An historical analysis of the philosophies of the vocational education leaders in relation to the 1990 Carl D. Perkins vocational and applied technology education act amendments

1992

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AN HISTORICAL ANALYSIS OF THE PHILOSOPHIES
OF THE VOCATIONAL EDUCATION LEADERS
IN RELATION TO THE
1990 CARL D. PERKINS
VOCATIONAL AND APPLIED TECHNOLOGY
EDUCATION ACT AMENDMENTS

by

CYNTHIA D. WOODLEY

A dissertation submitted in partial fulfillment of the
requirements for the degree of Doctor of Education
in the Department of Curriculum and Instruction at
the University of Central Florida
Orlando, Florida

August 1992

Major Professor: Larry Hudson
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Cynthia D. Woodley
Title: An historical analysis of the philosophies of the vocational education leaders in relation to the 1990 Carl D. Perkins Vocational And Applied Technology Education Act Amendments.

Federal vocational education legislation has undergone drastic changes in recent years. This study was designed to determine the educational philosophies of the leaders who pushed for the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments and the degree to which the amendments reflected the philosophies of those leaders. Data were collected on testimonies given before the United Stated Congress during hearings related to the act, to identify who the leaders were. Once the leaders were identified, the published literature and testimony of each leader was analyzed using a model developed by Lloyd Duck and the educational philosophy for each leader was identified. Finally, provisions of the act were compared to the philosophies and testimonies of the leaders to identify if the act paralleled the philosophical rationale of the leaders.

This researcher found that of the leaders who pushed for the act, the majority, though not all, were of an
experimentalist educational philosophy. Further analysis revealed that while the act appeared on the surface to match well with several different educational philosophies, it actually did not match the philosophies of all of the leaders. Because of this, this researcher concluded that implementation of the act may not be successful unless a new educational philosophy is established.
ACKNOWLEDGEMENTS

Special thanks are due several individuals who helped me in formulating my proposal, rationalizing the steps of the research methodology, and completing this study.

First, I would like to thank my husband, Rick, and daughters, Adrienne and Bridgitte, for their patience and understanding during my whole graduate program. It is a tribute to them that I was able to find time to complete this. Only with their cooperation and love did I finally finish.

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CHAPTER I
INTRODUCTION

Purpose of Research

The purpose of this research was to determine the degree to which the educational philosophies of the vocational education leaders who testified at the hearings for the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments, are reflected in the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments.

According to the Merriam-Webster Dictionary (1974), philosophy is the "critical study of fundamental beliefs and the grounds for them" (p. 522), and prior to the development of any plan, direction, or activity, educators should establish their beliefs regarding the purposes of life and education. Goodlad (1979) suggested that decisions made concerning curriculum always begin with a philosophy. Schubert (1986) agreed that "philosophy lies at the heart of the educational endeavor" (p. 116). Morris and Pai (1976) stated that "a sound philosophy of education ... is the solid base for what might be called intellectual accountability" (p. 7). Ornstein and Hunkins (1988) described philosophy as an important foundation of curriculum because it influences the goals, aims and content
of schools. They added that philosophy provides educators with "a framework or base for organizing schools and classrooms . . . and for determining the goals of education" (p. 25-26). In fact, Hopkins (1941) suggested that "philosophy has entered into every important decision that has ever been made about curriculum and teaching" (p. 198).

There has been much debate about what the philosophies of the early vocational education leaders were, especially during the founding of the vocational education movement (Greenwood, 1978, Lazerson and Grubb, 1974, Violas, 1978, Lakes, 1986). Despite the failure of these historians to agree upon a unified theory of the early philosophies, most agreed with Wirt (1991) that:

The prevailing view for a long time has been that the main purpose of vocational education is to provide students with marketable job skills--that is, specific skills and job knowledge that enable students to obtain better jobs than they would otherwise have gotten without the training.

(p. 426)

These historians agreed that the philosophies of the early vocational leaders were, at the very least, utilitarian in nature, but philosophies evolve and change over time.

Smith (1964) called philosophy an activity not a theoretical construct. He went on to say that the very nature of education changes radically "as one adapts
differing sets of aims or holds various ends in view" (p. 2-3). Thus, education changes as philosophy changes. Or philosophy changes as education changes. Whichever the case, vocational education underwent drastic changes during the 1980's and 1990's.

The 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments (1990) reflected one major change in direction for vocational education. Rosenstock (1991) suggested that these 1990 amendments to the 1984 Perkins Act reflected a change in the philosophies of vocational leaders in response to the perceived failure of vocational education. He stated that vocational leaders "would agree that vocational education [was] . . . in need of an overhaul . . . [and the amendments were] an important step in redirecting vocational education and, ultimately, in restructuring our high schools for the twenty-first century" (p. 434).

Kenneth Gray (1991) suggested that recent changes in vocational education reflect "not a new image but a new mission" (p. 443). He felt that the call to integrate academic and vocational education stemmed from a change in the underlying philosophy of vocational education. This new philosophy "de-emphasizes but does not eliminate preparation for work [and] . . . play[s] a role in teaching applied knowledge to all students" (p. 443). Gray further suggested that "blurring the distinctions between academic and
vocational education is becoming the sacred mission of vocational education" (p. 443).

This researcher reviewed the transcripts of the hearings for the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments and the published literature of the vocational education leaders who testified at these hearings to determine the philosophies of the leaders and the relationship between the philosophies of the leaders and the act.

Research Problem

Vocational educators have long operated without a clear understanding of their underlying philosophies or the philosophy of the legislation representing them. In 1975, Law proposed "that the philosophical bases upon which vocational education loosely operates are a conglomerate of rationales, indiscriminately interwoven, parts of which are mutually exclusive and often contradictory" (p. 9). He stated that the Fourth Yearbook of the American Vocational Association, The Philosophy for Quality Vocational Education Programs (1974), was not in fact "a philosophical treatise as the title would suggest" (p. 26). The yearbook was, instead, what Barlow (1974) said in its very first sentence, "a book about principles, issues, concepts and fundamental considerations related to vocational education in general" (p. 5). Law called for a national debate on and critical attention to the philosophy of vocational education. He
felt that "in order to withstand ferment, vocational education needs to have a clear, concise, definable philosophical base" (p. iii).

Several vocational historians answered Law's call to study the philosophical foundations of vocational education. By the mid 1980's, several studies had emerged in an attempt to define the philosophical base for vocational education. One such study, a doctoral dissertation written by Greenwood in 1978 (Greenwood, 1978) attempted to define the philosophical rationale of the early leaders of vocational education. She cited Law's call for a national debate on the role of vocational education as a partial basis for the "need" of her study. Lakes (1985) commented that Greenwood's work had "added significantly to the historiography surrounding the rationale of early vocational education leaders" (p. 2).

Unfortunately, rather than clarifying the philosophical basis, Greenwood and others like her (Lloyd, 1979, Herschbach, 1973) only enlarged the debate. Part of the problem lay in the dilemma of the nature of historical research itself. Pulliam (1991) stated that the difficulty of historical educational research is that "historians of education have differed on the interpretation of the facts" (p. 6). Greenwood (1978) theorized that these differences in interpretation are caused by "the problem of unstated, unrevealed, hidden biases held by the author which cloud the
reader's interpretation of the work" (p. ii). Several different interpretations of the philosophical foundations for vocational education emerged (Bennett, 1926, Herschbach, 1973, Lazerson and Grubb, 1974, Wirth, 1980).

Kantor (1988) described as standing on one side of the debate "those who link educational reform to expansion of American democracy. These scholars argued that the vocational movement sought to liberate the school from outmoded practices and to expand occupational opportunities for immigrant and working class youth" (p. xi). Beck (1990) described as standing on the other side a diverse group of scholars--generally revisionists--who view education as a form of social control. Rejecting outright the idea that educational reform was a product of American democracy, they argue that vocational education was shaded by businessmen and that professional education was interested not in democratizing education, but in using the schools to control workers and stabilize the corporate-industrial system that was emerging in the early twentieth century. (p.9)

All of these historical studies focused on some aspect of the philosophies operating in the vocational education movement. None of these philosophies seem to fit the philosophy underlying the 1990 Carl D. Perkins Vocational
and Applied Technology Education Act Amendments. Rosenstock (1991) stated that during the 1984 hearings on the reauthorization of the Perkins Act, it was considered blasphemy to suggest that schools integrate vocational and academic education. In the 1989 Senate hearings, virtually every commentator noted the need to bring together these two parts of our education system. (p. 434)

The 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments pointed towards "a new course to the future for vocational education" (Wirt, 1991). For the first time, federal funding was tied to vocational education's efforts to integrate with academic education. Section 235 of the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments (1990) stated that:

[the] funds made available under a grant under this part shall be used to provide vocational education in programs that integrate academic and vocational education in such programs through coherent sequences of courses so that students achieve both academic and occupational competencies.

The act also introduced a new initiative called "tech-prep" education. Section 342 of the 1990 Carl D. Perkins
Vocational and Applied Technology Education Act Amendments (1990) stated that:

The Congress finds that the establishment of systematic technical education articulation agreements between secondary schools and postsecondary educational institutions is necessary for providing youths with skills in the liberal and practical arts and in basic academics, including literacy instruction in the English language, and with the intense technical preparation necessary for finding a position in a changing workplace.

Both of these statements stood in direct opposition to statements made by early vocational education leaders in arguing for vocational education legislation. According to Snedden (1915) and Prosser (1949), those early leaders of vocational education argued that academic, liberal arts education was not appropriate for those going into the workforce and not to college.

Vocational education historians agreed that the philosophic rationale of early vocational education leaders for supporting federal vocational education legislation was centered on an opposition to academic education as the only form of education in the public schools. The early leaders went so far as to push for a completely separate dual system of education. Eliot (1908) stated that vocational education
should be taught in "new schools, separate from the existing public schools, and should have a different role from the Manual Training or the Mechanical Arts High School" (p. 9). Draper (1980) stated the early leaders felt that vocational trade schools should be separate from academic schools because "the new schools ought to be sharply distinguished from any schools that are known in America" (p. 224).

Yet the importance of a liberal and academic education was stressed in the 1990 vocational education legislation (Carl D. Perkins Vocational and Applied Technology Education Act Amendments, 1990). The act went one step further by tying vocational funds to integration efforts. The act called for an end to the dual system. The 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments demonstrated a dramatic shift away from the philosophical rationale and direction of earlier vocational education legislation.

