinion that the aim of Career Education of today does not differ widely from that of many wise teachers and good schools of past generations when through individual instruction and contact

with the then-available career openings pupils were led to make
wise choices commensurate with their abilities, aptitudes and
ambitions. Career Education has as its goal the making of this
type of education available to all pupils, which is a much more
complex and involved endeavor in these modern days.

> The present emphasis on Career Education is based
> on the belief that through the utilization of
> career interest pupils can be motivated to higher
> academic achievement. At the same time, it is
> hoped that Career Education will accomplish the
> important purpose of helping students understand
> the opportunities that exist in the world of
> work. They should be able to do some realistic
> thinking about their own place in the world and
> how they can move step-by-step to accomplish their
> own goals. That is what Career Education is about.
> How effectively we move toward the achievement of
> these purposes will be related directly to the skill
> we demonstrate in translating the concept into
> action. (43)

At a conference on Career Education, William Pierce, Deputy
Commissioner for Occupational and Adult Education, reminded the
educators present that every year 2.5 million young people either
drop out of high school or college or graduate from high school
with no marketable skills. Young people, he said, must be able to
find their places in society through planned choices rather than
by chance. (59)

Gordon Swanson, Professor of Education, makes the statement
that "at present 'Career Education' is merely a label for evolving
concepts and the concepts are as elusive as the label." Nevertheless,
he does say the concept can be described, and perhaps defined, by
discussing the various approaches to explicating the concept.

Briefly stated these are the five approaches he lists:

1. A _philosophical commitment_ by the enterprise of public
   education to the values of a work-oriented society.

2. A set of _essential components_ required for a functual
   Career program.

3. The utilization of an _educational delivery system._

4. A focus on _educational levels_ beginning with the
   elementary level and concluding with adult and
   continuing education.

5. A concern with _outcome._

"No single approach to the description or definition of Career

Education is complete or adequate. All of the approaches mentioned

above are mutually reinforcing." (68)

Swanson concludes the portion of his paper titled "Approaches

to Describing or Defining Career Education" with these thoughts,

> Finally, and most importantly, it should be
> emphasized that the word _career_ in Career
> Education is grammatically and conceptually
> an adjective. Career Education is not
> synonymous with education; it is a special
> kind of education which affords parity of
> esteem to the values of work. It accepts
> work as an activity which rations the goods,
> services, and satisfactions available to man-
> kind and its central feature, thus, is its
> endeavor to insure that all instruction includes
> occupational relevance and that all students
> may acquire job-entry skills in a career cluster
> of his choosing. (68)

Oregon was one of the first states to develop an official policy

for the implementation of Career Education in its schools. Dale

Parnell, Superintendent of Public Instruction in that state, calls

for a totally integrated educational program which will implement

an educational concept to meet the universal educational needs of
children and youth. (57)   The Oregon Way, as the new approach to
secondary education in 1969, was based on two assumptions:

> 1. Secondary schools should be preparatory
> institutions for all students (those entering
> college and those entering careers requiring
> less than a baccalaureate). 2. A secondary-
> school preparatory program should tie the
> curriculum to the goals of students in such
> a way that they are motivated while in school
> and also better equipped to choose from among
> many alternatives as they take that next step,
> whether it be on-the-job training, apprentice-
> ship, community college, proprietary schools,
> or a four-year college. (58, p. 57)

After pursuing for years a devious path of trial-and-error,
Stanley H. Cramer finally found himself living in a life style that
suited his tastes and in a position commensurate with his abilities
and aptitudes. He feels it would be less traumatic and would result
in less waste of individual time and energy if the process of
vocational education and career development could be institution-
alized. This would enable the youth to be guided "by accurate self-
knowledge, not self-deception; by order, not chaos; by skills in
decision making, not choice incompetence; by an understanding of
occupational alternatives, not vocational illiteracy; and by a joy
in the process, not frustration. . . That goal seems worthwhile."
(10)

An Assurance of Continuity

Edward Zigler, Professor of Psychology and Director of the
Child Development Program, Yale University, looks upon the Career
Education concept as having the potential for filling a gap in the
lives of children and youth. Children, he says, have become
isolated from the world of work.

> Few children have any real awareness of what
> their parents do on the job, and the schools
> have done little to ensure that children see
> adults -- other than their teachers -- work-
> ing at a variety of tasks. Older children
> have few opportunities to participate in adult
> work activities or responsibilities and to be
> paid for their labor. The consequence of our
> segregation of children from the adult world
> is simply that all children are to some extent
> deprived of the range of experiences they need
> to build an adult identity and a positive
> attitude toward work and independence.
>
> Another serious result of this isolation is
> that children encounter a rather narrow set
> of adult values. Formal schooling for white-
> color occupations is presented as the goals for
> which every student should strive. We certainly
> must continue our efforts to make sure that
> every child has the opportunity to receive
> formal education to the limit of his interests
> and aspirations. However, we must also convey
> to young people that skilled and semi-skilled
> labor and other occupations that do not require
> a college education are not second-rate jobs
> for second-rate people. These are jobs worth
> doing, and worth doing well; they can be deeply
> satisfying to an individual who, because of his
> unique interests or abilities, does not find
> fulfillment in extended formal schooling. Young
> people will not have the freedom to choose such
> occupations as long as the adult members of society
> send the message that some careers are not as
> intrinsically worthy of aspiration as others. I
> believe that the Career Education effort can do

much to overcome this barrier to genuine free-
dom of occupational choice for our youth. (79)

According to James P. Spradley, an anthropologist, Career

Education, which is intended to be a cultural innovation of some

magnitude, will not only change the content of education, but it

is aimed to change even more the structure of our education system.

In particular, it is designed to change the way our culture structures

continuity and choice. If these changes could take place at once

the gap would be closed - "the discontinuity between the worlds

of childhood and adulthood would no longer be a mystery to our

youth." (64)

Robert M. Worthington, Associate Commissioner for Adult,

Vocational and Technical Education, exemplified the thinking of

USOE regarding Career Education in his address in 1972 at a con-

ference in Tokyo when he said,

> Career Education recognizes the critical decision
> points when students must be prepared and equipped
> to decide whether to pursue a job or further educa-
> tion or some combination of both work and formal
> study. It is a lifelong systematic way of acquaint-
> ing with the world of work in their elementary and
> junior high school years and preparing them in high
> school and in college to enter into and advance in
> a career field of their own choosing . . . Career
> Education embraces all occupations and professions
> and can include individuals of all ages whether in
> or out of school. (77, p. 270)

Student Oriented

Dale Parnell was an electrician before he became a teacher,

high school principal, county superintendent and community college

president and now Superintendent of Public Instruction in Oregon.

This forceful advocate of Career Education has been instrumental

in helping Oregon rewrite school graduation requirements to include

competencies in career decision making and preparation. His attitude

is that schools are run for the benefit of students.

> Career Education is wholly student oriented. It
> uses knowledge, values and skills as a means to
> the student's ends, not as ends in themselves.
> In the Career Education curriculum, knowledge
> must be functually related to the range of life
> careers or roles in which the individual will
> participate. In other words, it is education
> for survival in our contemporary society. That
> implies some rigorous demands and discipline, not
> just on and for students but on and for education.
> It does not mean that everything will be easier.
> It does mean that student motivation based on a
> ranked order of needs will be a major considera-
> tion. (57)

An Involvement of School and Community

This opinion is also held by Thelma T. Daley, a counselor. She

develops emphasis on the importance of the school and the community

working together to make the plan work.

> Career Education embraces the total development
> of youth. It enhances academic preparation. True
> career development accentuates the development of
> attitudes, understandings, and self-awareness, as
> well as the development of job skills. Career
> development cannot be taught in isolation. It
> involves many disciplines and forces; it is a
> total school concept. Career development cannot
> be confined to mortar-sealed brick walls; its
> boundaries are limitless. For Career Education
> to become a true reality, the school and community
> must join hands and cooperatively push forward so
> that youth -- all youth -- may come to know and
> develop themselves. (13)

One issue of "School Health", a journal of the Health and
Education Department of the General Conference of Seventh-Day
Adventists, was devoted exclusively to Career Education. E. J.
Anderson gave a brief description of what Career Education is,
following closely the concept as given by many leading promoters
of Career Education.

> Career Education is the total effort of the
> community, the school, the church, the home,
> to develop a personally satisfying succession
> of opportunities for service through work
> extended throughout life.
>
> Career Education is a part of the student's
> learning from the moment he enters school.
> It relates reading, writing, arithmetic, and
> every other subject to varied ways in which
> adults live and earn a living. Career Educa-
> tion is a relevant education, its primary
> goal being to prepare each student in the
> existing elementary-secondary-school system
> for entry into successful employment or
> advanced studies, regardless of when the
> student leaves the system. (2)

Speaking at a conference on Career Education in July, 1974,
Donald L. Frueling, Vice President and General Manager of Gregg and
Community College Division of McGraw Hill Book Company, urged those
present to "push Career Education" in their communities, and to
elicit the support of parents, school administrators, and govern-
ment officials to develop meaningful Career Education programs. He
emphasized that "the time is right for a revolution in education,"
and that "Career Education, though in its embryonic stages, carries
with it the seeds of important educational reform." (19)

Edwin M. Stanley, a business man of Portland, Oregon, suggests that the most effective and economical method of educating for the world of work is to use resources already available in the community. He believes Career Education has the potential of bringing business and education together. He speaks of this "two-way street" as follows:

> In the past, business had little use for the world
> of education because education has tended to be a
> mystical responsibility of the select few. Educa-
> tors have tended to say, 'We will do only what we
> think needs to be done, in a way only we can under-
> stand.' Education has ignored the business world,
> too, largely because business has not been vocal
> enough in expressing its needs or active enough in
> making its resources available.
>
> Career Education may offer a chance and a channel
> for some much-need communication. In fact, this
> two-way street may be the real strength of Career
> Education. (65)

Lola June May, an experienced teacher, stresses the need for enlisting the help of parents, grandparents, neighbors and friends as practitioners who can assist in instilling attitudes about the satisfying fruits of hard work, the truths of brotherhood, and an enduring commitment to the dignity and worth of all persons, whatever their work.

In her opinion:

> That's what Career Education is all about --
> helping each young person discover his interest
> as early as possible, then assuring that he will
> leave school with both a traditional education
> and a salable skill. And that's why we need our
> practitioners all along the line -- to help us
> meet the challenge and help our young people reach
> the goal. (52)

Real Opportunity for Blacks

It is the opinion of Lawrence W. Davenport, of Tuskegee

Institute, that "The concept of Career Education holds greater pro-

mise for black students to attain a good education and preparation

for interesting and constructive careers than any of the civil rights

acts, Supreme Court decisions, and plans for improving education for

blacks that have occurred in recent years. . . Career Education

offers a chance to broaden the opportunities for blacks and to help

them out of the frustrating rut in which our present restrictive

educational system places them. (14)

An Involvement of All Levels of Education

William J. Micheels, University Professor, urges that univer-

sities not remain aloof from the Career Education movement but

remain true to their historic commitment to education for careers.

He advocates cooperative planning efforts at the national and state-

wide levels between colleges on the one hand and vocational-technical

schools, community colleges, and private proprietary schools on the

other. Like others who have expressed themselves in a similar vein,

he says that it is abundantly clear that Career Education is not a

neatly wrapped package nor a panacea that can be transplanted in toto

to each college campus to create instant miracles.

> The Career Education movement is creating a
> groundswell of activity at every educational
> level, perhaps as one reflection of the temper
> of the times. Higher education cannot remain
> aloof from these new realities. It is in this

> sense that each college ought to examine,
> decide, and define how Career Education can
> stimulate renewal efforts and become an integral
> part of an evolving mission on each campus.
> (54)

John F. Grede, an experienced junior college president, a
former university Professor of Higher Education, and now Vice
Chancellor for Career and Manpower Programs for the City Colleges
of Chicago, raises the question, not whether the role of higher
education in Career Education will be included, that he sees as
predetermined, but what kind of model will prevail to influence the
patterns of the system? Will it be the traditional career prepara-
tion as viewed by the colleges and universities, or will it be the
community college conception? The first is shaped by higher educa-
tion, particularly by the professional schools. The latter is
moving in different directions and operating on different assumptions.
For example, it is much smaller and is aimed at the entire community
of young and old, disadvantaged and mainstream, minorities and
majorities, rather than at the selective group of educationally
talented youth.