While several studies were conducted to determine the philosophical rationale of early vocational education leaders who lobbied for vocational education legislation, no studies have been done to determine the philosophic rationale of later vocational education leaders who pushed for the 1990 vocational education legislation. The philosophies of the early vocational education leaders couldn't have served as the foundation for vocational education from 1985 to 1990 because the earlier philosophies
are contradictory to the 1990 vocational education legislation. There was a need, then, to identify the philosophies of the vocational education leaders who testified during the hearings for the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments and the relationship between their philosophies and the act.

Research Questions

The following questions will be used to guide this research:

1. To what degree were the educational philosophies of the vocational education leaders who testified at the hearings for the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments reflected in the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments? More specifically,

a. Who were the vocational education leaders who testified in hearings for the 1990 Carl D. Perkins Vocational Education and Applied Technology Act?

b. What were the views and philosophies of the vocational education leaders expressed at the legislative hearings for the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments?
Importance of Research

This research was important because the successful implementation of vocational education legislation depends upon vocational educators having a clear understanding of the philosophies and philosophical rationale behind the 1990 federal vocational education legislation. Lakes (1986) stated that "historical inquiry provides an opportunity for clarifying current policy and leadership in the field. Historical introspection is necessary in order to illuminate the assumptions of the field" (p. 73).

Vocational educators cannot simply assume that the philosophical foundations of the early vocational education movement are still valid. In fact, the 1990 legislation did not seem to be based upon the same philosophical rationale as the early vocational education legislation. Rosenstock (1991) stated that "pursuing integration with academic education requires us to adopt a different view: that vocational education is a different way to learn the same academic concepts and skills that nonvocational students learn" (p. 435), the very integration that early leaders seemed to want to avoid. Thus, without a clear understanding of the new philosophy behind the 1990 vocational education legislation, teachers may fail to see any value in reforming. Gray (1991) stated that "without reform, vocational education may indeed cease to exist" (p. 438).
If a philosophical position can be identified for the vocational education leaders who testified on behalf of the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments and the relationship between these philosophies and the act itself, vocational educators can perhaps more easily understand the aims and goals of the 1990 legislation and thus develop more appropriate activities for fulfilling the provisions of the legislation. Vocational educators might also be more willing to take the initiative to become more involved with shaping the future direction of vocational education, especially if they do not agree with the philosophies. To identify the philosophies of the leaders of vocational education as they shaped 1990 vocational education legislation will help vocational educators understand where they are as well as help them decide where they will go from here.

ASSUMPTIONS AND LIMITATIONS

For the purpose of this study, the following assumptions were made:

1. The methodology selected produced a classification of the educational philosophies of the vocational education leaders who testified for the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments.

2. The Duck model was an appropriate model to use to classify the philosophies of vocational education leaders.
3. Federal legislation was affected by the views of the vocational education leaders as they participated in the legislative process.


5. Agreement on the specific philosophies of the early leaders or the philosophy of vocational education prior to 1985 was not necessary for the purpose of this study.

For the purpose of this study, the following limitations were noted:

1. Not all materials found were necessarily included. Materials were prioritized as to their importance and relevance, therefore, the possibility of error in selection may have occurred, despite careful attempts to select on the basis of relevance.

2. Not all the forces at work during the time period of 1985 to 1990 were studied (i.e., the moral issues, the work values, and other mores of the time period).

3. Only documented literature was consulted. No verbal historical interviews and accounts were conducted; therefore, if vocational education leaders did not participate in the legislative process, or it was not documented that they participated, or if they did not
published any materials, it is possible that their views and philosophies were not represented.

4. The year 1990 served as the cut-off time period. Literature and reactions to 1990 federal legislation were not included, only those events leading up to the 1990 federal legislation. Difficult in assessing a completely true picture of the 1990 federal legislation may exist due to the fact that most significant reactions may have occurred after the policy was in effect.

DEFINITION OF TERMS

For the purpose of this study, the following terms were defined as:

Academic Education--The traditional, liberal arts subjects: reading, writing, and arithmetic, classic literature, and classic languages.


Educational History--"That branch of history which deals with the development of thought, practice, materials, personnel, administration, organization, and problems of schools. The subject also includes [the study of] institutions and organizations which instruct both the young and the mature, the mass media, and other learning experiences (Pulliam, 1991, p. 6-7).
Educational Philosophy--Any philosophy dealing with or applied to the process of public or private education and used as a basis for the general determination, interpretation, and evaluation of educational problems having to do with objectives, practices, outcomes, child and social needs, materials of study, and all other aspects of the field.

History--A chronological record of significant events affecting a nation, social group, institution, science, or art, usually with an explanation of their causes; also the events that form the subject matter of history.

Historical Method--The process of discovering, recording, and interpreting facts having historical significance, involving collection, arrangement, criticism, and synthesis of the data into an acceptable whole, and subsequent interpretation of the data.

Integration--The concept and practice of combining academic and vocational curricula by one of several methods to replace the dual system operating in American educational institutions since the early nineteen hundreds.

Philosophy--"The critical study of fundamental beliefs and the grounds for establishing them" (Merriam-Webster Dictionary, 1974).

Philosophical Method--An approach to truth or value that rests principally on deliberative or rational processes, utilizing the results of observational research.
in so far as possible, and concerned with such purposes as
(a) testing the consistency of findings; (b) integrating
sets of findings into larger patterns of thought, possibly
thus arriving at new truths or producing new theories to be
checked (Greenwood, 1978).

Revisionism--The practice of historical inquiry whereby
the historian rewrites history or interprets the historical
significance of events using concepts, terms and ideas of a
later time period.

Vocational Education--Formal education or training at
less than a baccalaureate level that provides students with
skills for obtaining gainful employment.

Vocational Education Leaders--Those speakers and
writers who testified before the hearings for the 1990 Carl
D. Perkins Vocational Education and Applied Technology Act
and met other criteria established by this study.
CHAPTER II
REVIEW OF RELEVANT LITERATURE

Overview

In reviewing the literature and research for this study, several areas were studied. These included the historical and the philosophical aspects of vocational education and the nature of educational philosophies in general.

First, a review of the literature regarding the philosophies of education was conducted to identify existing models of educational philosophies. Next, a detailed, descriptive history of vocational education based upon literature and research was developed in an attempt to understand the historical developments and philosophical rationale of vocational education history. A thorough understanding of the philosophical foundations of vocational education was necessary before any relationships or conclusions could be drawn regarding the philosophical rationale of more recent legislation and foundations.

Because federal legislation was examined to establish who the vocational education leaders were and thus what their philosophies of vocational education were, a review of
research and literature was also conducted to identify the relationship between federal policy and philosophy.

PHILOSOPHIES OF EDUCATION

Background

One of the greatest difficulties involved in a study of the philosophies of education is agreeing upon the classifications of philosophy. Avey (1954) described more than fifty classifications of philosophy, and Pulliam (1991) stated that the "most commonly used categories provide a foundation for the study of educational practice grounded in philosophy, but classification schemes may vary" (p. 163). Several educational writers and philosophers attempted to break the philosophies down into simplified, blanket labels (Brameld, 1955, Morris and Pai, 1976, Ornstein and Hunkins, 1988, Schubert, 1986), and each described the classes of educational philosophies a little bit differently.

Brameld (1955)

Brameld identified three distinct philosophies of education: (a) progressivism, (b) essentialism, and (c) perennialism. He defined progressivism as "a transitional philosophy, standing between cultural patterns that are increasingly obsolescent and cultural patterns that still await an opportunity to prove their desirability and practicality" (p. 91). According to Brameld, other terms used to describe the progressive position are pragmatism,
instrumentalism, and experimentalism. He also said that progressive educators believe that reality is "dynamic, temporal, spatial, and pluralistic . . . [and knowledge revolves] around intelligence as the scientific method operating in every area of experience" (p. 197). A progressive educator sees "the 'whole child' as the proper subject matter of education, and . . . refines [his] . . . psychology through such operational concepts as interest, effort, habit, growth, organism, culture, and, above all, intelligence" (p. 198). A progressive educator believes that the curriculum should be experience-centered.

Brameld defined essentialism as the conservative philosophy of education that values "time-tested content, orderly sequence, inherited principles, [and] guided discipline" (p. 204). Essentialist educators "interpret democracy in terms more closely related to the 'early liberalism' of Locke than to the 'later liberalism' of Dewey" (p. 253). Brameld believed that essentialism can "be depicted as an adroit combination of realism and idealism" (p. 207). Essentialists see reality as "a world governed by unimpeachable and predetermined order" (p. 214). And it is the primary duty of education to disclose and perpetuate these "universalities of law, order, and custom" (p. 254).

Brameld described perennialism as a philosophy of education that "reacts against the failures and tragedies of our age by regressing or returning to the axiomatic beliefs
about reality, knowledge, and value . . . foundational to a much earlier time" (p. 287). A perennialist sees the principles of philosophy as "axiomatic, timeless, and spaceless [and] such principles transcend all history and therefore all cultures within history" (p. 288). According to Brameld, the core belief of a perennialist is everlasting. "Individual experiences . . . come and go . . . . But the patterns or forms common to all things recur and remain identical as patterns or forms, century after century, era after era" (p. 290). Based upon the concepts of Plato, Aristotle, and Aquinas, perennialist philosophy sees ideas as permanent, eternal and universal. To a perennialist:

knowledge rises in ascending levels of purity, from the sheer ignorance of material passion through intermediate levels of empirical method and opinion to that level of rare achievement of reason and spirit where self-evident first principles and still higher, revelation stand as the supreme accomplishments of man. (p. 379)

The perennialist curriculum is a "great books" curriculum.

Morris and Pai (1976)

Morris and Pai devoted an entire book to exploring the concepts of educational philosophy, classifying educational philosophers into five categories: (a) idealists, (b)
realists, (c) neo-Thomists, (d) experimentalists, and (e) existentialists.

Morris and Pai described an idealist as one who believes that "everything we see and perceive in this world is but a transient and fleeting replica or 'shadow' of eternal qualities--what Plato called 'ideas'--and it is the world of these ideas that constitutes ultimate and absolute reality" (p. 45). The idealist sees reality as the world of the mind and describes knowledge as seeing with the mind's eye. The idealist educator places emphasis on the "subject matter of the mind; literature, intellectual history, philosophy, religion" (p. 295). The idealist will pursue a curriculum based upon the classics.

Morris and Pai described realism as "those theories that find in the world of physical things, and in our perceptions and experiences of those things, the basis for an understanding of what is truly real" (p. 50). The realist focuses on the laws of nature and will advocate an curriculum that is based upon "subject matter of the physical world: mathematics and science" (p. 295). A realist educator will teach for the mastery of factual information and basic skills using learning packages and lots of demonstrations and recitations.