It is not difficult to detect that Dr. Grede asks his question
to set others to thinking, not because it is not settled in his own
mind. At least he has a strong opinion as to the "model" that should
be chosen "to influence the patterns" for he concludes his essay with
these statements,

> The catalyst for a more comprehensive, coordinated,
> flexible, economic, prestigious, productive, and
> unpublicized system of Career Education may be the

community college. In keeping with its past
history, the community college will take this
role in stride. (25)

According to the March 15, 1973 "Instructional Service, Career

Education" Oregon State Department of Education, "The Comprehensive

Career Education curriculum with its supportive guidance and counsel-

ing, articulation and interdisciplinary emphasis, and its emphasis on

complete career preparation, provides an expanded approach to occupa-

tional preparation, but it also provides a broad base for further

career preparation through a variety of post-high school options and

throughout life." (38)

The attitude toward Career Education of Morris Shapiro, a

machine shop teacher and Vocational Education promoter in New York

City, reflects his background and training. He sees the success of

Career Education as in direct proportion to the degree to which

occupational skills training is included in the plan and to the

effectiveness of teachers to present career options to their students.

He expresses anxiety that this principle is not being put into

practice.

The goals of recently organized so-called
comprehensive high schools have been diluted
because only a token number of vocational pro-
grams has been installed. In fact, there are
so few vocational programs in place that no real
career alternatives exist for most students
attending these schools. Unless attitudes toward
occupational preparation change dramatically,
Career Education in New York City and throughout
the nation will fail on the planning board. (62)

Susan Margot Smith (63), a college administrator, agrees with
Philip Marland that "Career Education adds to the sum of the educa-
tional parts, that it seeks articulation with conventional offerings,
giving them purpose and meaning at a time when young people are
searching for purpose and meaning." However, as Donald Crawford
points out, Smith feels that there are some "discordant notes."
These are expressed as she writes of the "trend of unfinished per-
formance", referring to the fact that so many women start out with
high hopes of realizing personal achievement but as their education
continues they give up their early aspirations and slide into the
role which tradition has assigned them. Smith argues that this
underachievement of women will not change simply by the implementa-
tion of a new form of education unless the descriptive factors of
the Career Education concept are designed to include alternate model
roles -- as opposed to the stereotypes that permeate our literature
and textbooks -- such as the professional woman who is a doctor,
lawyer, business executive, scientist, technician, or engineer,
are integrated substantially into the core curriculum. (11)

A Student's Views

Larry Allen, a recent high school graduate, deplores the
emphasis the public schools have put on college entry, the irrele-
vance of many high school courses to real-life needs, the lack of
adequate career counseling in high schools and the tendency to

place students in courses they do not wish to take. He believes that,

> With a few well-published exceptions, most
> young people know that their adult lives will
> be spent, to a great extent, in a career and
> that they must be thoroughly and carefully
> trained to stand up to competition in a highly
> technological society. Therefore, they want
> their schools to be relevant to their needs.
> They welcome the opportunity to learn all
> the skills necessary to prepare them to take
> their places in the adult world.

The closing paragraph of this young man's essay is evidence that the youth of today are thinking.

> I hope that when the crime comes to follow a
> Career Education plan in public schools we don't
> limit the concept implied by the term "Career
> Education." In the future the work careers of
> Americans will constitute only a portion of
> our daily lives. Probably we will have many
> more hours of leisure time than we have today.
> To lead full, useful lives, on the job and off,
> we must be prepared to develop ourselves into
> well-rounded individuals. Citizens of the future
> must be prepared to use their new rights and powers
> and leisure hours wisely. To do this, they must be
> given specific, practical instruction and informa-
> tion by their public schools. (1)

> Career Education provides three options and is
> designed to strengthen and achieve student self-
> actualization. It captures and builds on the
> strong motivating force of career interest, career
> development and preparation. It provides a means
> of making other elements of the school relevant to
> life purposes and stimulates student interest and
> participation in the whole school enterprise. Sub-
> ject matter is not an end, but rather a means of
> helping individuals optimize their career develop-
> ment. Knowledge is viewed as applicative; not merely
> descriptive. In the vernacular of the day, Career
> Education "puts it all together." (1)

Trends in Teacher Education in Career Education

Rupert N. Evans sees that in order for Career Education to become a reality changes must be made in teacher education. Below are given in substance certain changes he believes are needed.

Career Education will fail if, in its teacher education component, it seeks only to overcome the deficiencies of persons who have been or are currently being graduated from our teacher education institutions. In the long run, the teacher education institutions themselves must change in several significant ways.

1. The undergraduate teacher education programs must be invested with a Career Education emphasis. Work experience and work study programs for prospective teachers should become as important to their preparation as student teaching.

2. Counselor education programs must contain a much heavier emphasis on career development and also provide prospective counselors capable of interacting effectively with teachers, parents, and the business-industrial-labor community in a total career education program.

3. Career Education must be made an integral part of the formal preparation of prospective school administrators.

4. Teacher education institutions must assume responsibility for solving the need for support personnel in Career Education, prepared to work in the community college setting in training support persons for Career Education.

5. The need for research and evaluation in Career Education is an inescapable responsibility of teacher education institutions.

Teacher education personnel must join with State Department of Education personnel in assisting local school systems with the massive

problems of in-service education that Career Education will bring.
(17, p. 131)

Any subject matter which carries a vocational label can be as
liberal - or cultural - as any liberal arts subject. It isn't the
subject matter that determines the value in education. (74)

In writing of the Elementary School Careers Education, Frank
R. Cross, Coordinator of Theory and Practicum T.P. II, Oregon State
University, says,

> One of the strengths of the program is a built-in
> flexibility that permits it to give new vitality
> and direction to an on-going program. Teachers can
> benefit from the security of a familiar program as
> they seek ways of implementing the new emphasis on
> life roles. Careers education is not a totally
> new educational program. It is a new instructional
> direction that requires that teachers be prepared,
> philosophically and operationally, to implement and
> maintain careers education in their classrooms. (12)

In his article on "Teachers, Counselors and the Cool Learning
Tool", Robert E. Jenkins commends the Pontiac District for their
fine work in implementing one of the five pilot projects (K-6) set
up by the Ohio State University. Reference is made to the special
training given the teachers and their enthusiastic cooperation in
preparing and using the Individual Career Exploration Packs, referred
to as "The Cool Learning Tool." The reasons he gives for the success
of the project are summed up in the following paragraph.

> The Pontiac Career Development Program reflects
> a professional job in planning and implementation,
> with leadership, team work and cooperation on the
> part of teachers and administrators and with the
> strong support of the board, the superintendent
> and the community. In Pontiac, parents, leaders

of business, industry and labor all are a part
of the Career Education program and support the
Pontiac Career Development emphasis in their
city. (39)

Louise J. Keller, Chairman of the Department of Vocational
Education, University of Northern Colorado, emphasizes that the
integrating of academic, vocational and general education is the
Career Development theme. This theme provides students with a
conceptual map of the world of work, to which they can relate
their own interests and aspirations. She suggests that sincere
consideration be given to a complete restructuring of the entire
curriculum (K-2) around the concepts of Career Development Educa-
tion.

In writing about the necessity of assisting individual students
in the junior high school in designing career blueprints for reach-
ing both short-term objectives as well as long-range career goals,
she emphasizes the role of teachers in this endeavor.

The fact that so many young people today lack
goals and directions would seem to indicate that
educators have the responsibility for helping
young people focus attention on those aspects of
life which will affect future activities. Teachers,
regardless of their subject specialization, need
some tangible source of information to help them
better understand students and relate their
instructional program to individual objectives
and goals. Yes, the junior high school becomes
the centrality for decision making. (40, p. 198)

We can no longer make the old distinction between vocational
and liberal education, or between career and liberal education.
Education worthy of the name is education for a career and educa-
tion that liberates the mind and soul, declares Sterling M. McMurrin,

former U. S. Commissioner of Education. He emphasizes the need for

more intensive individualization of instruction, which can come about

through new teacher training processes.

> My argument does not support a movement of educa-
> tion toward some policy of conformity that makes
> education consist of the same elements for all.
> This would be culturally disastrous. Variety,
> diversity, and plurality are essential to the
> quality of personal and social life. Unless they
> are present in education they will be lost to the
> culture; incidentally, unless they are present in
> the character of educational institutions, they
> may be lost to education. What we need is a more
> intensive individualization of instruction, some-
> thing that should become possible through greater
> knowledge of the learning process, better design
> of the format of instruction, and wise employment
> of the new instructional technology. (53)

The Performance-Based Teacher Education Program

The philosophical premise for performance-based instruction in

the contemporary teacher education program as presented by Del

Schalock (61) is stated briefly in the following:

By contemporary teacher education standards, the student is

considered qualified to perform as a teacher when he is awarded a

Teacher's Certificate indicating that (a) he has been given a

minimal grade point average of C for a given number of courses in

a given area of study; (b) he has obtained a recommendation from a

recognized institution that he is qualified to teach on the level

for which he has prepared.

This certification implies that he has an average knowledge of

the subjects he will be required to teach, that he has demonstrated

as a student-teacher that he has the ability to apply his knowledge

at some minimal level and that he is "physically, mentally, morally,

ethically, and attitudinally acceptable as a member of the teaching

profession." The judgment regarding his qualities and abilities is

made by his teachers and the supervisors of his student-teaching

experience.

> Generally speaking the basic assumption underlying
> such an approach to certification is that knowledge
> of subject matter, teaching methods, children's
> learning, and so forth -- as measured by course
> grades -- is a basic predictor of teaching ability
> to apply what is known in a student teaching situa-
> tion and a subjective judgment as to the accept-
> ability of a particular student to the teaching
> profession. The reverse assumption is also applied:
> There is no need to systematically gather evidence
> as to the ability of a prospective teacher to behave
> in specified ways, of his ability to carry out the
> functions for which he will be responsible within
> a school once he is certified. (61)

The Competency-Based Teacher Education Program

Robert Houston (34) in writing on strategies and resources for

developing a competency-based teacher education program, presents

both the philosophical structure and the methodology for its actual-

ization.

> The very notion of Competency-based Teacher Educa-
> tion implies a clear idea of what the student is to
> become. The emphasis is on the objectives rather
> than activities. Such objectives are stipulated in
> advance, described in explicit observable terms, and
> made known to the student prior to any related
> instruction. Activities then are designed to con-
> tribute to the student's demonstration of objectives,
> and evaluation of a student's progress or of the
> program's viability in terms of such objectives.

Three types of objectives are pivotal in com-
petency-based programs: cognitive, performance,
and consequence objectives.

In cognitive-based objectives, the participant
is expected to demonstrate knowledge and intellectual
abilities and skills.

In performance-based objectives, the participant
is required to do something rather than simply to
know something. While contingent upon knowledge,
performance-based objectives place the emphasis on
observable action.

In consequence-based objectives, the participant is
required to bring about change in others. Objectives
in the affective domain are imbedded in all other
classes of objectives, but tend to resist the specific
description expected of the first three types.

A Summary of what is being said about Career Education

The following paragraph by Robert E. Taylor gives a condensed

but quite comprehensive description of what should be accomplished

when Career Education becomes a part of the general education system.

The educational program should be sequenced and
positioned to optimize career development and
should provide as broad a base of understanding
of self and the world of work as possible. It
should be designed so youngsters will, in fact,
have two options at several levels; continuing
education or employment. (69)

From these varied and sometimes divergent views on Career

Education, what it is, what it does and what it can do, many con-

clusions might be drawn. The thought, however, that appears to

permeate much of the current literature on the subject is that no

satisfactory conclusion can be arrived at until there is an ultimate

delineation of the descriptive factors which actually make up the

concept of Career Education.

CHAPTER III

THE DESIGN OF THE STUDY

This study was an investigation of the descriptive factors

of the emerging concept of Career Education. The concern of the

researcher was that the results would provide information for the

design and development of a teacher preparatory program in Career

Education.

Preliminary to examining the perceptions of educators relative

to the importance of certain descriptive factors to a definition of

Career Education, it was necessary to identify the descriptive

terminology currently in use.

Identification of Descriptive Factors

The survey of contemporary literature was the basic source of

information utilized to identify the descriptive terminology in

current use in reference to Career Education. Sources such as

E.R.I.C., Dissertation abstracts, periodicals, recent publications,

as well as personal interviews with individuals committed to the

development of the Career Education concept were the sources of the

initial listing of Career Education definitions or descriptive

phrases.

A screening panel, made up of staff members and graduate

students currently involved with Career Education at Oregon State

University, met and reviewed the initial collection of identified

descriptive factors. The initial listing of 190 items was
narrowed to 103 by the elimination of duplications and unnecessarily
ambiguous items.

Development of the Research Instrument

A jury panel of experts in Career Education was selected to
participate in the development of the Research Instrument. Nine-
teen individuals who had distinguished themselves as leaders in
Career Education (eight leaders from Oregon and eleven from the
rest of the nation) representing eight areas, including each area
represented inside and out of Oregon, were identified.

Service Area	Oregon	Nationally	Total
University	2	2	4
Public School	2	2	4
U.S. Office of Education	0	1	1
State Departments of Education	1	1	2
Centers for Vocational Education	1	2	3
Business Group (outside Education)	1	1	2
International Office of Education	0	1	1
Other	1	1	2
TOTAL	8	11	19

A questionnaire was submitted to each individual requesting
their participation in the development of the research instrument.
A Modified Delphi Technique was utilized to incorporate the

responses of each individual.