According to Morris and Pai, the neo-Thomist bases his/her world on reason and being (the ecclesiastical neo-Thomist would call this God). A neo-Thomist believes that
"through entertaining ideas and perceiving things, the human-mind can work its way to Absolute Truth" (p. 79). A neo-Thomist educator will advocate a curriculum based upon the subjects of "mathematics, language, and the Latin Trivium of Grammar, Rhetoric and Logic . . . [for these formal disciplines are] the most effective way to develop the powers of reason (p. 181). These subjects would be taught by formal drills and strict discipline of the mind. Discipline to a neo-Thomist is a matter of breaking the will of the child.

Morris and Pai described the experimentalist educator as deriving all learning from the world of experience. The experimentalist believes that:

the world we live in--the world of sensation, of change, of growth and death, of joy and misfortune, of trouble and misery, of problems and their solutions--is the only world we can intelligently manage in human discourse. (p. 62)

An experimentalist curriculum will be based in the "subject matter of social experience: the social studies" (p. 295). The teaching style will be the problem solving, project method, where the teacher is a facilitator. "By identifying the interests and needs of the learners, the teacher can elicit some genuine curiosities in the students" (p. 189). And the goal of education to an experimentalist is to help
each individual make group decisions based upon consequences.

Morris and Pai described existentialism as the view that reality is merely the world of existence or being. The role of the existential teacher is to "create an environment of complete and absolute freedom where selfhood can develop without hindrance" (p. 80). The existentialist elicits personal responses from the students by use of Socratic questioning methods. The existential curriculum is the "subject matter of choice: art, ethics, moral philosophy, religion" (p. 295). An existential educator believes that the goal of education is to awaken the self to responsibility and to help individuals understand and make responsible choices.

Schubert (1986)

Schubert broke educational philosophy into six "schools of philosophical thought" (p. 127). They were:
(a) idealism, (b) realism, (c) neo-Thomism, (d) naturalism, (e) pragmatism, and (f) existentialism. Schubert described the idealist as one who believes that:

Educational practice in which the learner is viewed as a mind to be molded by the teacher . . . classics of subject matter are deemed the best answer to ideas that have stood the test of time . . . rigorous discipline of the mind is considered the means to these ideas,
and . . . emulation of the teacher is considered a prime inducement to learning. (p. 128)

According to Schubert, the idealist traces his roots to "Plato, who saw a universe of ideas that was more real than sensed events" (p. 128).

Schubert defined realism as the school of philosophical thought in which educators "emphasize the validity of the senses to interpret the physical world" (p. 128). Schubert stated that realists "promote the acquisition of skills necessary to acquire and master factual knowledge, and . . . strive to adjust learners to realities of the physical world and behavior sanctioned by adult culture" (p. 128). The realist classroom often contains learning packages and systematic procedures as well as "highly technical modes of evaluation and testing" (p. 128).

Schubert described the neo-Thomist educator as one who advocates "a religious, Catholic education [and joins] . . . reason and faith to train the faculties of the mind through the study of formal disciplines of knowledge" (p. 129). Based upon the work of Thomas Aquinas, neo-Thomists believe that schools should be strict and "emphasize reason as the absolute object of study" (p. 129). Schubert stated that neo-Thomists are also known as essentialists or traditionalists.

Schubert described naturalism as the school of philosophical thought that advocates an
"education . . . focused on individual development" (p. 129). Based upon the works of Rousseau, Pestalozzi, and Froebel, naturalists "do not [want to] interfere with what the child wants to learn and experience [and] do not impose social conformity" (p. 129). Instead, they "encourage close contact with nature" (p. 129).

Schubert described pragmatism as the school of philosophical thought which holds that:

- reality is in a state of continuous flux, that the truth of ideas or propositions depends upon their consequences in the broadest sense of the public and personal good they bring, and that human beings create knowledge through the reconstruction of experience. (p. 129)

The pragmatic educator wants to "begin with the psychological (student interests) and demonstrate to students that they can resolve meaningful problems by moving toward the logical (knowledge, organized by human culture)" (p. 129).

According to Schubert, existentialists "see the world as essentially absurd and alienating, and . . . thus conclude that the only way to deal with the predicament of existence is to take responsibility to create one’s life" (p. 130). Schubert stated that the existential teacher would "encourage students to look deeply within themselves..."
to develop greater self-knowledge and thereby be in a better position to initiate choice and action" (p. 130).

Ornstein and Hunkins (1988)

Ornstein and Hunkins took a different approach in describing the philosophies of education. They began by describing four philosophical bases: (a) idealism, (b) realism, (c) pragmatism, and (d) existentialism. Then they went on to describe four educational philosophies: (a) perennialism, (b) essentialism, (c) progressivism, and (d) reconstructionism.

Ornstein and Hunkins saw idealism as the philosophy founded by Plato. Idealist educators emphasize: moral and spiritual reality as the chief explanation of the world . . . [and see] Truth and values . . . as absolute, timeless, and universal. The world of mind and ideas is permanent, regular, and orderly; it represents a perfect order. (p. 29)

To an idealist educator, the classics are the preferred subject matter for they are timeless and unchanging.

Ornstein and Hunkins described realist educators as viewing "the world in terms of objects and matter. People can come to know the world through their senses and their reason. Everything is derived from nature and is subject to its laws" (pp. 29-30). According to Ornstein and Hunkins, the realist prefers a curriculum centered on science and the
Ornstein and Hunkins defined pragmatism as the view that knowledge is "a process in which reality is constantly changing. Learning occurs as the person engages in problem solving; problem solving is, moreover, transferable to a wide variety of subjects and situations" (p. 30). Another name they gave to the pragmatic philosophy of education is experimentalism. Ornstein and Hunkins described John Dewey as the leading pragmatic educator.

Ornstein and Hunkins described the final philosophy, existentialism, as the view that "individualism and self-fulfillment" (p. 31) is of paramount importance. Existentialists believe that "people are thrust into a number of choice-making situations. Some choices are minor and others are significant, but the choice is the individual's, and the decisions lead to personal self-definition" (p. 31). Ornstein and Hunkins described the existential curriculum as one that "avoids systematic knowledge or structured disciplines, and the students . . . [are] free to select from many available learning situations (p. 31).

Ornstein and Hunkins then further broke down the educational philosophies into the four distinct "camps" mentioned previously. They described perennialism as an educational philosophy drawn from the idealist philosophy.
Perennialists rely "on the past, especially the past asserted by agreed-upon, universal knowledge and cherished values of society" (p. 33). The curriculum of the perennialist educator is subject-centered and the "teacher is viewed as an authority in the field whose knowledge and expertise are unquestionable" (p. 33). Ornstein and Hunkins added that "students' interests are irrelevant for curriculum development because students are immature and lack the judgement to determine what are the best knowledge and values to learn" (p. 33).

Ornstein and Hunkins described the essentialist educational philosophy as, like Brameld (1955), rooted in both idealism and realism philosophies. Essentialists believe, like perennialists, that school curriculum should be subject centered in the three R's and the essential academic subjects, but essentialism is not rooted in the past as is perennialism. It "is more concerned with the contemporary scene" (p. 35). Ornstein and Hunkins cited more recent movements such as back-to-basics and excellence in education as stemming from essentialist philosophies.

Ornstein and Hunkins described progressivism as the view that the "skills and tools of learning include problem-solving methods and scientific inquiry; in addition, learning experiences should include cooperative behaviors and self-discipline, both of which are important for democratic living" (p. 38). To a progressive educator, the
"teacher serves as a guide for students in their problem-solving and scientific projects" (p. 38). Table 1 contains a partial overview of the educational philosophies as described by Ornstein and Hunkins (p. 47).

TABLE 1
OVERVIEW OF EDUCATIONAL PHILOSOPHIES
ORNSTEIN AND HUNKINS

<table>
<thead>
<tr>
<th>Educational Philosophy</th>
<th>Philosophical Base</th>
<th>Aim of Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perennialism</td>
<td>Realism</td>
<td>To educate the rational person; to cultivate the intellect.</td>
</tr>
<tr>
<td>Essentialism</td>
<td>Idealism, Realism</td>
<td>To promote the intellectual growth of the individual; to educate the competent person.</td>
</tr>
<tr>
<td>Progressivism</td>
<td>Pragmatism</td>
<td>To promote democratic living, social living.</td>
</tr>
<tr>
<td>Reconstructionism</td>
<td>Pragmatism</td>
<td>To improve and reconstruct society; education for change and social reform.</td>
</tr>
</tbody>
</table>

Ornstein and Hunkins defined reconstructionism as the educational philosophy that places emphasis on "society-centered education . . . [and takes] into consideration the needs of society (not the individual) and all classes (not only the middle class)" (p. 42). Reconstructionist philosophy is based upon utopian ideas and "is a crisis
philosophy, appropriate for a society in crisis, which is the essence of our society and international society today" (p. 43).

In an earlier book, Hunkins (1980) classified educational philosophy into: (a) idealism, (b) realism, (c) perennialism, (d) essentialism, (e) pragmatism, (f) naturalism/experimentalism/progressivism, and (g) existentialism. Because Hunkins’s definitions were essentially the same as the others described here, a detailed description of each of Hunkins’s classifications is not included.

Duck (1981)

Lloyd Duck described a philosophical position as "indicated by emphases and preferences which translate themselves into behavior" (p. 2-3). Thus, by studying the behavioral emphases or preferences of educators, Duck believed their underlying set of philosophical assumptions can be discovered. According to Duck, educators are too often described as eclectic, that is that they "borrow from several different philosophies" (p. 2), and that while this is a safe way of dealing with the difficulties of classifying one’s philosophy, he believed that it is "highly unlikely that many educators are true eclectics ... [and] apply all methodologies with equal degrees of enthusiasm" (p. 3).
In an attempt to help identify a general preference towards a certain philosophy, Duck detailed an analytic tool for revealing a philosophical position. Duck’s analysis system had four questions which served as indicators of philosophical preference. Duck defined his four questions, then answered those questions for each of his five categories of educational philosophies: (a) essentialism, (b) experimentalism, (c) reconstructionism, (d) existentialism, and (e) perennialism.

Since this researcher chose to use Duck’s model of philosophical analysis, Duck’s system and classifications were further described in the next chapter as part of the methodology of this study.

SUMMARY

Several different systems for classification of educational philosophies have been described by different educational authors. Table 2 contains a breakdown of several educational authors and their categories of educational philosophies.

As shown in Table 2, each author classified educational philosophies a bit differently, however, several philosophies described are combinations of philosophies that others have described. While Ornstein and Hunkins (1988) offered the most comprehensive and detailed classifications, Duck (1981) described a model for classifying educators into
each of the educational philosophies. No other models that actually classified the philosophies of educators were discovered.

**TABLE 2**

**CATEGORIES OF EDUCATIONAL PHILOSOPHIES BY AUTHOR**

<table>
<thead>
<tr>
<th>Author and Year</th>
<th>Perennialism</th>
<th>Essentialism</th>
<th>Progressivism</th>
<th>Duck (1981)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brameld (1955)</td>
<td>Idealism</td>
<td>Realism</td>
<td>Experimentalism</td>
<td>Perennialism</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neo-Thomism</td>
<td></td>
<td>Essentialism</td>
</tr>
<tr>
<td>Morris and Pai (1976)</td>
<td>Experimentalism</td>
<td></td>
<td>Reconstructionism</td>
<td>Existentialism</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Existentialism</td>
</tr>
<tr>
<td>Duck (1981)</td>
<td></td>
<td></td>
<td></td>
<td>Existentialism</td>
</tr>
</tbody>
</table>

| Hunkins (1980)  | (Essentialism, Perennialism) | Realism (Perennialism) | Perennialism | Idealism |
|                 |              |              | (Perennialism) | Essentialism | Idealism |
|                 |              |              |               | Pragmatism | Idealism |
|                 |              |              |               | Pragmatism (Progressivism, Reconstructionism) | Idealism |
|                 |              |              |               | Naturalism | Idealism/Naturalism/Experimentalism/Progressivism |
|                 |              |              |               | Existentialism | Existentialism |
|                 |              |              |               | Existentialism | Existentialism |
Thus, this researcher chose to use Duck’s model for classification of educational philosophies as well as his system of analyzing educational philosophies.

History of Vocational Education

Background

Vocational education history spans thousands of years. According to Finch and Crunkilton (1984), archaeological records indicated that as early as 2000 B.C., the Egyptians had organized apprenticeship programs where the most able of the young men were apprenticed as scribes in court schools or in government. In these programs, the child would first attend lessons to master reading and writing and would then serve a period of apprenticeship with a seasoned scribe. According to Finch and Crunkilton, apprenticeship, or observation and conscious imitation, was the method through which societies taught students skills or crafts to maintain the society.

Apprenticeship remained virtually unchanged as the major form of vocational education until the nineteenth century; however, vocational education as it is known in America does not have such a long history. To trace the history of American vocational education, one must begin with the movement for federally supported, public vocational education.
Pre 1917

Historical studies and descriptive manuscripts of vocational education, described the manual arts movement as the beginning of the vocational education movement. Lazerson and Grubb (1974) state that "In the period before 1900, many of the arguments for vocationalism were developed as part of the manual training movement, and we have viewed that movement both as an entity unto itself and as a transition to vocational education" (p. 2). Cremin (1961), Finch and Crunkilton (1984), and Lazerson and Grubb (1974) all agreed that the manual training movement gained its momentum somewhere about the time of the 1876 Philadelphia Centennial Exposition and World's Fair. At that fair a new Russian system, developed by Victor Della Vos of the Moscow Imperial Technical School, for teaching tool use and construction methods caught the attention of some American educators. According to Lazerson and Grubb (1974):

The examples shown in Philadelphia influenced the two men most responsible for popularizing manual education in the United States: John D. Runkle, president of the Massachusetts Institute of Technology, and Calvin M. Woodward, professor of mathematics and applied mechanics at Washington University in St. Louis. (p. 4)

Runkle took the idea and constructed similar shops at the newly formed School of Mechanical Arts in Massachusetts. In
their historical perspective, Feirer and Lindbeck (1964) stated that this new method of teaching mechanical arts proved to be extremely successful and that Runkle became an enthusiastic supporter of the system.

Like Runkle, Woodward also experienced success with the Russian system and he "turned to propagandizing for manual training as essential to general education, and quickly became the movement's acknowledged leader" (Lazerson and Grubb, 1974, pp. 4-5).

Runkle and Woodward together began a movement to include manual training in the public schools. In the Forty-First Annual Report of the Massachusetts State Board of Education, Runkle stated:

The question is, whether we can introduce the manual element into our system of public instruction, in order that a larger number of those whose education, as pupils, ends in the public schools, shall be led more directly than is now the case to some specific pursuit. (Runkle, 1974, p. 57).

Woodward also eloquently spoke in support of manual training in an address given before the National Teachers Association in July, 1883, when he said:

I advocate manual training for all children as an element of general education. . . . No education can be 'free' which leaves the child no choice, or
which gives a bias against any honorable occupation: which walls up the avenues of approach to any vocation requiring intelligence and skill. (Woodward, 1974, pp. 60-61)

Gradually, the concepts of the progressive movement began to take hold and an education centered on children rather than an education centered on subjects became openly debated and hotly discussed.

In 1892, the National Education Association (NEA) appointed the Committee of Ten to study the curriculum issue. Chaired by Charles W. Eliot, the committee's report (NEA, 1893) recommended nine academic areas upon which they felt the high school curriculum should focus: (a) Latin, (b) Greek, (c) English, (d) other modern languages, (e) mathematics, (f) physical sciences, (g) natural history or biological sciences, (h) social sciences, and (i) geography, geology, and meteorology.

Despite the recommendations of the Committee of Ten, the debate continued and by the turn of the century, two distinct camps had emerged: the conservatives attempting to keep the traditional, liberal curriculum and the progressive reformers who wanted a more practical, individualized and broad curriculum. Barlow (1965) stated that the slogan for the vocational education movement became equality of educational opportunity rather than equal education for all. According to Barlow, the proponents of vocational education
believed that equality of educational opportunity meant providing training and skills for those exiting school to enter vocations, not just preparation for those going on to college.

Schaefer and Kaufman (1971) stated that the Morrill Land-Grant Act, passed in 1862, established agricultural and mechanical colleges, but no real changes in the curriculum of lower levels of education had occurred. The movement for reformation of the public school system began.

McClure, Chrisman and Mock (1985) felt that while the NEA continued to issue reports regarding school curriculum and vocational education, the NEA was not an aggressive promoter of vocational education. There were, however, other organizations forming that impacted the movement. In 1896 the National Association of Manufacturers (NAM) was founded, and they quickly joined in support of trade education in the schools. Cremin (1961) stated that by the nineteen hundreds, the Association was the nation’s most outspoken advocate of trade education. In 1905, NAM appointed the Committee on Industrial Education to study and promote the issue. They supported practical education but they were not sure of the ability of professional educators to run such a program (McClure, et al., 1985). NAM wanted to see vocational education operating as a separate system run by representatives of workers, farmers, and employers.
The American Federation of Labor (AFL) was the largest labor organization at the turn of the century (McClure, et al., 1985). While the AFL advocated educational reform, they had mixed feelings about vocational education. They supported the concept of vocational education in the schools, but they did not want to see a separate system controlled by managers and employers. McClure, et al. (1985) added that, in fact, the AFL did not like the concept of a dual educational system of academic and trade schools because they felt that trade schools provided an avenue for management to sidestep organized labor and provide low-waged workers for industries. America was in the midst of the industrial revolution and the factories were in dire need of skilled workers. The AFL wanted vocational training, but they wanted publicly controlled vocational education included as an integral part of public education.

In 1906, the National Society for the Promotion of Industrial Education (NSPIE) was founded. The society’s membership grew quickly, and the NSPIE did much to draw America’s attention to issues involving industrial and trade education. Moreover, the NSPIE served to unite the various groups to lobby for a federal vocational education bill.

The AFL and NAM joined forces in 1910 to lobby for trade instruction in the schools. The AFL issued a report that year entitled *Industrial Education* in support of publicly funded and controlled vocational education.
(Gompers, 1910). And in 1910, the NEA publicly joined the others with their report, Report of the Committee on the Place of Industries in Public Education (1910) describing the importance of vocational education for those students going into industry after leaving school. Lazerson and Grubb (1974) stated that "the year 1910 marked something of a turning point; by then the N.E.A., the N.A.M. and the A.F. of L. had all issued major reports supporting vocational education in the public schools" (p. 28). Greenwood (1978) stated that support came from everywhere: citizens, educators, politicians, social workers, businessmen, and laborers.

In 1912, Charles A. Prosser became the Secretary for the NSPIE and together with the other educational leaders and various organizations, began to push for the appointment of a national commission to study the issue of federal aid for vocational education. Prosser, a staunch proponent of vocational education, advocated a curriculum based upon individual needs, interests, and abilities. Prosser's vocal support for publicly supported vocational education was only matched by that of David Snedden. According to Drost (1967), prior to Prosser's appointment as Secretary of the NSPIE, Prosser had been the Deputy Commissioner of Education in Massachusetts under the Commissioner of Education, David Snedden. Prosser had been a student under Snedden and together, the two had developed a strong vocational
education system in Massachusetts. Now they sought to bring this system to all youth via the federal government.

In 1914, President Woodrow Wilson appointed the Commission on National Aid to Vocational Education. The commission consisted of four Congressmen (Senators Hoke Smith and Carroll S. Page; House Representatives D.M. Hughes and S.D. Fess) and five vocational education leaders, one of whom was Charles Prosser (Schaefer and Kaufman, 1971). The commission found that vocational education was imperative for those students not going on to college and that the only way to stimulate the growth of vocational education was to provide federal funds to support it (McClure, et al., 1985). America was on the verge of establishing the first federal legislation for support of public vocational education.

**Federal Legislation 1917 - 1984**

The commission’s recommendations were incorporated into the Smith-Hughes Act of 1917 which set aside funds to states for vocational education in agriculture, home economics, and trade and industry. States did not have to accept these funds, but if they did, they had to match them and all funds had to be publicly controlled. The act also established a federal board to oversee the provisions of the act. The Smith-Hughes Act marked the beginning of a federally supported system of vocational education that today, still serves students at the secondary and post-secondary levels.
Since the passage of Smith-Hughes, Congress has continued to refine vocational education legislation. The George-Reed Act of 1929 and the George-Ellzey Act of 1934 adjusted the distribution of funds. The 1937 George-Deen Act increased expenditures and added distributive education to the list of vocational subjects. And in 1940, under the threat of war, the National Defense Training Act (also known as the Wartime Production Act) provided wartime vocational training for thousands of workers in defense industries.