The jury panel modified 36 items, rejected 42 and added 11, creating an instrument of 72 items. Since the ultimate purpose of this research was to suggest a model for teacher preparation in Career Education, a three-phase model was described to be included in the study.

The Dependent Variable

The dependent variable in the study was a score assigned by respondents in the population to indicate their perception of the level of importance of each descriptive factor to a workable definition of Career Education. Respondents were asked to assign a score based upon the following Likert-type scale:

1. The statement given has no importance as a descriptive factor of Career Education.

2. The statement given is slightly important as a descriptive factor of Career Education.

3. The statement given is moderately important as a descriptive factor of Career Education.

4. The statement given is considerably important as a descriptive factor of Career Education.

5. The statement given is very important as a descriptive factor of Career Education.

The Statistical Design

The facilities and resources of the Oregon State University Computer Center were utilized in compiling the numerical data collected through the questionnaire.

As stated in the introductory section of the chapter, the purpose of this study was to identify the descriptive factors (of Career Education) that make up a working definition of Career Education and incorporate these in the development of a teacher preparatory model in Career Education.

Phase I   become aware of the learner and his environment.

Phase II   understand the psychological base and methods that
             may be used to interact with the learner, as a
             beginning teacher.

Phase III   actually implement his knowledge base of learners
             from Phase I as well as those methods developed
             in Phase II in the teaching phase of the program.

The final questionnaire of 72 items was designed to ask on a Likert-type scale of 1-5, the importance of each item to a definition of Career Education and on important items, the point in the teacher preparation program where that definition or concept should be introduced.

Selection of the Population

The study utilized a population from all 50 states. State directors of Career Education in each state and Deans of Education in each of the Land-Grant colleges and Universities, and three from each of the three centers for Vocational Education. The

remainder of the population was selected from individuals who have

shown themselves interested in furthering the concept of Career

Education from each of the following areas: Public School, U.S.

Office of Education, State Departments of Education, Centers for

Vocational Education, Business Groups, and the International

Office of Education.

Area	Total
State Directors of Career Education	50
Deans of Education (Land-Grant Institutions)	68
The Centers for Vocational Education	15
Randomly selected individuals who have demonstrated awareness and leadership in Career Education.	37
TOTAL	170

The general design of this study included the following:

1. The population for the study was representative of leaders

   in Career Education and Deans of Colleges and Univer-

   sities from all 50 states. The Career Education personnel

   were chosen from the State Department offices and the Deans

   from the 62 Land-Grant Colleges and Universities. In

   addition, a miscellaneous group of nationally known leaders

   in Career Education were included. A sample of 170

   administrators and leaders in Career Education provided

   data by completing and returning a two-part, 72-item

   questionnaire which was mailed directly to them by the

   investigator.

2. Responses regarding the degree of importance of the

    descriptive factors were recorded on a five-point

    Likert-type scale. Response values ranged from a

    low of 1.0 to a high of 5.0. In addition, responses

    as to where the descriptive factors should be intro-

    duced in a teacher preparatory program were recorded

    on a five step scale, representing the three phases

    of the teacher preparation program as well as "other"

    and "not at all".

3. The one-way analysis of variance was used to test the

    hypothesis that no significant difference existed in

    the perceptions of the population relative to the

    importance of each descriptive factor to a workable

    definition of Career Education. The test statistic

    used was the $\underline{F}$ statistic with the .05 level of signi-

    ficance used for the assessment of differences. The

    least significant differences existed when the hypothesis

    was rejected.

Source	DF	SS	MS	F
Institution				
Error/within	126			
TOTAL	126			2.10
				Critical F.

4. The data were further analyzed through the use of two

    factor analytic modes – the R-modes and the Q-modes. The

two techniques took on the following characteristics
for the study:

A. The R-Mode orders descriptors according to the
respondents included in the study. This form
of analysis examines the relationship of every
descriptor with every other descriptor. Where
factor loadings of $\pm.50$ or higher were recorded as
being clustered within each factor, a 72-item
(descriptors) intercorrelation matrix, based
upon data collected from 126 respondents is
generated. Hence, the 72 descriptors are
clustered in a manner that best accounts for
the largest percentage of common variance.

B. The Q-mode ordered respondents according to how
they responded to the descriptors in the study.
It provided a measure of commonality among the
respondents by indicating the extent to which
leaders in Career Education and administrators
were alike relative to their responses to the
importance of the descriptors. Based on the
data furnished by the 72 descriptors, a 126
respondent intercorrelation matrix was generated
which provided the measure of commonality.

Summary Statement

A 72 item mail-administered instrument was developed through the use of a 3-step modified Delphi procedure. The instrument was submitted to a 170 member national population, whose perspective was sought relative to the importance of each item to Career Education and the place of important items in the curriculum. Analysis of Variance and Q and R mode factor analytic technique were used for the analysis of data.

CHAPTER IV

PRESENTATION OF THE FINDINGS

The analysis of the data collected for the study is presented
in three sections.

The first section presents the results of the analysis of
variance statistical technique used in testing for differences among
mean scores of the eight groups in the study population.

Section two presents the results of the Q and R mode factor
analysis.

The third section reports the tabulation of responses as to
where each descriptor should be introduced in the teacher prepara-
tory program.

The Analysis of Variance

The null hypotheses, that there were no significant differences
among the mean scores of the 72 items included in the questionnaire,
was tested. The one-way analysis of variance using the F statistical
was used to test the null hypothesis for each descriptive factor. In
all, 72 individual hypotheses were tested.

The computed F value was less than the critical value of 2.10
at the .05 level of significance for 65 descriptive factors and
greater than that critical value for seven factors. Thus, the null
hypothesis was retained for 65 factors and rejected for seven. The
results of the analysis of variance are presented in Appendix D.

Since the analysis of variance test does not compare one mean with others, it was necessary to do further testing to determine where a significant difference existed on those seven rejected items. The a priori Least Significant Difference test was selected to determine where differences existed. The results of these tests are presented in Table 1.

The briefest or lowest mean score on the first rejected item, that of the educators, was selected as the mean to be used to compare for the L.S.D. test. The results of this test indicated that there was no significant pattern to the responses that could explain the rejected items. Rejected items appeared to be rejected at random.

Results of the R-technique Analysis

The R-technique factor analysis program examined the relationship of every descriptive factor within every other factor and ordered them according to people. Cotrell has stated that this technique has proven very popular in similar studies with as many as 95% of all factor studies using this procedure (8).

Fruchter (18) has recommended that the factor loading level used as a cutoff in this technique be based on the following formula:

Loading of .2 or less   -   insignificant

Loading of .2 to .3   -   low

Loading of .3 to .5   -   moderate

Loading of .5 to .7   -   high

Loading of .7 or above   -   very high

The data of this study were analyzed with 4, 5, 6, and 12 factor solutions.

The four factor solution accounted for 56 factors with factor loadings of $\pm$.45 or higher. The five factor solution included 56 factors with factor loadings of $\pm$.45 or higher. The six factor solution accounted for 49 factors of $\pm$.45 or higher with the twelve factor accounting for 60 factors.

The _five_ _factor_ solution was selected as most definitive since descriptive statements seemed to cluster with more clarity in this solution.

The factors were arbitrarily named and were intended to generally represent or characterize the nature of the descriptors loaded under each factor.

Factor I, the largest factor, accounted for 30.4% of the common variance. Two sub-factors were identified within Factor I. _Sub-factor Ia_, Student Academic Performance and Understanding of Life, included 10 descriptors with a factor loading of $\pm$.50 or higher. Table II presents the factors clustered under this sub-factor.

Sub-factor Ib - Student choice and Vocational Performance, included 11 descriptors with a factor loading of $\pm$.50 or higher. Table II presents the factors clustered under this sub-factor.

Factor I also contained 8 spurious descriptors which are included in Table II. A total of 29 descriptors were clustered under Factor I.

TABLE **1** RESULTS OF MULTIPLE COMPARISONS

L.S.D. Test at .05 Level of Significance

Multiple	Item Number						
Comparisons	2	3	4	13	33	62	69
M1 = M2	Reject	Retain	Reject	Retain	Reject	Retain	Reject
M1 = M3	Reject	Reject	Reject	Reject	Reject	Reject	Reject
M1 = M4	Retain	Retain	Reject	Reject	Retain	Reject	Retain
M1 = M5	Reject	Reject	Reject	Reject	Reject	Reject	Retain
M1 = M6	Reject	Reject	Retain	Retain	Reject	Reject	Reject
M1 = M7	Reject	Reject	Retain	Reject	Reject	Reject	Reject
M1 = M8	Retain	Retain	Reject	Retain	Retain	Retain	Retain
M2 = M3	Reject	Retain	Reject	Reject	Reject	Reject	Reject
M2 = M4	Reject	Reject	Reject	Reject	Reject	Reject	Retain
M2 = M5	Reject	Reject	Reject	Reject	Reject	Reject	Reject
M2 = M6	Reject	Reject	Retain	Reject	Reject	Reject	Reject
M2 = M7	Reject	Reject	Retain	Reject	Reject	Reject	Reject
M2 = M8	Reject	Reject	Reject	Reject	Reject	Reject	Reject
M3 = M4	Retain	Reject	Reject	Reject	Reject	Reject	Reject
M3 = M5	Reject	Reject	Reject	Reject	Reject	Reject	Reject
M3 = M6	Reject	Retain	Reject	Reject	Reject	Reject	Reject
M3 = M7	Reject	Reject	Retain	Reject	Reject	Reject	Reject
M3 = M8	Reject	Retain	Reject	Reject	Reject	Reject	Reject
M4 = M5	Reject	Reject	Reject	Reject	Reject	Reject	Reject
M4 = M6	Reject	Reject	Retain	Reject	Reject	Reject	Reject
M4 = M7	Reject	Reject	Retain	Reject	Reject	Reject	Reject
M4 = M8	Reject	Reject	Reject	Retain	Reject	Retain	Reject
M5 = M6	Reject	Reject	Retain	Reject	Reject	Reject	Reject
M5 = M7	Reject	Reject	Retain	Reject	Reject	Reject	Reject
M5 = M8	Reject	Reject	Reject	Reject	Reject	Reject	Reject
M6 = M7	Reject	Reject	Reject	Reject	Reject	Reject	Reject
M6 = M8	Reject	Reject	Retain	Reject	Retain	Reject	Reject
M7 = M8	Reject	Reject	Retain	Reject	Reject	Reject	Reject

Table 2. Results of R-technique analysis for Factor I. (Sub-factor Ia – Student Academic Performance and Understanding of Life; Sub-factor Ib – Student Choice and Vocational Performance.)

Factor	Item Number	Descriptive Statement	Factor loading	Mean	Standard deviation	Mean Ranking
Ia	3	integrates traditional academic education with vocational education.	.65	3.83	1.15	33.5
	7	improves overall pupil performance by focusing basic subjects around a career development theme.	.55	3.94	1.00	28.5
	13	makes possible a vocademic (vocational and academic) program.	.73	3.48	1.31	43
	14	enhances academic preparation by making learning relevant.	.52	4.19	1.06	9
	18	builds progressively the student's knowledge and understanding of the world about him.	.56	4.05	9.11	19
	29	establishes interrelationships among categories and disciplines to bring about the total development of the individual.	.63	3.94	1.09	27.5
	43	diminishes the number of persons who hold degrees but remain "uneducated".	.54	2.92	1.35	46
	52	increases one's adaptability to change.	.51	3.75	1.10	35.5
	59	develops the student's ability to gather information and apply it in solving problems and making rational decisions.	.53	3.94	1.02	27.5
	67	introduces a sense of purpose into education.	.53	4.03	9.79	29.5

Factor	Item Number	Descriptive Statement	Factor loading	Mean	Standard deviation	Ranking
Ib	23	removes the assumed distinctions between academic and occupational learning programs.	.54	3.56	1.24	41
	24	provides for every person to make informed choices as he develops his own career.	.61	4.25	9.63	6.5
	26	explores interrelationship between attitude, ability, experiences and performance.	.53	3.84	9.91	32
	27	enables the individual to analyze the changing nature of job opportunities in terms of technology and the needs of people.	.53	3.83	9.47	33.5
	30	develops student attitudes about the significance of work.	.55	4.02	9.07	21.5
Ib	32	develops student attitudes about the significance of work.	.57	3.70	1.01	36
	45	leads to employment, whether as farmer, musician, plumber, or physician.	.58	3.75	1.28	35.5
	46	allows a student to gain: (1) a full educational preparation, (2) a broad understanding of the world of work, (3) social maturity, (4) a positive resilient self-concept, (5) a familiarity with social problems as they emerge from practical experience.	.64	3.99	1.12	24.5
	47	enables the individual to identify the skills which are basic to success in adult life and in any job he might choose.	.68	3.67	1.12	38.5
	50	increases motivation through a sense of competence derived through experimentation in job skills.	.54	3.88	9.52	30.5

Factor	Item number	Descriptive Statement	Factor loading	Mean	Standard deviation	Mean Ranking
	51	stimulates the kind of educational program in which every pupil can succeed.	.57	4.07	9.40	18

<center>Spurious Statement</center>

	6	increases the student's motivation to learn by relating his studies to the world of work.	.50	4.09	1.04	16.5
	34	enables the individual to achieve a measure of success in his particular role in life.	.49	3.75	1.18	35.5
	40	enables the individual to analyze factors relating to attaining and maintaining a job.	.48	4.12	7.86	13.5
	41	reduces the discontinuity between childhood education and adult work.	.50	3.89	9.98	30.5
	42	is the combined effort of public education and community to prepare the individual for a meaningful and satisfying life.	.46	4.16	1.10	10
	44	enables the individual to demonstrate an awareness of the diversity of life styles which exist and show positive feelings about those that are different from his.	.50	3.67	1.13	38.5
	49	integrates learning and going.	.48	4.09	9.47	16.5
	55	allows the student time to explore his abilities, interests and attitudes, relate them to career opportunities, and make valid decisions regarding further education and/or work.	.47	4.22	9.71	7

Factor II, Curriculum Unity, accounted for 21.5% of the common variance. Nine descriptors with factor loadings of +.50 or higher clustered under Factor II.