By the end of the war, tremendous numbers of wartime workers and servicemen were no longer needed. America was faced with the prospect of high unemployment unless something could be done. Congress responded by passing the Servicemen's Readjustment Act (also known as the G.I. Bill) to retrain W.W. II veterans. This training included vocational training.

The 1946 George-Barden Act (also known as the Vocational Education Act of 1946) amended the George-Deen Act. The 1946 act increased federal aid and gave states more flexibility for the development of vocational programs and activities. The Health Amendments Act (1956), signed by Dwight Eisenhower, amended the George-Barden Act to include practical nursing and other health occupations programs.

During the nineteen fifties, Russia's launching of Sputnik raised fears that America was losing the technical race. Perceived as a national security threat, Congress
passed the National Defense Education Act in 1958 to address the need for more technical education.

During the 1960s a major shift in social and educational philosophy which influenced the direction of vocational education legislation occurred. All legislation affecting vocational education between 1940 and 1960 had meeting the nation’s industrial and military needs as its principle objective (preparing for war, combating unemployment, encouraging technological advancement). In the 1960s, however, Congress passed several laws designed to better the condition of citizens who were suffering because of the economy. America became socially oriented as many social and human rights organizations were founded. The Area Redevelopment Act (1961) was designed to provide help in areas that had experienced long-term unemployment. The need for the Department of Labor and vocational education agencies to cooperate in helping those in depressed areas was stressed in this legislation.

In 1962, the Manpower Development Training Act was passed as Congress’s response to President Kennedy’s call to help those who had lost their jobs to machines and economic problems. Training and retraining of individuals for work within the community was provided. The 1962 Public Welfare Act provided training to those on welfare so that they might obtain gainful employment. The Trade Extension Act of the same year provided for training of displaced workers.
The 1963 Higher Educational Facilities Act earmarked funds for technical institutions as well as community colleges to update vocational facilities. In that same year, Congress passed the Vocational Education Act of 1963. In addition to adding business education to the list of vocational subjects, the act required states to submit statewide plans for use of the funds and specified some of the areas in which money was to be spent.

In 1968, the Vocational Education Act Amendments repealed all previous vocational education acts except for Smith-Hughes. This act made funds available to states on a matching basis to meet the needs of: (a) high school students needing post-secondary vocational/technical education, (b) individuals needing training or retraining to keep or advance in their positions, (c) non-high school students needing training to enter the job market, and (d) disadvantaged individuals. Funds were made available for teacher training, supervision, guidance, evaluation, demonstration products, and the development of instructional materials. The act also created the National Advisory Council on Vocational Education and procedures for evaluating state plans.

The Vocational Education Act Amendments of 1972 and 1976 provided support for nurse training, part-time employment of trainees, training of the handicapped, and training of the disadvantaged. Also, for the first time,
sex discrimination was forbidden in programs receiving federal dollars.

By the late 1970s, vocational education was in jeopardy. Vocational education was seen as too expensive. Many students did not get jobs in the areas for which they had trained, and no data surfaced to suggest that these students who attended vocational programs were any better off than their high school drop-out counterparts. Federal cutbacks in the early 1980's were matched by cutbacks in state dollars for vocational education, and a new rash of education reform reports surfaced that suggested a back to basics approach and a return to traditional academic curriculum (A Nation at Risk, 1982; A Nation Prepared, 1986; Action for Excellence, 1983; High School: A Report of Secondary Education, 1983; Horace's Compromise, 1983; The Paideia Proposal, 1982). In response, Congress revamped vocational education with the Carl D. Perkins Vocational Education Act.

The Carl D. Perkins Vocational Education Act of 1984 stated as its purpose:

1. To assist the States to expand, improve, modernize, and develop quality vocational education programs;

2. To assure that individuals who are inadequately served under vocational education programs are assured access to quality vocational education programs;
3. To promote greater cooperation between public agencies and the private sector in preparing individuals for employment;

4. To improve the academic foundations of vocational students;

5. To provide vocational education services to train, retrain, and upgrade employed and unemployed workers in new skills;

6. To assist the most economically depressed areas of a State to raise employment and occupational competencies of its citizens;

7. To assist the State to utilize a full range of supportive services, special programs, and guidance counseling and placement;

8. To improve the effectiveness of consumer and homemaking education; and

9. To authorize national programs designed to meet designated vocational education needs.

The 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments

The 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments, stated as its purpose:

To make the United States more competitive in the world economy by developing more fully the academic and occupational skills of all segments of the population. This purpose will principally
be achieved through concentrating resources on improving educational programs leading to academic and occupational skill competencies needed to work in a technologically advanced society. (Sec. 2, 20 U.S.C. 2301)

The act consists of the following titles and sections:

Title I - Vocational Education Assistance to the States  
Part A - Allotment and Allocation  
Part B - State Organizational and Planning Responsibilities

Title II - Basic State Grants for Vocational Education  
Part A - State Programs  
Part B - Other State-Administered Programs

Title III - Special Programs  
Part A - State Assistance for Vocational Education Support Programs by Community-Based Organizations  
Part B - Consumer and Homemaking Education  
Part C - Comprehensive Career Guidance and Counseling Programs  
Part D - Business-Labor-Education Partnership for Training  
Part E - Tech-Prep Education  
Part F - Supplementary State Grants for Facilities and Equipment and Other Program Improvement Activities
Part G - Community Education Employment Centers and Vocational Education Lighthouse Schools

Part H - Tribally Controlled Postsecondary Vocational Institutions

Title IV - National Programs

Part A - Research and Development
Part B - Demonstration Programs
Part C - Vocational Education and Occupational Information Data Systems
Part D - National Council on Vocational Education
Part E - Bilingual Vocational Training
Part F - General Provisions

Title V - General Provisions

Part B - State Administrative Provisions
Part C - Definitions

The act was effective on July 1, 1991 and was to remain in effect until June 30, 1996. The act differed from previous vocational education legislation in that it increased the federal government's role in vocational education. In addition to eliminating set-asides, matching program costs, and excess costs, the legislation placed a new emphasis on technology and basic academic education. The act stated:

Any State desiring to receive funds from its allotment for any fiscal year shall submit to the Secretary a
State plan for a 3-year period . . . In developing the State plan, the State shall conduct an assessment according to section 116. Such assessment shall include analysis of . . . (A) the relative academic, occupational, training, and retraining needs of secondary, adult, and postsecondary students; and (B) the capability of vocational education programs to provide vocational education students, to the extent practicable with . . . (ii) strong development and use of problem-solving skills and basic and advanced academic skills (including skills in the areas of mathematics, reading, writing, science, and social studies). (SEC 113, 20 U.S.C. 2323)

The act also stated that:

Each State Board receiving funds under this Act shall develop and implement a statewide system of core standards and measure of performance for secondary and postsecondary vocational education programs . . . Each system developed under [this section] . . . shall include--(1) measures of learning and competency gains, including student progress in the achievement of basic and more advanced academic skills. (SEC 115, 20 U.S.C. 2325)

The major philosophical issue of the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments was its mandate to integrate academic and vocational
education as evidenced by the above quotations. The concept of integration requires one to re-examine the educational philosophy under which one is operating. This emphasis on academic education was definitely a philosophical shift from previous federal legislation which did not mention academic skills.

Summary

The history of vocational education can be traced back to 2000 B.C., but the history of American vocational education began with the manual arts training movement in the late 1800s. From the manual training movement, the vocational education movement sprang, culminating in the passage of the Smith-Hughes Act of 1917. Since that time, there have been several additions and modifications to the original legislation, but other than for legislative changes, vocational education remained virtually the same as related to academic education until the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments.

Historical Studies of the Philosophy of Vocational Education

Background

Research historians and vocational educators have not diligently studied the history of vocational education. They have also not exhibited interest in conducting historical research on the philosophical foundations of vocational education. Lakes (1985) believed this to be true
for several reasons. First, Lakes suggested that to pursue historical research in education requires studies in both "history and/or educational foundations departments . . . [and these courses] are often electives" (p. 1). According to Lakes, a second reason for the "paucity of historical dissertations by vocational educators . . . [is that] vocational professors, often lacking the appropriate methodological skills, are usually not interested in generating historical research topics" (p. 1). And finally, Lakes stated that "the outlook for employment in vocational education with history specializations is bleak" (p. 1).

Vocational leaders have long recognized that this lack of historical research in the philosophical foundations of vocational education has been to the detriment of vocational education. According to Lakes (1985),

Bennett’s two volume History of Manual and Industrial Education (1926, 36) . . . was written as a result of the difficulties he encountered in trying to help students build an adequate historical background essential to the understanding of the present-day problems of public education. (p. 4)

Since Law’s call in 1975 for more study of the philosophical history and foundations of vocational education, several dissertations and studies surfaced, but
Lakes (1985) found that these studies were often not comprehensive and, due to selection bias, sometimes misrepresented vocational education history. Lakes stated that of the historical dissertation research that he reviewed (all conducted in the ten year period between 1975 and 1985), most were "clustered around scholars . . . who are known for their acumen and longevity in vocational education history" (p. 2). Regarding selection biases, Lakes added that "historical dissertation research is often delimited by the geographic locale of archival sources. Graduate students tended to investigate topics within one day's driving time of their university" (p. 2).

There seemed to be no clear distinction between those who offered descriptive historical accounts and were themselves early leaders, and those who offered descriptive historical accounts while studying and interpreting the works of the early leaders. The first descriptive research studies on the philosophy of vocational education appeared in the early 1950s, yet there were several descriptive texts around as early as the 1920s that were not intended to be studies, rather were intended as practitioner guides.

Early Literature on Vocational Education Philosophy

One of the first literary works in which an attempt was made to define the philosophy of vocational education appeared in 1925. That year, Prosser and Allen published *Vocational Education in a Democracy*. This book was revised
in 1949 by Prosser and Quigley and enjoyed five separate printings from 1949 to 1968. A comprehensive guide for practitioners and preservice vocational educators, Prosser and Quigley devoted several chapters to the history of vocational education as well as the philosophical, social and economic foundations of vocational education. Ironically, Prosser and Quigley (1949) noted that Dewey, who was vehemently opposed to vocational education (Dewey, 1915), established the accepted philosophy of education in America and then Prosser and Quigley proceeded to use Dewey’s philosophy to justify vocational education. They stated that:

[Dewey’s] philosophy of education . . . is the accepted American philosophy of education. Thus education through the individual’s active participation in his life work, in its widest sense, rather than for leisure, is the emphasis in the accepted American and democratic philosophy of education. (p. 36)

After establishing Dewey’s philosophy as the accepted American philosophy of education, Prosser and Quigley went on to state that "the accepted American social-psychological philosophy of education . . . point[s] out that, in the degree which we as individuals or groups are vocationally inefficient or fail in our social participation, the one and
obvious universal channel through which education must operate is the vocations of the people" (p. 37).