Factor II also contained 9 spurious descriptors which are included in Table III. A total of 18 descriptors were clustered under Factor II. Factors II and IV included 3 and 1 descriptive factors respectively, but it was not possible to draw any definitive titles because of the lack of interrelationship within the factors. These factors are presented in Table IV.

The items in Factors III and IV as well as other items with higher mean scores but low factor loadings should not be overlooked as a conceptual model of Career Education is developed.

It was decided that the computer should be used to create a group of random numbers to determine if the real and random data might be the same. Figure I demonstrates that the data in the first three factors were reliable.

The ten highest and ten lowest mean ranked descriptors are presented in Table V. All of the ten highest ranked descriptors are concerned with the ability of Career Education to deal with the needs of the individual. The standard deviations of the ten highest descriptors indicate a strong agreement among respondents relative to the importance of these items.

Factor	Item number	Descriptive Statement	Factor loading	Mean	Standard deviation	Mean Ranking
II	1	constitutes a new, vitalizing thrust in education.	-.51	4.08	1.08	17.5
	8	is a basic part of all education.	-.50	4.13	1.17	12
	19	may well provide the vehicle for revitalizing the American educational enterprise and reestablishing its relevance and credibility with society.	-.57	3.83	1.20	33.5
	28	constitutes a major curriculum reform.	-.62	3.34	1.32	44
	31	enables the individual to recognize that learning is a continuing process.	-.52	3.95	1.04	26
	33	is wholly student oriented.	-.61	3.51	1.35	42
	37	has educators, employers and young people planning and operating the program.	-.54	3.70	9.99	34
	39	is a new partnership in learning for life.	-.59	3.60	1.25	40
	57	gears the sequence of learning activities to the student's individual interests and abilities.	-.54	4.01	8.34	23
		Spurious Statement				
	2	places career development as the central unifying element of education.	-.45	4.15	1.12	11
	21	allows youth to evaluate themselves.	-.46	3.96	1.13	25.5
	34	enables the individual to achieve a measure of success in his particular role in life.	-.46	3.75	1.18	35.5

65

Factor	Item number	Descriptive Statement	Factor loading	Mean	Standard deviation	Mean Ranking
		Spurious Statement				
II	38	involves coping with all spheres of existence - work, leisure, intellectual development and social involvements.	-.48	3.90	9.62	29.5
	49	integrates learning and doing.	-.47	4.09	9.47	16.5
	52	increases one's adaptability to change.	-.47	3.75	1.10	35.5
	53	develops techniques and structures for fostering self-direction and decision making.	-.48	4.08	9.52	17.5
	60	assumes that education is preparation for life in which one chooses his own particular role.	-.49	4.03	9.95	20.5
	63	demonstrates concern for the individual.	-.46	4.25	1.08	6.5

Factor	Item number	Descriptive Statement	Factor loading	Mean	Standard deviation	Mean Ranking
III	5	recognizes the centrality of careers in shaping lives by determining or limiting where individuals work, where they live, their associates, and other dimensions that are significant in defining the life style.	.58	4.27	8.24	5.5
	12	facilitates more rational and valid career planning and preparation by its varied choices offered.	.54	4.11	9.40	14
	54	permeates all levels of education.	.51	4.33	9.47	4
		Spurious Statement				
	8	is a basic part of all education.	.46	4.13	1.17	12
	9	leads the individual through the progressive stages of career awareness, orientation, exploration and preparation of career development.	.49	4.34	8.31	3
	35	affects every student and embraces the entire range of the school system.	.50	4.21	1.02	8
	69	helps the student to "find" a career by choice, not by chance.	.47	4.10	9.11	15

Factor	Item number	Descriptive Statement	Factor loading	Mean	Standard deviation	Mean Ranking
IV	58	facilitates learning in the broadest sense to help the individual achieve effective participation in all his life roles.	.50	3.83	1.02	33
		Spurious Statement				
	36	enables the individual to identify some of the reasons why people work and to differentiate between societal and individual needs in working.	.45	3.90	9.45	29.5

A Technique Factor Analysis

The Q-technique is a statistical technique used to determine the degree that two respondents are alike with regard to their responses to the test instrument.

Fruchter's recommended cutoff formula was utilized to select factors for the Q-techniques. A twelve factor solution was used to analyze the data.

Factor I accounted for 94.5% of the common variance. No loadings of any consequence were found on the remaining factors.

Table 6. Percentage of Common Variance for the
         R Mode Analysis.

Factor	Percentage	Cumulative Percentage
1	30.37	30.37
2	21.54	51.90
3	9.87	61.77
4	7.99	69.77
5	5.67	75.44
6	4.79	80.23
7	4.33	84.57
8	3.81	88.38
9	3.31	91.69
10	3.23	94.92
11	2.58	97.50
12	2.50	100.00

Figure 1. Comparison of Real Data Versus Random Data.

CHAPTER V

SUMMARY AND RECOMMENDATIONS

SUMMARY

The overall purpose of this study was to identify the descrip-
tive factors that make up a workable Career Education concept and
to apply this criterion to a teacher education program. The main
objectives, procedures and findings of this study are here sum-
marized.

Objective I. To identify potential descriptive
              factors of Career Education.

This objective was accomplished by reviewing current Career
Education literature found in: ERIC, recent publications, recent
dissertation abstracts, periodicals, as well as personal interviews
with those involved with the concept. A total of 190 descriptive
factors were initially identified.

Objective II. To develop a research instrument capable
              of measuring the response of educators
              relative to the importance of each
              identified Career Education descriptive
              factor.

This objective was handled in two steps: First, the original
list of descriptive factors was submitted to a jury panel of experts
made up of individuals in Career Education, Vocational Education,
Teacher Preparation and general Education. The panel eliminated any
duplicate or ambiguous statements and the result was a total of 103
descriptive factors. In the next step these factors were submitted

by mail to 19 individuals who had distinguished themselves as leaders in Career Education, 8 in Oregon and 11 from outside the state. These experts were asked to accept, modify or reject the factors. From the results of this process a 72 item questionnaire was created using a modified Delphi technique. It was designed to be administered by mail and the final instrument was field tested before submission to the 170 members of the study population.

> Objective III. To identify the importance of selected Career Education descriptive factors to professional educators who have demonstrated an awareness of and an interest in the Career Education concept.

The responses of the study population were analyzed statistically utilizing a one-way analysis of variance F statistics, and a factor analysis procedure incorporating Q and R mode analysis. The results of this test indicated:

1. There were certain descriptive factors considered important and essential to the concept of Career Education by respondents throughout the United States.

2. There was no significant difference in the way the respondents from all service areas viewed these descriptive factors.

> Objective IV. To utilize the findings to develop a suggested teacher education model in Career Education.

This study has identified certain descriptive factors of Career Education as being of real importance to be included in a teacher education program. Basic to these factors is the implication that none of them operate in isolation but rather each is a part of a

developing multi-dimensional concept. This approach is also relevant

to the development of innovative teacher education curriculum. Even

though certain factors have been identified as being best introduced

in Phase I or Phase II of the program the fact remains that the

Certain Education concept cuts across all levels of teacher education

and should be viewed in that light.

Taking the descriptive factors of Career Education that have

been identified and subdivided into six cluster areas let us investi-

gate how they might be incorporated into the eight general subject

matter areas of an innovative program. (See Figure 2)   This con-

ceptual diagram is an attempt to interpret visually all the factors

suggested above.

ESSENTIAL AREAS OF IMPORTANCE IN TEACHER EDUCATION

Affective Development of Children
Cognitive Development of Children
School as a Social System
Instruction & Learning
Reading
Cultural Diversity
Media
Classroom Behavior

DESCRIPTIVE
FACTORS

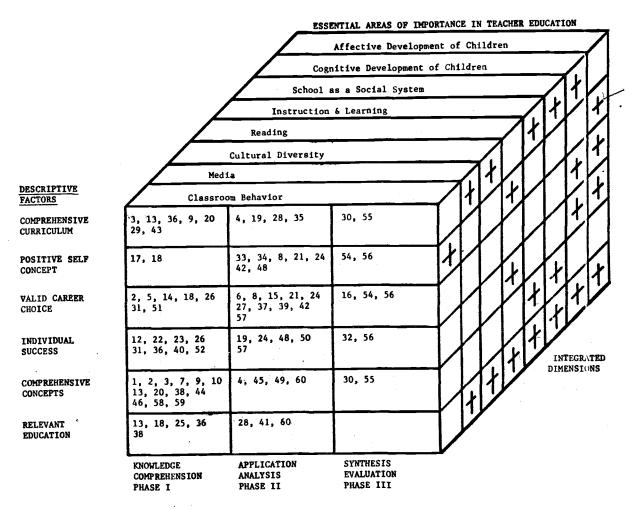|	KNOWLEDGE COMPREHENSION PHASE I	APPLICATION ANALYSIS PHASE II	SYNTHESIS EVALUATION PHASE III
COMPREHENSIVE CURRICULUM	3, 13, 36, 9, 20 29, 43	4, 19, 28, 35	30, 55
POSITIVE SELF CONCEPT	17, 18	33, 34, 8, 21, 24 42, 48	54, 56
VALID CAREER CHOICE	2, 5, 14, 18, 26 31, 51	6, 8, 15, 21, 24 27, 37, 39, 42 57	16, 54, 56
INDIVIDUAL SUCCESS	12, 22, 23, 26 31, 36, 40, 52	19, 24, 48, 50 57	32, 56
COMPREHENSIVE CONCEPTS	1, 2, 3, 7, 9, 10 13, 20, 38, 44 46, 58, 59	4, 45, 49, 60	30, 55
RELEVANT EDUCATION	13, 18, 25, 36 38	28, 41, 60	

INTEGRATED
DIMENSIONS

Figure 2. CLUSTERS OF DESCRIPTIVE FACTORS APPLIED TO A LEARNING MODEL

DESCRIPTIVE FACTORS

I. COMPREHENSIVE CURRICULUM CLUSTER

Phase I:

3. Permeates all levels of Education.

13. Is a basic part of all education.

36. Establishes interrelationships among categories and disciplines to bring about the total development of the individual.

9. Affects every student and embraces the entire range of the school system.

20. Constitutes a new, vitalizing thrust in education.

29. Should be universally accessible at all levels.

43. Is a current on-going process that is primarily developmental in nature.

Phase II:

4. Recognizes the centrality of careers in shaping lives by determining or limiting where individuals work, where they live, their associates, and other dimensions that are signifianct in defining the life style.

19. Integrates learning and doing.

28. Gears the sequence of learning activities to the student's individual interests and abilities

35. Improves overall pupil performance by focusing basic subjects around a career development theme.

Phase III:

30. Incorporates varied learning experiences into the educational program of all pupils.

55. Provides a new way of orienting and deploying educational resources.

II. POSITIVE SELF CONCEPT CLUSTER

Phase I:

17. Is for all youth who would like their education to be more relevant to life outside the school

18. Increases the student's motivation to learn by relating his studies to the world of work.

Phase II:

33. Allows youth to evaluate themselves.

34. Enables the individual to recognize that learning is a continuing process.

8. Allows the student time to explore his abilities, interests and attitudes, relate them to career opportunities, and make valid decisions regarding further education and/or work.

21. Develops techniques and structures for fostering self-direction and decision making.

24. Assumes that education is preparation for life in which one chooses his own particular role.

42. Increases motivation through a sense of competence derived through experimentation in job skills.

48. Facilitates learning in the broadest sense to help the individual achieve effective participation in all his life roles.

Phase III:

54. Improves the vocational planning of students by providing a variety of work opportunities.

56. Enables the individual to demonstrate an awareness of the diversity of life styles which exist and show positive feelings about those that are different from his.

III. VALID CAREER CHOICE CLUSTER

Phase I:

2. Leads the individual through the progressive stages of career awareness, orientation, exploration, and preparation of career development.

5. Broadens young people's career horizons.

14. Enables the individual to recognize that the academic skills learned in elementary schools have application to the world of work.

18. Increases the student's motivation to learn by relating his studies to the world of work.

26. Recognizes the urgent necessity of making sure that every pupil is prepared through education to find his place in society and in the economy.

31. Allows a student to gain: (1) a full educational preparation, (2) a broad understanding of the world of work, (3) social maturity, (4) a positive resilient self-concept, (5) a familiarity with social problems as they emerge from practical experience.

51. Leads to employment, whether as farmer, musician, plumber, or physician.

Phase II:

6. Provides for every person to make informed choices as he develops his own career.

8. Allows the student time to explore his abilities, interests and attitudes, relate them to career opportunities, and make valid decisions regarding further education and/or work.

15. Enables the individual to analyze factors relating to attaining and maintaining a job.

21. Develops techniques and structures for fostering self-direction and decision making.

24. Assumes that education is preparation for life in which one chooses his own particular role.

27. Develops student attitudes about the significance of work.

37. Develops the student's ability to gather information and apply it in solving problems and making rational decisions.

39. Enables the individual to identify some of the reasons why people work and to differentiate between societal and in-dividual needs in working.

42. Increases motivation through a sense of competence derived through experimentation in job skills.

57. Enables the individual to identify the skills which are basic to success in adult life and in any job he might choose.

Phase III:

16. Facilitates more rational and valid career planning and preparation by its varied choices offered.

54. Improves the vocational planning of students by providing a variety of work opportunities.

56. Enables the individual to demonstrate an awareness of the diversity of life styles which exist and show positive feelings about those that are different from his.

IV. INDIVIDUAL SUCCESS CLUSTER

Phase I:

12. Is the combined effort of public education and community to prepare the individual for a meaningful and satisfying life.

22. Stimulates the kind of educational program in which every pupil can succeed.

23. Builds progressively the student's knowledge and understanding of the world about him.

26. Recognizes the urgent necessity of making sure that every pupil is prepared through education to find his place in society and in the economy.

31. Allows a student to gain: (1) a full educational preparation, (2) a broad understanding of the world of work, (3) social maturity, (4) a positive resilient self-concept, (5) a familiarity with social problems as they emerge from practical experience.

36. Establ ishes interrelationships among categories and disciplines to bring about the total development of the individual.

40. Involves coping with all spheres of existence - work, leisure, intellectual development and social involvements.

52. Increases one's adaptability to change.

Phase II:

19. Integrates learning and doing.

24. Assumes that education is preparation for life in which one chooses his own particular role.

48. Facilitates learning in the broadest sense to help the individual achieve effective participation in all his life roles.

50. Enables the individual to achieve a measure of success in his particular role in life.

57. Enables the individual to identify the skills which are basic to success in adult life and in any job he might choose.

Phase III:

32. Involves employers in a new alliance with educators and
    young people.

56. Enables the individual to demonstrate an awareness of the
    diversity of life styles which exist and show positive feelings
    about those that are different from his.

V. COMPREHENSIVE CONCEPTS CLUSTER

Phase I:

1. Is for all -- high and low achievers, college bound youth and dropouts.

2. Leads the individual through the progressive stages of career awareness, orientation, exploration, and preparation of. career development.

3. Permeates all levels of education.

7. Demonstrates concern for the individual.

9. Affects every student and embraces the entire range of the school system.

10. Encourages the recognition that people do not have the same interests or abilities.

13. Is a basic part of all education.

20. Constitutes a new, vitalizing thrust in education.

38. Interrelates all the various dimensions of education to the concept of career education for all.

44. The goal of career education is comprehensive learning, not vocational training.

46. May well provide the vehicle fore revitalizing the American educational enterprise and reestablishing its relevance and credibility with society.

58. Introduces a new sense of focus in education.

59. Is a new partnership in learning for life.

Phase II:

4. Recognizes the centrality of careers in shaping lives by determining or limiting where individuals work, where they live, their associates, and other dimensions that are significant in defining the life style.

45. Explores interrelationship between attitude, ability, experiences and performance.

49. Makes possible a comprehensive educational program focused on careers.

60. Removes the assumed distinctions between academic and occupational learning programs.

Phase III:

30. Incorporates varied learning experiences into the educational program of all pupils.

55. Provides a new way of orienting and deploying educational resources.

VI.. RELEVANT EDUCATION CLUSTER

Phase I:

13. Is a basic part of all education.

18. Increases the student's motivation to learn by relating his studies to the world of work.

25. Introduces a sense of purpose into education.

36. Establishes interrelationships among categories and disciplines to bring about the total development of the individual.

38. Interrelates all the various dimensions of education to the concept of career education for all.

Phase II:

28. Gears the sequence of learning activities to the student's individual interests and abilities.

41. Reduces the discontinuity between childhood education and adult work.

60. Removes the assumed distinctions between academic and occupational learning programs.

RECOMMENDATIONS

The findings and conclusions derived from this study suggest

several recommendations.

1. Based on the identification of these factors an

   instructional instrument needs to be developed

   appropriate for use with Phase I, Phase II,

   Phase III, and in-service work with teachers

   currently in the field. This instrument would

   best be developed on a multi-media concept and

   should have as its central focus the creation

   of a thirst for answers in the persons working

   with it rather than attempting to provide absolute

   answers. If this instrument were developed along

   these innovative lines, it might well provide a

   central focus that could be viewed repeatedly

   throughout all phases of the teacher education

   curriculum to spark the questions that generate

   the thirst for answers that would motivate a

   student to investigate all life roles within the

   total Career Education concept.

2. That further research be conducted on a broader

   scale using this same instrument to verify and/or

   modify the results of this study.

3. There is a need for more studies on methods of
   implementing Career Education into the existing
   Teacher Education curriculums.

4. Prospective teachers should know and understand
   the Career Education concept and the methods for
   implementing it in the class room.

5. This study should be replicated in the neat future
   due to the intense interest in and the rapidly
   expanding concept of Career Education and the
   growing impact it is making on education nation-
   wide.

Moving in the direction of these recommendations could improve
the structure and quality of the Teacher Education program. When
these recommendations are implemented they may materially influence
Teacher Education programs for the realization of a successful
Career Education program in the public schools and post secondary
educational institutions.

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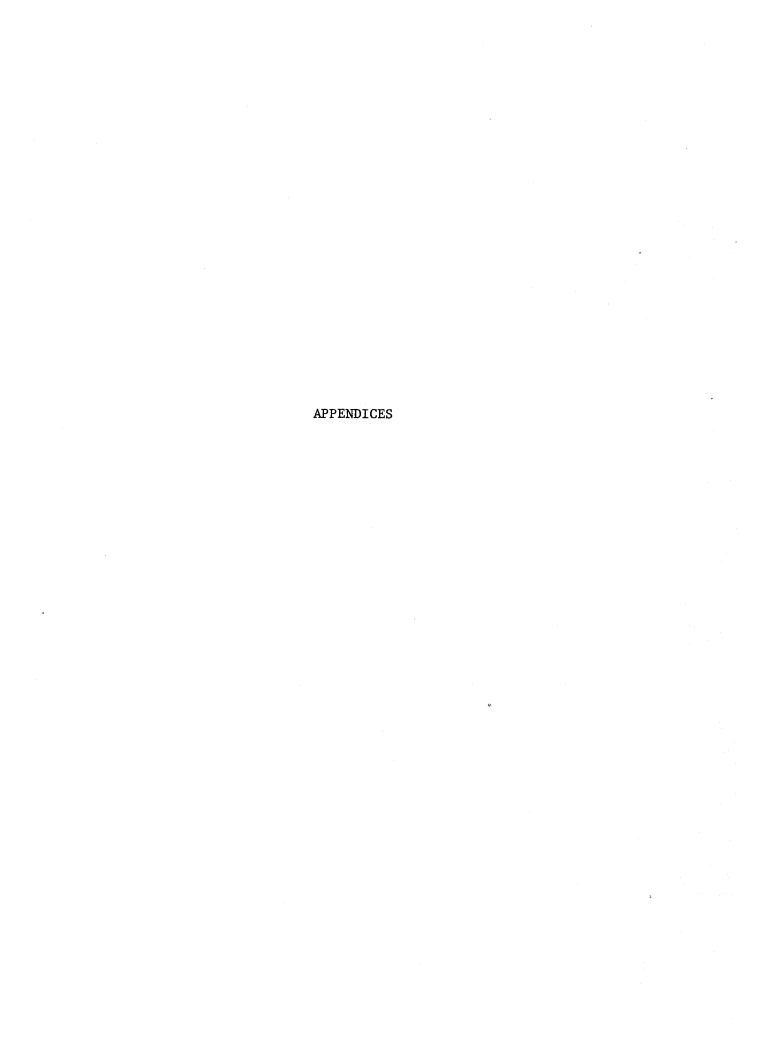
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APPENDICES

APPENDIX A

QUESTIONNAIRE

Oregon State University

(1973-1974)

School of Education Oregon State University Corvallis, Oregon 97331 (503) 754-1661

Dear Colleague:

The School of Education, Oregon State University, is involved in the development of a Career Education component to be included in the Teacher Preparatory offerings of the institution. Among the tasks that must be completed is the identification of the descriptive factors that make up the Career Education concept.

You have been identified as an individual with an active professional interest in Career Education. Your assistance is requested in the development of a research instrument that can be submitted to a large population of educators. The purpose of this research effort is to place before working educators a variety of statements from the literature relating to Career Education in order to:

1. Seek their reaction as to the importance of each statement to the identification of the descriptive factors that make up the Career Education concept.

2. Locate in a three-phase Teacher Preparation Program where each concept would best be introduced.

The three phases of this program provide the potential teacher with an opportunity to:

Phase I become aware of the learner and his environment.

Phase II understand the psychological base and methods that may be used to interact with the learner, as a beginning teacher.

Phase III actually implement his knowledge base of learners from Phase I as well as those methods developed in Phase II in the teaching phase of the program.

It is requested that you examine each of the items included in the enclosed list and:

1. Rate each statement as to its importance as a descriptive factor of Career Education.

Page 2

2. Specify where you feel the concept should be introduced.

3. Add any statement that you feel has been overlooked that partic-
ularly relates to the description of Career Education. Extra
pages are supplied at the end of the questionnaire for any addi-
tions.

Each questionnaire has been numbered to determine follow-up contacts. No
other use will be made of that number in this project, and all responses
will be treated confidentially.

In order to meet the time scheduled for the completion of this phase of the
project, it is requested that the questionnaire be completed and returned
as soon as possible. Your cooperation and assistance are greatly appreciated.

Sincerely,

Redacted for privacy

Henry A. Ten Pas
Director
Division of Undergraduate Studies

Redacted for privacy

Jim W. Ashlock
Research Assistant

Instructions for completion of the questionnaire

A. In the spaces provided below, check ( ) the appropriate area in which you spend the majority of your professional time:

( ) University
( ) Public School
( ) U.S. Office of Education
( ) State Departments of Education
( ) Centers for Vocational Education
( ) Business Group (outside of Education)
( ) International Office of Education
( ) Other _____

B. The following questions are included to provide an informational profile of respondents:

1. Age:
   ( ) Under 40
   ( ) Over 40

2. Teaching and/or Administrative Experience:

Teaching		Administrative
( )	1-5 years	( )
( )	6-10 years	( )
( )	11 or more years	( )

C. For each item please circle the rating (1,2,3,4,5) which most closely represents your feeling as to the importance of the descriptive factor and (1,2,3) as to where in the Teacher Preparation Program you feel it should be introduced.

Part I   Part II

Here is an example:

Career Education

1. Enables the individual to recognize occupations important to the community.   1 2 3 4 ⑤   ① 2 3 4 5

This person in marking the "5" rating on the first part felt the descriptive factor was very important, and in marking the "1" on the second part felt the factor should be introduced into the Teacher Preparation Program during Phase I.