While Prosser and Quigley (1949) did not actually classify vocational education leaders as falling within any particular educational philosophy, the reference to Dewey implied that Prosser and Quigley accepted Dewey's beliefs as the philosophies of vocational education because they stated that Dewey established the accepted philosophy of education. Other educational philosophers cited Dewey as the spokesman for pragmatic, experimental, progressive and reconstructive educational philosophies (Ornstein and Hunkins, 1988; Morris and Pai, 1976). By this rationale, it was possible to infer that Prosser and Quigley established the philosophy of vocational education to be one of (or some combination of) pragmatism, experimentalism, progressivism, and reconstructionism.

In 1926 and 1936, Bennett published a book dealing with vocational education history. His book, an in-depth descriptive review of the historical events leading up to the establishment of vocational education in America, like the Prosser and Quigley (1949) text, did not draw any conclusions regarding the actual philosophy of vocational education. In fact, Bennett went so far out of his way to stay factual and descriptive that Lakes (1983) suggested Bennett "overlooked the essential cultural forces that shaped the present form of industrial education" (p. 4).
Lakes added that the Bennett book was "overly preoccupied with the details of formal institutions of instruction . . . [and] ignores the political struggles . . . which shaped the modern curriculum" (p. 4).

While a few of the earlier works were reviewed, this literature review was more focused on historical studies already conducted on the previous philosophies of vocational education and relied upon those researchers' judgments rather than conducting a second study in attempt to identify the philosophies.

Studies of the Philosophy of Vocational Education

The historical accounts of the foundation philosophies of vocational education were in two divisions—those that attempted to be purely descriptive and those that were revisionistic in nature.

Beginning in the early 1950s graduate students started conducting historical research in an attempt to define the foundation philosophies of vocational education. A doctoral student at the University of Michigan, Jay Dykehouse (1950), completed a study of the leaders and forces influential between the years 1906 and 1950, in the promotion of federal legislation for vocational education. Dykehouse was interested in the concept of educational dualism and searched for the root of this dualism. Greenwood (1978) in preparation for her study critically reviewed Dykehouse's study as well as several other studies. She found that
because Dykehouse was only concerned with the issue of dualism, "Dykehouse selected sources that tended to illuminate the one concept of 'dualism'; he did not attempt to search for a full philosophical position within early literature" (p. 45).

A 1951 historical study by Morgan focused on the economic, social, and philosophical factors significant in federally supported vocational programs. Tracing the development of federal legislation from the Smith-Hughes Act of 1917 to the George-Barden Act of 1946, Morgan "concluded among other things that the initial movement promoting vocational education on both state and national levels was an attempt to provide an education better suited to the needs of the masses of boys and girls below sixteen years of age" (Greenwood, 1978, p. 46). Greenwood (1978) found in her review and analysis of previous studies that "Morgan focused only on political aspects influencing federal legislation" (p. 47). She added that:

He inferred that philosophy and legislation were closely related, without specifically outlining the ways. He did not achieve, at least philosophically, what he proposed in his introductory comments: to examine why we are doing what we are doing in vocational education. (p. 47)
One of the most well known educational historians was Lawrence Cremin. Throughout his career, Cremin was known as an educator, historian, administrator, and author. Cremin published some thirteen books and numerous articles all centered on education and/or history.

In 1953, Cremin published *A History of Education in American Culture*. In four parts: (a) Colonial Foundations of American Education (1600-1779), (b) The Development of a Distinctive American Education (1779-1865), (c) Expansion of American Education (1865-1918), and (d) American Education in the Contemporary World (1918-Mid-Century), Cremin described the history of education in American in detail not previously achieved.

Cremin attributed the formation of progressive education and the vocational education movement to a host of factors all coming together in a conducive atmosphere. Cremin saw the great vocational education debates as one between leaders who represented several schools of educational philosophy. One philosophical stand was taken by those who believed in the idealism. At the heart of idealism was a belief that the "essence of the universe was spirited and not material" (Cremin, 1953, p. 328). Until the late 1800s, idealism and Christian theology had the largest influence on the curriculum in American education. The idealist placed an emphasis on the liberal classical curriculum (stemming all the way back to the Greeks), and
the early settlers brought with them the religious beliefs that the only way to keep young minds from Satan was to educate these minds to read and write so they could study the bible.

Cremin believed that during the late nineteenth century, classical humanism or dualistic humanism emerged and laid the foundations for other theories of philosophy. Adding to the debate, Cremin believed that scientific advances began to produce a different view of man's nature, his mind, and his learning process. Cremin credited Darwin and his evolution theories for this new focus on science. Cremin (1953) stated that:

The impact of evolution led to the view that man was an essential part of nature; that his intellectual and moral achievements were developed in the natural process of biological adaptation and adjustment to his environment; that man's mind as well as his body emerged as a product of a long period of growth from simple beginnings to more complex forms through natural selection, survival, and gradual variation. (p. 333)

According to Cremin, Darwinism caused a number of American philosophers to look at the mind as a process rather than as an entity or substance. Mind was only a way of behaving and was an adjustment only a little more complex than the responses of lower animals. Because of this theory,
objective psychology came into being. Since mind was a process, it could be conditioned through connectionism or stimulus-response psychology. Cremin mentioned E. L. Thorndike as one of the early proponents of this learning theory. While Cremin did not say that this new learning theory had a strong impact on the vocational education movement, he did identify it, and later historians gave the new learning theory more credit for influencing the movement (Wirth, 1972).

Cremin (1953) stated that "The latter decades of the nineteenth century witnessed a growing concern to apply the evolutionary concept to the growth and change of social institutions as well as to individuals" (p. 339). Cremin's interpretation of events was that America was in the midst of an industrial revolution and the simple, familiar lives of the earlier settlers had been replaced by large urban city life. America was caught up in growth and the industrial revolution. People were needed to work in the factories and industries, and society itself was in a pressure cooker. In the large urban cities, poverty was rampant, working conditions were poor, and the family unit had deteriorated. The old traditions of parents passing along skills to their young was on the demise. Something had to be done, and America looked to government and specifically education to do something about these problems. Vocational education was the answer. Started because of the
changes in philosophy and learning psychology and united with the progressive education movement, vocational education was a way for government to help both individuals and industries. But it first had to get past those individuals who were still holding on to the idealist philosophy that pressed for a liberal public education heavily reliant on the classics.

Charles Eliot of Harvard was one of those individuals who became a proponent for expanding education. Cremin (1953) stated of Eliot that "In his crusade to widen the scope of liberal education, Eliot was running up against one of the most impregnable strongholds of liberal education. Yet this stronghold was under increasing attack from those who saw value in the growing practical and utilitarian studies " (p. 395).

In 1964, Cremin published The Transformation of the School where he explored the whole progressive movement (including the vocational education movement) even more deeply. Lakes (1985) stated in a review that "The Transformation of the School signaled a new beginning of a new historiography" (p. 5). Heavily influenced by Bernard Bailyn, Cremin investigated the previously neglected informal, cultural aspects of education. Cremin (1964) looked in depth at the progressive movement and of it wrote: progressive education began as part of a vast humanistic effort to apply the promise of American
While Cremin gave an in depth description of Woodward and Runkle and their efforts to introduce the manual arts, he also looked at other individuals and factors that were at play during that period. In describing individuals often overlooked by previous historians studying the vocational and progressive education movement, Cremin described one particular individual as the root of the movement. That person was Herbert Spencer.

Spencer had published several books but it was his book on education that Cremin believed was most widely read in America. Spencer’s book had been published prior to Darwin’s but it fit hand in hand with the theories that Darwin had proposed. Spencer believed that the only function of education was to prepare the student for a complete living (the same theories espoused by Prosser). Spencer went so far as to describe exactly what a complete living was:

(1) those activities ministering directly to self-preservation, (2) those that secure the necessaries of life, (3) those concerned with the rearing and disciplining of offspring, (4) those that maintain proper social and political relations, and (5) those
devoted to the gratification of tastes and feelings. The ideal education . . . [according to Spencer] is simply "complete preparation in all of these divisions" (Cremin, 1964, p. 92)

Spencer's evolutionary thesis held that history is the progressive adaptation to conditions or the adjustment of human character to the circumstances of living. Applying this theory to education, Spencer concluded that the aim of education should be preparation for life. He believed that instruction should begin with objects rather than abstracts, and morals were best taught by connecting acts with consequences. Cremin saw Spencer as believing that the development of mind follows evolutionary processes. And because evolutionary processes work themselves out over long periods of time (independent of human acts), education could never be an important factor in social progress. The best that the teacher could do would be to provide the knowledge that might enable people to adapt more readily to their circumstances.

Cremin believed Spencer's ideas eventually made their way into the vocational education movement. And it was exactly those ideas that caused so much debate between the proponents of vocational education (Snedden) and their opponents (John Dewey). Dewey felt that a truly democratic education would not adapt the individual to society, but
foster freedom and growth so that the individual could overcome society (Dewey, 1950). Dewey (1940) stated:

Instead of trying to split schools into two kinds, one of a trade type for children whom it is assumed are to be employees and one of a liberal type for the children of the well-to-do, [education should] . . . select the materials and the technique of the trades not for the sake of producing skilled workers for hire in definite trades, but for the sake of securing industrial intelligence—a knowledge of the conditions and processes of present manufacturing, transportation and commerce so that the individual may be able to make his own choices and his own adjustments, and be master, so far as in him lies, of his own economic fate. (p. 131-132).

Dewey believed these differences to be philosophical differences. He stated (Dewey, 1916):

At the present time the conflict of philosophical theories focuses on the discussion of the proper place and function of vocational factors in education . . . significant differences in fundamental philosophical conceptions find their chief issues in connection with this point (p. 358).

Dewey had never agreed with the kind of philosophy for education that Snedden espoused. He verbally acknowledged
this dissatisfaction with the ideas the founding fathers of vocational education had when he stated:

The kind of vocational education in which I am interested in is not one which will "adapt" workers to the existing industrial regime; I am not sufficiently in love with the regime for that. It seems to me that the business of all who would not be educational time-servers is to resist every move in this direction, and to strive for a kind of vocational education which will first alter the existing industrial system and ultimately transform it. (Dewey, 1915, p. 42).