DESCRIPTIVE FACTORS OF CAREER EDUCATION
SURVEY INSTRUMENT

		Not Slightly Moderately Considerably Very	Phase I Phase II Phase III Other None
A.	How important is each of the following statements in describing Career Education?		
B.	At what phase in the Teacher Preparation Program as described should this concept be introduced?	1 2 3 4 5	1 2 3 4 5

Career Education:

1. Constitutes a new, vitalizing thrust in education. 1 2 3 4 5   1 2 3 4 5

2. Places career development as the central unifying element of education. 1 2 3 4 5   1 2 3 4 5

3. Teaches the use of the head and the hand, a combination required in today's progressive society. 1 2 3 4 5   1 2 3 4 5

4. Integrates traditional academic education with vocational education. 1 2 3 4 5   1 2 3 4 5

5. Incorporates the concept of an individual's entitlement to the educational opportunities required for career selection, preparation, and advancement. 1 2 3 4 5   1 2 3 4 5

6. Enables women to re-examine their life roles. 1 2 3 4 5   1 2 3 4 5

7. Recognizes the centrality of careers in shaping lives by determining or limiting where individuals work, where they liv their associates, and other dimensions that are significant in defining the life style. 1 2 3 4 5   1 2 3 4 5

8. Increases the student's motivation to learn by relating his studies to the world of work. 1 2 3 4 5   1 2 3 4 5

9. Puts the most emphasis on "career". 1 2 3 4 5   1 2 3 4 5

10. Improves overall pupil performance by focusing basic subjects around a career development theme. 1 2 3 4 5   1 2 3 4 5

Career Education: | Not | Slightly | Moderately | Considerably | Very | | Phase I | Phase II | Phase III | Other | None

11. Is a basic part of all education.

    1 2 3 4 5   1 2 3 4 5

12. Leads the individual through the progressive stages of career awareness, orientation, exploration, and preparation of career development

    1 2 3 4 5   1 2 3 4 5

13. Enables women to reach their full professional potential.

    1 2 3 4 5   1 2 3 4 5

14. Interrelates all the various dimensions of education to the concept of career education for all.

    1 2 3 4 5   1 2 3 4 5

15. Is a return to the concept of education as career preparation.

    1 2 3 4 5   1 2 3 4 5

16. Facilitates more rational and valid career planning and preparation by its varied choices offered.

    1 2 3 4 5   1 2 3 4 5

17. Makes possible a vocademic (vocational and academic) program.

    1 2 3 4 5   1 2 3 4 5

18. Enhances academic preparation by making learning relevant.

    1 2 3 4 5   1 2 3 4 5

19. Recognizes the urgent necessity of making sure that every pupil is prepared through education to find his place in society and in the economy.

    1 2 3 4 5   1 2 3 4 5

20. Incorporates varied learning experiences into the educational program of all pupils.

    1 2 3 4 5   1 2 3 4 5

21. Introduces a new sense of focus in education.

    1 2 3 4 5   1 2 3 4 5

22. Enables a person to identify and describe his parents' occupations.

    1 2 3 4 5   1 2 3 4 5

23. Builds progressively the student's knowledge and understanding of the world about him.

    1 2 3 4 5   1 2 3 4 5

Career Education:

		Not	Slightly	Moderately	Considerably	Very		Phase I	Phase II	Phase III	Other	None

24. Synonymous with total education — 1 2 3 4 5 — 1 2 3 4 5

25. May well provide the vehicle for revitalizing the American educational enterprise and reestablishing its relevance and credibility with society. — 1 2 3 4 5 — 1 2 3 4 5

26. Will enable the individual to identify five related occupations in each job cluster or family. — 1 2 3 4 5 — 1 2 3 4 5

27. Makes possible a comprehensive educational program focused on careers. — 1 2 3 4 5 — 1 2 3 4 5

28. Allows youth to evaluate themselves. — 1 2 3 4 5 — 1 2 3 4 5

29. Enables the individual to recognize that the academic skills learned in elementary schools have application to the world of work. — 1 2 3 4 5 — 1 2 3 4 5

30. Removes the assumed distinctions between academic and occupational learning programs. — 1 2 3 4 5 — 1 2 3 4 5

31. Provides for every person to make informed choices as he develops his own career. — 1 2 3 4 5 — 1 2 3 4 5

32. Encourages the recognition that people do not have the same interests or abilities. — 1 2 3 4 5 — 1 2 3 4 5

33. Explores interrelationship between attitude, ability, experiences and performance. — 1 2 3 4 5 — 1 2 3 4 5

34. Enables the individual to recognize occupations important to the community. — 1 2 3 4 5 — 1 2 3 4 5

35. Provides for continuity of instruction. — 1 2 3 4 5 — 1 2 3 4 5

36. Enables the individual to analyze the changing nature of job opportunities in terms of technology and the needs of people. — 1 2 3 4 5 — 1 2 3 4 5

37. Constitutes a major curriculum reform. — 1 2 3 4 5 — 1 2 3 4 5

38. Establishes interrelationships among categories and disciplines to bring about the total development of the individual. — 1 2 3 4 5 — 1 2 3 4 5

	Not	Slightly	Moderately	Considerably	Very		Phase I	Phase II	Phase III	Other	None

Career Education:

39. Develops student attitudes about the significance of work. 1 2 3 4 5 1 2 3 4 5

40. Enables the individual to recognize that learning is a continuing process. 1 2 3 4 5 1 2 3 4 5

41. Improves the vocational planning of students by providing a variety of work opportunities. 1 2 3 4 5 1 2 3 4 5

42. Is wholly student oriented. 1 2 3 4 5 1 2 3 4 5

43. Enables the individual to achieve a measure of success in his particular role in life. 1 2 3 4 5 1 2 3 4 5

44. Today, as in ancient times, allows children to learn by observing, taking part in and being included in adult activities. 1 2 3 4 5 1 2 3 4 5

45. Affects every student and embraces the entire range of the school system. 1 2 3 4 5 1 2 3 4 5

46. Enables the individual to identify some of the reasons why people work and to differentiate between societal and individual needs in working. 1 2 3 4 5 1 2 3 4 5

47. Provides for increased avocational options. 1 2 3 4 5 1 2 3 4 5

48. Has educators, employers and young people planning and operating the program. 1 2 3 4 5 1 2 3 4 5

49. Involves coping with all spheres of existence – work, leisure, intellectual development and social involvements. 1 2 3 4 5 1 2 3 4 5

50. Is a new partnership in learning for life. 1 2 3 4 5 1 2 3 4 5

51. Enables the individual to analyze factors relating to attaining and maintaining a job. 1 2 3 4 5 1 2 3 4 5

52. Reduces the discontinuity between childhood education and adult work. 1 2 3 4 5 1 2 3 4 5

Career Education:

	Not / Slightly / Moderately / Considerably / Very	Phase I / Phase II / Phase III / Other / None
53. Enables the individual to explain the difference between producers of goods and producers of services.	1 2 3 4 5	1 2 3 4 5
54. Is the combined effort of public education and community to prepare the individual for a meaningful and satisfying life.	1 2 3 4 5	1 2 3 4 5
55. Diminishes the number of persons who hold degrees but remain "uneducated".	1 2 3 4 5	1 2 3 4 5
56. Enables the individual to demonstrate an awareness of the diversity of life styles which exist and show positive feelings about those that are different from his.	1 2 3 4 5	1 2 3 4 5
57. Leads to employment, whether as farmer, musician, plumber, or physician.	1 2 3 4 5	1 2 3 4 5
58. Allows a student to Gain: (1) a full educational preparation. (2) a broad understanding of the world of work. (3) social maturity. (4) a positive resilient self-concept. (5) a familiarity with social problems as they emerge from practical experience.	1 2 3 4 5	1 2 3 4 5
59. Is the revolutionary instrument that the times demand.	1 2 3 4 5	1 2 3 4 5
60. Enables the individual to identify the skills which are basic to success in adult life and in any job he might choose.	1 2 3 4 5	1 2 3 4 5
61. Is based on the philosophy, like that of the Greeks, which makes no distinction between fine and applied arts - between building a house and writing a poem.	1 2 3 4 5	1 2 3 4 5
62. Integrates learning and doing.	1 2 3 4 5	1 2 3 4 5
63. Concept will allow the school to prove its worth to society.	1 2 3 4 5	1 2 3 4 5
64. Increases motivation through a sense of competence derived through experimentation in job skills.	1 2 3 4 5	1 2 3 4 5

Career Education:

	Not	Slightly	Moderately	Considerably	Very		Phase I	Phase II	Phase III	Other	None

65. Stimulates the kind of educational program in which every pupil can succeed.
   1 2 3 4 5   1 2 3 4 5

66. Gives each person a greater command over his own life through the right of choice.
   1 2 3 4 5   1 2 3 4 5

67. Increases one's adaptability to change.
   1 2 3 4 5   1 2 3 4 5

68. Success depends on the quality of leadership.
   1 2 3 4 5   1 2 3 4 5

69. Affords students opportunities to meet all the basic human needs - survival, security, belonging, self-esteem, and self-actualization.
   1 2 3 4 5   1 2 3 4 5

70. Develops techniques and structures for fostering self-direction and decision making.
   1 2 3 4 5   1 2 3 4 5

71. Offers a totally new approach for preparing students for survival in the modern world.
   1 2 3 4 5   1 2 3 4 5

72. Allows the student to feel himself a part of the program by permitting him to put abstract ideas into practical use.
   1 2 3 4 5   1 2 3 4 5

73. Permeates all levels of education.
   1 2 3 4 5   1 2 3 4 5.

74. Allows the student time to explore his abilities, interests and attitudes, relate them to career opportunities, and make valid decisions regarding further education and/or work.
   1 2 3 4 5   1 2 3 4 5

75. Is a current on-going process that is primarily developmental in nature.
   1 2 3 4 5   1 2 3 4 5

76. Tears the sequence of learning activities to the student's individual interests and abilities.
   1 2 3 4 5   1 2 3 4 5

77. Facilities learning in the broadest sense to help the individual achieve effective participation in all his life roles.
   1 2 3 4 5   1 2 3 4 5

Career Education:

	Not / Slightly / Moderately / Considerably / Very	Phase I / Phase II / Phase III / Other / None
78. Develops the student's ability to gather information and apply it in solving problems and making rational decisions.	1 2 3 4 5	1 2 3 4 5
79. Provides direct learning experiences in all areas of life.	1 2 3 4 5	1 2 3 4 5
80. Takes place out in the real world where people earn their living, grapple with personal, social and vocational problems of daily existence.	1 2 3 4 5	1 2 3 4 5
81. Assumes that education is preparation for life in which one chooses his own particular role.	1 2 3 4 5	1 2 3 4 5
82. Allows the same learning activities that help a young person explore various careers, also provide him with a fully accredited high school diploma.	1 2 3 4 5	1 2 3 4 5
83. Addresses itself to the needs of society.	1 2 3 4 5	1 2 3 4 5
84. Should be universally accessible at all levels.	1 2 3 4 5	1 2 3 4 5
85. Enables the community to reclaim its crucial role in preparing young people to live and work as effective social beings in a complex, rapidly changing world.	1 2 3 4 5	1 2 3 4 5
86. Demonstrates concern for the individual.	1 2 3 4 5	1 2 3 4 5
87. Is new but the idea is the first learning method used by man to pass on technical know-how, social skills and human understanding.	1 2 3 4 5	1 2 3 4 5
88. Is for all -- high and low achievers, college bound youth and dropouts.	1 2 3 4 5	1 2 3 4 5
89. Is for all youth who would like their education to be more relevant to life outside the school.	1 2 3 4 5	1 2 3 4 5
90. Broadens young people's career horizons.	1 2 3 4 5	1 2 3 4 5

		Not	Slightly	Moderately	Considerably	Very		Phase I	Phase II	Phase III	Other	None

Career Education:

91. Is a voluntary alternative for boys and girls of all backgrounds and abilities. 1 2 3 4 5   1 2 3 4 5

92. Introduces a sense of purpose into education. 1 2 3 4 5   1 2 3 4 5

93. Is a type of education in which theory and practice are inseparable. 1 2 3 4 5   1 2 3 4 5

94. Provides expert help for planning an appropriate educational program to teach individual goals. 1 2 3 4 5   1 2 3 4 5

95. Addresses itself to the needs of society. 1 2 3 4 5   1 2 3 4 5

96. Provides a new way of orienting and deploying educational resources. 1 2 3 4 5   1 2 3 4 5

97. Helps the student to "find" a career by choice not by chance. 1 2 3 4 5   1 2 3 4 5

98. Changes the way our culture structures continuity and choice. 1 2 3 4 5   1 2 3 4 5

99. Provides a new, vigorous sense of purpose and mission for the school enterprise. 1 2 3 4 5   1 2 3 4 5

100. The goal of career education is comprehensive learning not vocational training. 1 2 3 4 5   1 2 3 4 5

101. Guides the individual into the career which to him proves interesting and satisfying. 1 2 3 4 5   1 2 3 4 5

102. Involves employers in a new alliance with educators and young people. 1 2 3 4 5   1 2 3 4 5

103. Is synonymous with vocational education. 1 2 3 4 5   1 2 3 4 5

ADDITIONS - Please state all additions in performance terms

Item No.