In 1956, Shank conducted a study of vocational education and the philosophical relationship between public secondary vocational education and general education. Shank's conclusions made no attempt to delineate the philosophy of either the vocational education leaders or of vocational education itself.

Several historical studies were undertaken to research specific vocational education leaders or specific vocational organizations (Clough, 1957; Dye, 1971; Gadell, 1972; Lloyd, 1979). In these studies, some references were made to the philosophy of vocational education. In 1957, Clough conducted an historical research study on the founding and development of the National Society for the Promotion of Industrial Education (NSPIE). A 1979 dissertation by Lloyd
also studied the NSPIE, but was focused not only on the NSPIE itself but the NSPIE's role in promoting federal aid for vocational education. In 1971, Dye focused his dissertation on Calvin Woodward and Woodward's contributions to vocational education as a founding father of the manual training movement. Gadell (1972) conducted a study of Charles Prosser and Prosser's contributions to vocational and general education. Despite the fact that the philosophy was interpreted as being important to these studies, none of these studies identified a clear and definitive philosophy of vocational education.

Keller's (1968) doctoral dissertation was a study to determine the principles of vocational education. After identifying 264 statements of belief from vocational education literature, she asked 25 supervisors of vocational-technical education in the U.S. Office of Education's Region VIII to respond to each statement. Using an agree-disagree rating scale, Keller identified twelve statements of belief and concluded those to be the principles of vocational education. Greenwood (1978) criticized Keller's work stating that Keller's "methodology involved an excessive reliance on quantitative research to solve a qualitative problem" (p. 49). Greenwood added that Keller's study "implied an assumption that agreement on policy issues from membership groups represents agreement about philosophic premises" (p. 49).
Greenwood's 1978 dissertation also included an extensive review of the works of Barlow. She found that "Continuously, Barlow has attempted to interpret the rationale of early vocational education as characteristic of a liberal, democratic, and progressive philosophy" (p. 54). Greenwood ended her review of the studies by stating that:

As a whole, the studies and literature reviewed from the field of vocational education suffered from a lack of methodology that would, in fact, explicate a philosophic rationale. Either the methodology selectively covered only one component of a philosophy or policy issue; or quantitative methods were used in lieu of qualitative processes to determine interpretations, or in the case of the promotional interpretations, adequate bibliographical documentation was lacking thereby preventing adequate validation. (p. 56)

Greenwood conducted her own 1978 study in an attempt to identify a philosophical foundation for vocational education based upon the philosophies of the early leaders. Greenwood's review was excellent as she conducted a thorough historical review of the works of Prosser and Snedden. To analyze the educational philosophies of the early leaders, she used a model proposed by William Frankena. While Greenwood's study did establish a philosophical premise or thought pattern for the early leaders, Greenwood did not
actually classify the early leaders as falling within a particular educational philosophy. The closest to classifying the early leaders that Greenwood came was in her final chapter where she attempted to define which educational philosophies the early leaders were not. For example, Greenwood described Bagley as "one of the early conceptualists of the essentialist position" (p. 333) and concluded that "the Snedden-Bagley debates represented the incompatibility between basic educational philosophies of utilitarianism and essentialism" (p. 333).

Greenwood (1978) described the Dewey-Snedden debates as evidence that the vocational leaders did not agree with the progressive philosophy since Dewey was the "spokesman-leader for progressivism" (p. 334). And Greenwood offered other examples to support her theory that the early vocational leaders did not agree with perennialism or reconstructionism. Greenwood concluded that:

Vocational educators, themselves, have mistakenly assumed that the philosophic rationale for vocational education was somehow linked to the better known educational philosophies, such as essentialism, perennialism, progressivism, reconstructionism, behavior engineering, or existentialism; they have persistently wanted to believe that vocational education somehow evolved
from progressivism, and the rationale supplied by
John Dewey. (pp. 335-336)

Greenwood argued instead that:

In reality, the thought-pattern that preceded the
Smith-Hughes Act and that has been embodied in
federal legislation at least until 1963 was not
compatible with progressivism; but it was a
distinct and separate philosophy, evolving
independently from all of the other education
philosophies of the early twentieth century.
(p. 336)

Prosser and Quigley (1949) inferred that the philosophy
for vocational education was based upon some parts of
pragmatism, experimentalism, progressivism, and
reconstructionism as described earlier. Cremin (1964)
established the foundation philosophy of vocational
education as being progressive and the push for vocational
education as based in the progressive movement. It is not
known if any of these philosophies fit with the
philosophical rationale of the 1990 Carl D. Perkins
Vocational and Applied Technology Education Act Amendments.

Revisionistic Theories

Beginning with Krug in 1964, a new breed of vocational
historians emerged. These historians regarded the
philosophical ideas of the early vocational education
leaders as being one of social control and social
efficiency. While they did not actually classify the early leaders within one or several education philosophies, they did represent a trend that could be seen as the basis for the changes made in vocational education legislation and philosophy during the 1980s and 1990s.

Krug (1964) felt that the early leaders represented a social control philosophy and that the early leaders pushed for vocational education as a method of controlling society. In 1967, Drost studied the biographical history of David Snedden. Like Krug, Drost described Snedden as a social-efficiency supporter and concluded that Snedden's philosophy clearly represented a desire to control society through education. Drost stated that:

Snedden went a step further than many in the social efficiency tradition by proposing that a concentrated effort be made to determine the probable destination of each individual in society and to prescribe a curriculum especially suited to promote his ultimate efficiency. This set Snedden apart from others like Franklin Bobbitt and W.W. Charters who were also in the social efficiency camp. (p. 4)

Drost added that "Snedden saw as the ultimate aim of education the attainment of the 'greatest degree of efficiency.' Thus efficiency should be a product of the curriculum" (p. 43).
In 1972, Wirth studied the philosophies of Snedden and Dewey as they debated the value of vocational education. Wirth (1972) felt that he had uncovered enough primary evidence to support his theory that Snedden was a social-control philosopher. In 1974, Wirth commented on the Snedden-Dewey controversy in the journal *Studies in Philosophy and Education*. Wirth (1974) believed that the vocational education movement was:

Marked by a conservative social philosophy, a methodology of specific training operations based upon principles of S-R psychology, a curriculum designed according to a job analysis of the needs of industry, and by a preference for a separately-administered set of educational schools. (p. 171)

Wirth added that:

Snedden shared the basic faith of Herbert Spencer and the conservative Social Darwinists that the emergence of scientific-corporate capitalism was the cosmic instrument for progress. He accepted the basic proposition of the manufacturers that what was good for business was good for America. In order to help more Americans enjoy progress, the task of education was to aid the economy to function as efficiently as possible—"to make each child a better socius," a more fit member of a complex society. (p. 171)

Manufacturers demanded that schools teach basic industrial skills and sponsored machine training and industrial arts. Technical educators sought to improve the practical training of engineers and future industrial leaders. Pedagogical reformers saw hand learning as part of a broader movement to invigorate classroom teaching. Those concerned about instruction would restore the ideal of the skilled artisan, while social reformers turned to manual education to teach traditional moral values and bring together a disrupted industrialized society. (p. 3)

Lazerson and Grubb believed that the central issue of the educational reform movement lay in the problem of promoting industrial growth while limiting its negative social effects. The school was seen as a major agent in this process. They saw as justification for manual training that manual learning would lead to individual and social reform. In support of this interpretation, Lazerson and Grubb (1974) stated that:
This idea had received its most explicit expression in antebellum activities to reform juvenile delinquents. Part of a broader movement to reform rather than punish, "houses of refuge" and reformatories for wayward youth tried to construct a therapeutic environment within which manual education was seen as a central weapon in the attack of poverty, crime, and vice. . . . After the Civil War the ideas of the juvenile reformers became more generally applied to the social problems of industrialization. The underlying assumption however, remained the same: social evils could be corrected by moral uplift, and manual labor was essential to inculcating morality. (p. 9)

Lazerson and Grubb interpreted the movement as shifting from manual arts to vocational education because manual education had no economic relevance. The leaders of the manual arts movement (Woodward and Runkle) had been forced to deny its vocational applicability to gain wide-spread support. The leaders had consistently presented the manual arts movement as a supplementary approach to traditional goals. At the same time, those seeking more drastic changes in the relationship between schools and the economy had begun to raise serious questions about manual training's economic and vocational utility. Lazerson and Grubb stated:
The economy did not need individuals who understood the traditional crafts and the principles of production, but men to run the industrial machine, supervise the assembly line, and organize the corporation. Manual training has failed to show its practicality, and on this issue those committed to education for industrial efficiency broke with earlier advocates of hand learning (p. 15-16).

Lazerson and Grubb (1974) saw the vocational education movement as part of a larger movement where "Ideals of utilitarianism, efficient use of resources, and economy in production became by-words of educational management" (p. 24). They added that:

In an era when reformers were becoming critical of the inhumanity of industrial work, the response of public education was to adapt the individual to the new industrial system so as to make him happy with his work and proud of his position in society. Educators accepted the nature of technology as given, and strove to accommodate their pupils to industrialism in the most direct way possible. (p. 27)

In 1978, Paul Violas published an historical account of American education. Violas also saw the vocational
education movement as based in social control philosophies. Violas stated that:

The accompanying belief that working-class children could be better trained for the factory through an industrial curriculum than through traditional studies rested in part upon racist vestiges of Darwinism and the eugenics movement. Certain categories of students were considered inherently inferior and thus incapable of mastering the intellectual content of the traditional curriculum. Since the newer branches of psychology taught that nonintellectual levers were more effective for the control of human behavior, industrial training relied more heavily on conditioned reflexes than on intellectual appeals. (p. 135)

Violas suggested that the American public was deceived into believing that vocational education represented democratic ideas. He stated that:

This new slogan [equality of educational opportunity] contained the magic words in the American democratic lexicon: "equality", "opportunity", and "education". Who could challenge the notion of giving every child an equal opportunity in education? Unfortunately, the slogan actually meant less than equality or
opportunity and probably less than education, at least less than what has been formerly understood by that term. In actual practice the new slogan meant little more than the earlier justification for industrial education: an opportunity for the children of the poor to be trained by the public schools for efficient service as industrial proletarians. (pp. 143-144)

Violas (1978) added:

The belief that equality meant the opportunity for members of each class to become efficient in their class labors negated the traditional American ideal of equality. Indeed, those who embraced this rationale made little effort to conceal the class nature of their proposed educational system. (p. 145)

Revisionist historians added a new dimension to the study of the philosophy of vocational education.