APPENDIX B

QUESTIONNAIRE II

Oregon State University

(1974)

School of Education | **Oregon State University** | Corvallis, Oregon 97331 (503) 754-1661

Dear Colleague:

The School of Education, Oregon State University, is involved in the development of a Career Education component to be included in the Teacher Preparatory program. Among the tasks that must be completed is the identification of the descriptive factors that make up the Career Education concept.

You have been identified as an individual with an active professional interest in Career Education. The purpose of this research effort is to place before working educators a variety of statements from the literature relating to Career Education. It is requested that you examine each of the items in the questionnaire and:

1. Rate the importance of each statement to the identification of the descriptive factors that make up the Career Education concept.

2. Locate in a three-phase Teacher Preparation Program where each concept would best be introduced.

The three phases of this program provide the potential teacher with an opportunity to:

Phase I become aware of the learner and his environment.

Phase II understand the psychological base and methods that may be used to interact with the learner, as a beginning teacher.

Phase III actually implement his knowledge base of learners from Phase I as well as those methods developed in Phase II in the teaching phase of the program.

Each questionnaire has been numbered to determine follow-up contacts. No other use will be made of that number, and all responses will be treated confidentially.

In order to meet the time scheduled for the completion of this phase of the project, it is requested that the questionnaire be completed and returned as soon as possible. Your cooperation and assistance are greatly appreciated.

Sincerely,

Redacted for privacy

Redacted for privacy

/ Henry A. Ten Pas
Director
Division of Undergraduate Studies

Jim W. Ashlock
Research Assistant

*_ _ _ _

Instructions for completion of the questionnaire

A. In the spaces provided below, check ( ) the appropriate area in which you spend the majority of your professional time:

( ) University
( ) Public School
( ) U.S. Office of Education
( ) State Departments of Education
( ) Centers for Vocational Education
( ) Business Group (outside of Education)
( ) International Office of Education
( ) Other _____

B. The following questions are included to provide an informational profile of respondents:

1. Age:
   ( ) Under 40
   ( ) Over 40

2. Teaching and/or Administrative Experience:

Teaching		Administrative
( )	1-5 years	( )
( )	6-10 years	( )
( )	11 or more years	( )

C. For each item please circle the rating (1,2,3,4,5) which most closely represents your feeling as to the importance of the descriptive factor and (1,2,3,4,5) to where in the Teacher Preparation Program you feel it should be introduced.

Here is an example:

Career Education

	Part I	Part II
	Not / Slightly / Moderately / Considerably / Very	Phase I / Phase II / Phase III / Other / None
1. Enables the individual to recognize occupations important to the community.	1 2 3 4 (5)	(1) 2 3 4 5

This person in marking the "5" rating on the first part felt the descriptive factor was very important, and in marking the "1" on the second part felt the factor should be introduced into the Teacher Preparation Program during Phase I.

DESCRIPTIVE FACTORS OF CAREER EDUCATION
SURVEY INSTRUMENT

		Not / Slightly / Moderately / Considerably / Very	Phase I / Phase II / Phase III / Other / None
A.	How important is each of the following statements in describing Career Education?		
B.	At what phase in the Teacher Preparation Program as described should this concept be introduced?	1 2 3 4 5	1 2 3 4 5

Career Education:

1. Constitutes a new, vitalizing thrust in education.

    1 2 3 4 5   1 2 3 4 5

2. Places career development as the central unifying element of education.

    1 2 3 4 5   1 2 3 4 5

3. Integrates traditional academic education with vocational education.

    1 2 3 4 5   1 2 3 4 5

4. Incorporates the concept of an individual's entitlement to the educational opportunities required for career selection, preparation, and advancement.

    1 2 3 4 5   1 2 3 4 5

5. Recognizes the centrality of careers in shaping lives by determining or limiting where individuals work, where they live, their associates, and other dimensions that are significant in defining the life style.

    1 2 3 4 5   1 2 3 4 5

6. Increases the student's motiviation to learn by relating his studies to the world of work.

    1 2 3 4 5   1 2 3 4 5

7. Improves overall pupil performance by focusing basic subjects around a career development theme.

    1 2 3 4 5   1 2 3 4 5

8. Is a basic part of all education.

    1 2 3 4 5   1 2 3 4 5

9. Leads the individual through the progressive stages of career awareness, orientation, exploration, and preparation of career development.

    1 2 3 4 5   1 2 3 4 5

10. Interrelates all the various dimensions of education to the concept of career education for all.

    1 2 3 4 5   1 2 3 4 5

	Not	Slightly	Moderately	Considerably	Very		Phase I	Phase II	Phase III	Other	None

Career Education:

11. Is a return to the concept of education
as career preparation.   1 2 3 4 5   1 2 3 4 5

12. Facilitates more rational and valid career
planning and preparation by its varied
choices offered.   1 2 3 4 5   1 2 3 4 5

13. Makes possible a vocademic (vocational
and academic) program.   1 2 3 4 5   1 2 3 4 5

14. Enhances academic preparation by making
learning relevant.   1 2 3 4 5   1 2 3 4 5

15. Recognizes the urgent necessity of making
sure that every pupil is prepared through
education to find his place in society
and in the economy.   1 2 3 4 5   1 2 3 4 5

16. Incorporates varied learning experiences
into the educational program of all
pupils.   1 2 3 4 5   1 2 3 4 5

17. Introduces a new sense of focus in educa-
tion.   1 2 3 4 5   1 2 3 4 5

18. Builds progressively the student's knowl-
edge and understanding of the world about
him.   1 2 3 4 5   1 2 3 4 5

19. May well provide the vehicle for revital-
izing the American educational enterprise
and reestablishing its relevance and
credibility with society.   1 2 3 4 5   1 2 3 4 5

20. Makes possible a comprehensive educational
program focused on careers.   1 2 3 4 5   1 2 3 4 5

21. Allows youth to evaluate themselves.   1 2 3 4 5   1 2 3 4 5

22. Enables the individual to recognize that
the academic skills learned in elementary
schools have application to the world of
work.   1 2 3 4 5   1 2 3 4 5 .

23. Removes the assumed distinctions between
academic and occupational learning pro-
grams.   1 2 3 4 5   1 2 3 4 5

		Not	Slightly	Moderately	Considerably	Very		Phase I	Phase II	Phase III	Other	None

Career Education:

24. Provides for every person to make informed choices as he develops his own career.   1 2 3 4 5   1 2 3 4 5

25. Encourages the recognition that people do not have the same interests or abilities.   1 2 3 4 5   1 2 3 4 5

26. Explores interrelationship between attitude, ability, experiences and performance.   1 2 3 4 5   1 2 3 4 5

27. Enables the individual to analyze the changing nature of job opportunities in terms of technology and the needs of people.   1 2 3 4 5   1 2 3 4 5

28. Constitutes a major curriculum reform.   1 2 3 4 5   1 2 3 4 5

29. Establishes interrelationships among categories and disciplines to bring about the total development of the individual.   1 2 3 4 5   1 2 3 4 5

30. Develops student attitudes about the significance of work.   1 2 3 4 5   1 2 3 4 5

31. Enables the individual to recognize that learning is a continuing process.   1 2 3 4 5   1 2 3 4 5

32. Improves the vocational planning of students by providing a variety of work opportunities.   1 2 3 4 5   1 2 3 4 5

33. Is wholly student oriented.   1 2 3 4 5   1 2 3 4 5

34. Enables the individual to achieve a measure of success in his particular role in life.   1 2 3 4 5   1 2 3 4 5

35. Affects every student and embraces the entire range of the school system.   1 2 3 4 5   1 2 3 4 5

36. Enables the individual to identify some of the reasons why people work and to differentiate between societal and individual needs in working.   1 2 3 4 5   1 2 3 4 5

	Not / Slightly / Moderately / Considerably / Very	Phase I / Phase II / Phase III / Other / None

Career Education:

37. Has educators, employers and young people planning and operating the program. 1 2 3 4 5   1 2 3 4 5

38. Involves coping with all spheres of existence - work, leisure, intellectual development and social involvements. 1 2 3 4 5   1 2 3 4 5

39. Is a new partnership in learning for life. 1 2 3 4 5   1 2 3 4 5

40. Enables the individual to analyze factors relating to attaining and maintaining a job. 1 2 3 4 5   1 2 3 4 5

41. Reduces the discontinuity between childhood education and adult work. 1 2 3 4 5   1 2 3 4 5

42. Is the combined effort of public education and community to prepare the individual for a meaningful and satisfying life. 1 2 3 4 5   1 2 3 4 5

43. Diminishes the number of persons who hold degrees but remain "uneducated". 1 2 3 4 5   1 2 3 4 5

44. Enables the individual to demonstrate an awareness of the diversity of life styles which exist and show positive feelings about those that are different from his. 1 2 3 4 5   1 2 3 4 5

45. Leads to employment, whether as farmer, musician, plumber, or physician. 1 2 3 4 5   1 2 3 4 5

46. Allows a student to gain: (1) a full educational preparation, (2) a broad understanding of the world of work, (3) social maturity, (4) a positive resilient self-concept, (5) a familiarity with social problems as they emerge from practical experience. 1 2 3 4 5   1 2 3 4 5

47. Enables the individual to identify the skills which are basic to success in adult life and in any job he might choose. 1 2 3 4 5   1 2 3 4 5

48. Is based on the philosophy, like that of the Greeks, which makes no distinction between fine and applied arts - between building a house and writing a poem. 1 2 3 4 5   1 2 3 4 5

| | Not | Slightly | Moderately | Considerably | Very | | Phase I | Phase II | Phase III | Other | None |

Career Education:

49. Integrates learning and doing. 1 2 3 4 5 1 2 3 4 5

50. Increases motivation through a sense of competence derived through experimentation in job skills. 1 2 3 4 5 1 2 3 4 5

51. Stimulates the kind of educational program in which every pupil can succeed. 1 2 3 4 5 1 2 3 4 5

52. Increases one's adaptability to change. 1 2 3 4 5 1 2 3 4 5

53. Develops techniques and structures for fostering self-direction and decision making. 1 2 3 4 5 1 2 3 4 5

54. Permeates all levels of education. 1 2 3 4 5 1 2 3 4 5

55. Allows the student time to explore his abilities, interests and attitudes, relate them to career opportunities, and make valid decisions regarding further education and/or work. 1 2 3 4 5 1 2 3 4 5

56. Is a current on-going process that is primarily developmental in nature. 1 2 3 4 5 1 2 3 4 5

57. Gears the sequence of learning activities to the student's individual interests and abilities. 1 2 3 4 5 1 2 3 4 5

58. Facilitates learning in the broadest sense to help the individual achieve effective participation in all his life roles. 1 2 3 4 5 1 2 3 4 5

59. Develops the student's ability to gather information and apply it in solving problems and making rational decisions. 1 2 3 4 5 1 2 3 4 5

60. Assumes that education is preparation for life in which one chooses his own particular role. 1 2 3 4 5 1 2 3 4 5

61. Should be universally accessible at all levels. 1 2 3 4 5 1 2 3 4 5

62. Enables the community to reclaim its crucial role in preparing young people to live and work as effective social beings in a complex, rapidly changing world. 1 2 3 4 5 1 2 3 4 5

Career Education:

		Not	Slightly	Moderately	Considerably	Very		Phase I	Phase II	Phase III	Other	None
63.	Demonstrates concern for the individual.	1	2	3	4	5		1	2	3	4	5
64.	Is for all -- high and low achievers, college bound youth and dropouts.	1	2	3	4	5		1	2	3	4	5
65.	Is for all youth who would like their education to be more relevant to life outside the school.	1	2	3	4	5		1	2	3	4	5
66.	Broadens young people's career horizons.	1	2	3	4	5		1	2	3	4	5
67.	Introduces a sense of purpose into education.	1	2	3	4	5		1	2	3	4	5
68.	Provides a new way of orienting and deploying educational resources.	1	2	3	4	5		1	2	3	4	5
69.	Helps the student to "find" a career by choice not by chance.	1	2	3	4	5		1	2	3	4	5
70.	The goal of career education is comprehensive learning, not vocational training.	1	2	3	4	5		1	2	3	4	5
71.	Involves employers in a new alliance with educators and young people.	1	2	3	4	5		1	2	3	4	5
72.	Is synonymous with vocational education.	1	2	3	4	5		1	2	3	4	5

APPENDIX C

FOLLOW-UP LETTER

Oregon State University

(1974)

School of Education | **Oregon State University** | Corvallis, Oregon 97331   (503) 754-1661

May 12, 1974

Dear Sir:

Recently you should have received a copy of my questionnaire which asks for
your help in developing a Career Education component to be included in the
Teacher Preparatory Program here at Oregon State University.

If you have not already done so, will you be kind enough to take a few min-
utes to complete the questionnaire and return it to me? There is still time
to have your reply included in the survey results. Your reply is needed to
complete this nation-wide study now in progress.

If you have already completed a copy of the form, please disregard this
letter. If not, I would greatly appreciate your reply as soon as possible.

Thank you for your cooperation.

Sincerely,

Redacted for privacy

Jim W. Ashlock
Research Assistant

APPENDIX D

Results of Analysis of Variance Using the F Statistic

Competency	Computed F	Hypothesis*	Competency	Computed F	Hypothesis
1	1.57	retain	37	1.37	retain
2	3.18	reject**	38	.36	"
3	2.69	"	39	1.20	"
4	3.65	"	40	.67	"
5	1.66	retain	41	1.04	"
6	1.15	"	42	.83	"
7	1.70	"	43	.95	"
8	.73	"	44	.71	"
9	1.75	"	45	1.05	"
10	.86	"	46	.87	"
11	1.68	"	47	1.41	"
12	.70	"	48	1.03	"
13	2.52	reject	49	.99	"
14	1.97	retain	50	.80	"
15	1.00	"	51	.66	"
16	1.73	"	52	1.52	"
17	1.77	"	53	1.12	"
18	1.90	"	54	1.11	"
19	1.07	"	55	1.36	"
20	1.16	"	56	1.11	"
21	1.55	"	57	.58	"
22	1.80	"	58	.33	"
23	1.17	"	59	.76	"
24	1.74	"	60	.78	"
25	1.14	"	61	1.10	"
26	.76	"	62	2.15	reject
27	.96	"	63	.39	retain
28	1.78	"	64	.86	"
29	1.87	"	65	1.51	"
30	.98	"	66	.52	"
31	.53	"	67	1.88	"
32	.88	"	68	1.15	"
33	2.35	reject	69	2.52	reject
34	1.67	retain	70	.77	retain
35	1.87	"	71	1.80	"
36	.56	"	72	.85	"

*The level of significance was the .05 percent level and critical region with 7 degrees of freedom for the numerator mean and 118 degrees of freedom for the denominator mean square was F 2.10.

**The L.S.D. Test was used to compare means for the rejected items.

Following pages numbered
Consecutively. Text doesn't
flow. Author unavailable   119

APPENDIX E

DESCRIPTIVE FACTORS OF CAREER EDUCATION
RANKED ACCORDING TO IMPORTANCE, ALSO
INDICATING WHERE THEY SHOULD BE INTRODUCED
IN A TEACHER PREPARATION PROGRAM.

CAREER EDUCATION:	Mean Rating	Where Introduced
1. Is for all -- high and low achievers, college bound youth and dropouts.	4.48	Phase 1
2. Leads the individual through the progressive stages of career awareness, orientation, exploration, and preparation of career development.	4.34	Phase 1
3. Permeates all levels of education.	4.33	Phase 1
4. Recognizes the centrality of careers in shaping lives by determining or limiting where individuals work, where they live, their associates, and other dimensions that are significant in defining the life style.	4.27	Phase 2
5. Broadens young people's career horizons.	4.27	Phase 1
6. Provides for every person to make informed choices as he develops his own career.	4.25	Phase 2
7. Demonstrates concern for the individual.	4.25	Phase 1
8. Allows the student time to explore his abilities, interests and attitudes, relate them to career opportunities, and make valid decisions regarding further education and/or work.	4.22	Phase 2
9. Affects every student and embraces the entire range of the school system.	4.21	Phase 1
10. Encourages the recognition that people do not have the same interests or abilities.	4.20	Phase 1
11. Enhances academic preparation by making learning relevant	4.19	Other
12. Is the combined effort of public education and community to prepare the individual for a meaningful and satisfying life.	4.16	Phase 1

DESCRIPTIVE FACTORS OF CAREER EDUCATION
FOR INTRODUCTION IN PHASE III IN A
TEACHER PREPARATION PROGRAM

CAREER EDUCATION:

1. Facilitates more rational and valid career planning and preparation by its varied choices offered.

2. Incorporates varied learning experiences into the educational program of all pupils.

3. Involves employers in a new alliance with educators and young people.

4. Improves the vocational planning of students by providing a variety of work opportunities.

5. Provides a new way of orienting and deploying educational resourses.

6. Enables the individual to demonstrate an awareness of the diversity of life styles which exist and show positive feelings about those that are different from his.

CAREER EDUCATION:

17. Explores interrelationships between attitude, ability, experiences and performance.

18. Facilitates learning in the broadest sense to help the individual achieve effective participation in all his life roles.

19. Makes possible a comprehensive educational program focused on careers,

20. Enables the individual to achieve a measure of success in his particular role in life.

21. Enables the individual to identify the skills which are basic to success in adult life and in any job he might choose.

22. Removes the assumed distinctions between academic and occupational learning programs.

DESCRIPTIVE FACTORS OF CAREER EDUCATION
FOR INTRODUCTION IN PHASE II IN A
TEACHER PREPARATION PROGRAM

CAREER EDUCATION:

1. Recognizes the centrality of careers in shaping lives by determining or limiting where individuals work, where they live, their associates, and other dimensions that are significant in defining the life style.

2. Provides for every person to make informed choices as he develops his own career.

3. Allows the student time to explore his abilities, interests and attitudes, relate them to career opportunities, and make valid decisions regarding further education and/or work.

4. Enables the individual to analyze factors relating to attaining and maintaining a job.

5. Integrates learning and doing.

6. Develops techniques and structures for fostering self-direction and decision making.

7. Assumes that education is preparation for life in which one chooses his own particular role.

8. Develops student attitudes about the significance of work.

9. Gears the sequence of learning activities to the students individual abilities and interests.

10. Allows youth to evaluate themselves.

11. Enables the individual to recognize that learning is a continuing process.

12. Improves overall pupil performance by focusing basic subjects around a career development theme.

13. Develops the student's ability to gather information and apply it in solving problems and making rational decisions.

14. Enables the individual to identify some of the reasons why people work and to differentiate between societal and individual needs in working.

15. Reduces the discontinuity between childhood education and adult work.

16. Increases motivation through a sense of competence derived through experimentation in job skills.

CAREER EDUCATION:

19. Allows a student to gain: (1) a full educational preparation, (2) a broad understanding of the world of work, (3) social maturity, (4) a positive resilient self-concept, (5) a familarity with social problems as they emerge from practical experience.

20. Establishes interrelationships among categories and disciplines to bring about the total development of the individual.

21. Interrelates all the various dimensions of education to the concept of career education for all.

22. Involves coping with all spheres of existence - work leisure, intellectual development and social involvement.

23. Is a current on-going process that is primarily developmental in nature.

24. The goal of career education is comprehensive learning, not vocational training.

25. May well provide the vehicle for revitalizing the American education-al enterprise and reestablishing its relevance and credibility with society.

26. Leads to employment, whether as farmer, musician, plumber, or physician.

27. Increases one's adaptability to change.

28. Introduces a new sense of focus in education.

29. Is a new partnership in learning for life.

APPENDIX F

DESCRIPTIVE FACTORS OF CAREER EDUCATION
FOR INTRODUCTION IN PHASE I IN A
TEACHER PREPARATION PROGRAM

CAREER EDUCATION:

1. Is for all -- high and low achievers, college bound youth and drop-outs.

2. Leads the individual through the progressive stages of career awareness, orientation, exploration, and preparation of career development.

3. Permeates all levels of education.

4. Broadens young people's career horizons.

5. Demonstrates concern for the individual.

6. Affects every student and embraces the entire range of the school system.

7. Encourages the recognition that people do not have the same interests or abilities.

8. Is the combined effort of public education and community to prepare the individual for a meaningful and satisfying life.

9. Is a basic part of all education.

10. Enables the individual to recognize that the academic skills learned in elementary schools have application to the world of work.

11. Is for all youth who would like their education to be more relevant to life outside the school.

12. Increases the student's motivation to learn by relating his studies to the world of work.

13. Constitutes a new, vitalizing thrust in education.

14. Stimulates the kind of educational program in which every pupil can succeed.

15. Builds progressively the student's knowledge and understanding of the world about him.

16. Introduces a sense of purpose into education.

17. Recognizes the urgent necessity of making sure that every pupil is prepared through education to find his place in society and in the economy.

18. Should be universally accessible at all levels.

CAREER EDUCATION:	Mean Rating	Where Introduced
56. Enables the individual to demonstrate an awareness of the diversity of life styles which exist and show positive feelings about those that are different from his.	3.67	Phase 3
57. Enables the individual to identify the skills which are basic to success in adult life and in any job he might choose.	3.67	Phase 2
58. Introduces a new sense of focus in education.	3.65	Phase 1
59. Is a new partnership in learning for life.	3.60	Phase 1
60. Removes the assumed distinctions between academic and occupational learning programs.	3.56	Phase 2

CAREER EDUCATION:	Mean Rating	Where Introduced
42. Increases motivation through a sense of competence derived through experimentation in job skills.	3.88	Phase 2
43. Is a current on-going process that is primarily developmental in nature.	3.87	Phase 1
44. The goal of career education is comprehensive learning, not vocational training.	3.87	Phase 1
45. Explores interrelationship between attitude, ability, experiences and performance.	3.84	Phase 2
46. May well provide the vehicle for revitalizing the American educational enterprise and reestablishing its relevance and credibility with society.	3.83	Phase 1
47. Enables the individual to analyze the changing nature of job opportunities in terms of technology and the needs of people.	3.83	Other
48. Facilitates learning in the broadest sense to help the individual achieve effective participation in all his life roles.	3.83	Phase 2
49. Makes possible a comprehensive educational program focused on careers.	3.79	Phase 2
50. Enables the individual to achieve a measure of success in his particular role in life.	3.75	Phase 2
51. Leads to employment, whether as farmer, musician, plumber, or physician.	3.75	Phase 1
52. Increases one's adaptability to change.	3.75	Phase 1
53. Has educators, employers and young people planning and operating the program.	3.73	Phase 3
54. Improves the vocational planning of students by providing a variety of work opportunities.	3.70	Phase 3
55. Provides a new way of orienting and deploying educational resources.	3.69	Phase 3

CAREER EDUCATION:	Mean Rating	Where Introduced
29. Should be universally accessible at all levels.	4.01	Phase 1
30. Incorporates varied learning experiences into the educational program of all pupils.	3.99	Phase 3
31. Allows a student to gain: (1) a full educational preparation, (2) a broad understanding of the world of work, (3) social maturity, (4) a positive resilient self-concept, (5) a familiarity with social problems as they emerge from practical experience.	3.99	Phase 1
32. Involves employers in a new alliance with educators and young people.	3.97	Phase 3
33. Allows youth to evaluate themselves.	3.96	Phase 2
34. Enables the individual to recognize that learning is a continuing process.	3.95	Phase 2
35. Improves overall pupil performance by focusing basic subjects around a career development theme.	3.94	Phase 2
36. Establishes interrelationships among categories and disciplines to bring about the total development of the individual.	3.94	Phase 1
37. Develops the student's ability to gather information and apply it in solving problems and making rational decisions.	3.94	Phase 2
38. Interrelates all the various dimensions of education to the concept of career education for all.	3.93	Phase 1
39. Enables the individual to identify some of the reasons why people work and to differentiate between societal and individual needs in working.	3.90	Phase 2
40. Involves coping with all spheres of existence - work, leisure, intellectual development and social involvements.	3.90	Phase 1
41. Reduces the discontinuity between childhood education and adult work.	3.89	Phase 2

	Mean Rating	Where Introduced
CAREER EDUCATION:		
13. Is a basic part of all education.	4.13	Phase 1
14. Enables the individual to recognize that the academic skills learned in elementary schools have application to the world of work.	4.12	Phase 1
15. Enables the individual to analyze factors relating to attaining and maintaining a job.	4.12	Phase 2
16. Facilitates more rational and valid career planning and preparation by its varied choices offered.	4.11	Phase 3
17. Is for all youth who would like their education to be more relevant to life outside the school.	4.10	Phase 1
18. Increases the student's motivation to learn by relating his studies to the world of work.	4.09	Phase 1
19. Integrates learning and doing.	4.09	Phase 2
20. Constitutes a new, vitalizing thrust in education.	4.08	Phase 1
21. Develops techniques and structures for fostering self-direction and decision making.	4.08	Phase 2
22. Stimulates the kind of educational program in which every pupil can succeed.	4.07	Phase 1
23. Builds progressively the student's knowledge and understanding of the world about him.	4.05	Phase 1
24. Assumes that education is preparation for life in which one chooses his own particular role.	4.03	Phase 2
25. Introduces a sense of purpose into education.	4.03	Phase 1
26. Recognizes the urgent necessity of making sure that every pupil is prepared through education to find his place in society and in the economy.	4.02	Phase 1
27. Develops student attitudes about the significance of work.	4.02	Phase 2
28. Gears the sequence of learning activities to the student's individual interests and abilities.	4.01	Phase 2