In 1978, several historians came to the defense of vocational education and its early proponents. Diane Ravitch published The Revisionists Revised: A Critique of the Radical Attack on the Schools (1978) wherein she described these revisionist historians as radical historians. Ravitch believed that they achieved prominence during the 1960's as they asked not whether Americans had placed too much faith in education, but why Americans had
placed any faith at all in education. Ravitch asserted that these radical historians encountered little opposition which she felt was wrong. She stated that even books which, in her view, flagrantly violated the rules of evidence and logic, went unchallenged. Ravitch defined radical critics as historians who found schools to be oppressive institutions which regimented, indoctrinated, and sorted children, either brutally or subtly crushing their individuality and processing them to take their place in an unjust social order.

Ravitch said that there were several factors at play that resulted in the conclusions that these historians drew. First of all, she believed that many of these historians interpreted the history of education in the way they did as a reaction to what they saw as an inadequacy in educational historiography. Historians such as Bailyn saw the earlier educational histories as "dominated by boosters who were primarily interested in glorifying the new profession of education" (Ravitch, 1978, p. 21). Ravitch felt that historians like Bailyn and Cremin did not agree with those earlier historians (such as Ellwood Cubberly) who felt that American educational history was a story of the emergence and triumph of the American public school. Cremin and Bailyn sought to re-look at the accounts of educational history that they believed were "patristic . . . [and] written in almost total isolation from the major influences
and shaping minds of twentieth-century historiography" (Ravitch, 1978, p. 23).

Second, Ravitch felt that the revisionist thrust in vocational education historiography worsened when the historians came from a radical perspective. She believed that these radical historians were formed on college campuses where a radical political ideology evolved as a result of the Vietnam War, urban riots, and persistent economic inequality. Ravitch saw this group of historians as portraying the American past as a history of racism and exploitation. Ravitch stated that the "intellectual, emotional, and political currents of an era of radical protest furnished the climate within which the radical revisionist books were written" (p. 28).

A third factor, which Ravitch called a bias, was that these radical revisionist historians sought a seed of the public schools in the past, but their aim was to account for the evil that they perceived in the present. Because of this, they suffered from what Ravitch called the presentist method, that is, they projected their own ideas into the past in search of the seeds of present problems. Ravitch stated, "The impulse to use history for political purposes is not new; it has been indulged in by scholars of all political persuasions, by communists and anti-communists, by conservatives and liberals, and most recently, by young radical historians" (p. 165-166).
Greenwood (1979) also suggested that the revisionist historians used "selective reporting in the interpretation . . . of the intentions of the early leaders of vocational education" (p. 5). Lakes (1986) best summed up the revisionists' position when he stated that:

According to revisionists, scientific management in schools is a vehicle for social control. Schools track students into class-related levels in order to prepare them for their eventual social dispositions. Children of the working class receive an education that "fits" them for industrial life. Values such as docility, discipline, and cooperation are inculcated through vocational training. (p. 71)

More recent researchers have indicated that vocational education may actually be hurting vocational students rather than helping them (Oakes, 1986). Whether or not the revisionist historians, or the recent research, or some other factor has led to the shift in vocational education legislation and philosophy, the 1990 Carl D. Perkins Vocational and Applied Technologies Education Act Amendments moved away from the philosophic rationale of early leaders.

Philosophy and Policy

Researchers have studied how philosophy and the philosophy of leaders relate to policy. David (1983) believed that:
Policies are by definition future-oriented, even when they seek to effect a return to a preferred past condition or circumstance, and even though they register, at least by implication, a reading on the present states and the meaning of past developments. Constructing preferred futures is both the dynamics of policy behavior and the battle ground of policy makers. (p. 25)

David (1983) added that public policy seeks to "realize goals or purposes that may be immediate, intermediate or longer-range, if not all three" (p. 26). The philosophy or goal must be the basis for the policy. "A public policy without a purpose, without a goal, is a contradiction in terms" (p. 26).

Bottoms (1983a) suggested that it is often not the collective body of vocational educators who drive public vocational education policy because vocational educators often do not know what they believe or what they want. He stated:

Answering this question of what policy or legislative action we want may sound simple, but it can be the most difficult step in developing a political plan. Individuals in the field often tell me of their frustrations in trying to get support from their state legislatures, for example, but when I press for an account of the
specific action they sought, too often I am met with a vague stare or some general response like, 'We just want them to support vocational education.' Policy makers need to know what specific support we want for what specific action.

(pp. 69-70)

Stenzel (1983) added that "any group that wants to succeed in legislative action needs to first clearly define the goals it wants to achieve" (p. 93). But what often happened in vocational education was that vocational educators found themselves wondering where certain policies came from or who the leaders were in supporting the policies. Because many vocational educators cannot articulate what their philosophical beliefs are, they have not participated in policy making. Greenwood (1983) stated that, "Legislative enactment, as an instrument for change, became a popular form of educational reform during the 1960's and 1970's, often without any or little accompanying rhetoric linking the prescribed features to an ideology or philosophical rational for education" (p. 5).

The initiative for creating educational policy often begins with educational leaders. If the leaders can get broad support for the philosophical reasoning behind a policy, the policy will often be successful. As an example, Greenwood (1983) stated that the "initial reform effort of vocational education was successful because . . . it
sponsored an ideology or educational philosophy which has gradually emerged as a consensus position in education— that schools can and should prepare youth for jobs" (p. 6).

Greenwood (1983) believed that while vocational leaders alone can affect policy, unless that policy has broad support, it will not be successful in the long run. She compared the initial movement by vocational education leaders for federal aid to the career education movement. In comparing the two, Greenwood stated that during the initial movement for federal aid for vocational education,

The vocational education leadership relied on a grass-roots acceptance of its platform prior to seeking federal legislation. Career education . . . programs, on the other hand, were never fully debated at the grass-roots level. . . . [It was] vulnerable to resistance in . . . [its] legislative and implementation phases, because the issues involved . . . were never fully explored by the groups whom the programs would affect. While the vocational education leadership was representative of a 'people's movement', the career education . . . [movement was a] government sponsored program. . . . [It was] never viewed by a critical mass of people as their reform movement. (pp. 9-14)
Greenwood felt that the philosophies of vocational educators must be compatible with the policy, and that they must fully accept the policy in order for it to be successful.

Summary

Much has been studied about the philosophy of vocational education, though no studies have successfully resulted in an undisputable philosophy for vocational education. In writing about the history of vocational education, some have attempted to define a philosophy, but those early writers were not very explicit in this task.

Starting in the early 1950s, several research studies on the philosophy of vocational education emerged. The authors of these studies were not successful in categorizing vocational philosophy into specific educational philosophies. In fact, some such as Greenwood (1978) have suggested that the philosophy of vocational education during its founding can't be classified into one of the educational philosophies and is instead a new philosophy unto itself. Law (1975) seemed to agree with Greenwood by suggesting that vocational education is not really a separate "type" of education but is instead a "method" of teaching.

A third group to describe the philosophical foundations of vocational education was the revisionist historians. While some of the vocational education historians disputed the conclusions of the revisionists, the revisionists must be credited with looking at the larger picture, including
social, political and economical factors that may have influenced the philosophy that served as the foundation for vocational education.

Chapter Summary

Some vocational education historians who researched the philosophy of the vocational education movement charged that other historians, such as the revisionists, subjected the readers to poor quality historical research (Ravitch, 1978). They stated that revisionist historians were not objective and often had selection biases.

Literature on the philosophies of education revealed that several classification systems of educational philosophies existed. Some of these models used similar terms and categories while others used distinctly different terminology. Some of the models were interrelated and combined philosophical categories of other models. Basically, the classifications of educational philosophies that this review revealed were: (a) idealism, (b) realism, (c) perennialism, (d) essentialism, (e) experimentalism, (f) neo-thomism, (g) naturalism, (h) pragmatism, (i) progressivism, (j) existentialism, and (k) reconstructionism. Some of these classifications were combinations of others. Very little of the literature revealed an actual system or model for classifying the philosophy of educators into one of these categories. Duck
(1981) proposed a workable model for classifying educational philosophies.

The literature on the history of vocational education in America described the beginning of the vocational education movement as starting somewhere near the end of the eighteen hundreds with the manual training movement and firmly establishing itself with the passage of the 1917 Smith-Hughes Act.

A review of literature on policy found that many believed that policy must begin with a clear goal or philosophy. However, the literature review also revealed that within vocational education, educators often had difficulty stating their goals or philosophies and thus often felt alienated from the policy. Despite the literature that suggested that vocational education legislation often did not begin at the grass-roots level, some literature suggested that vocational leaders often drive policy in vocational education.

The literature and research in the philosophical history of vocational education resulted in varying conclusions. Many of these variations conclusions could be attributed to the nature of historical research and compounded by the complexity in researching educational philosophies of past movements and leaders. Despite the fact that no consensus of educational philosophy emerged for vocational education and the early movement, most of the
historians agreed on the sequence of events that led to the development of vocational education. They seemed to differ only on the philosophical rationale for the vocational education movement. A consensus opinion on the early philosophy for vocational education or of the early leaders was not necessary for this particular research study.
CHAPTER III
METHODOLOGY OF THE STUDY

Design of Research

This study incorporated two separate designs. The first part was an historical study on the testimony for the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments to gather data. Data was collected from the transcripts of the hearings for the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments to establish who the vocational education leaders were and what they said. Once the data was gathered, the second prong was to analyze the data and then classify the philosophy of leaders into educational philosophical categories utilizing a model developed by Duck (1981) for this purpose.

Historical research is the practice of looking at past events "to arrive at conclusions concerning causes, effects, or trends of past occurrences that may help to explain present events and anticipate future events" (Gay, 1987, p. 9). According to Gay, historical research attempts to understand and explain past events. McCullagh (1984) stated, "History enables us to understand our social and
cultural inheritance, our institutions, beliefs and artefacts [sic]" (p. 3).

Gay (1987) stated that in education, "many current educational practices, theories, and issues can be better understood in light of past experiences" (p. 179). Thus, historical inquiry may help the researcher understand why certain policies exist and what events led to the passage of those policies.

Like other forms of research, historical research follows specific methods. Van Dalen (1966) described the steps for historical research as: (a) formulating the problem, (b) collecting source materials, (c) criticizing source materials, (d) formulating the hypotheses, and (e) interpreting and reporting the findings. In an alternate method, Gay (1978) defined the steps as: (a) defining the problem, (b) data collection, (c) data analysis—external and internal criticism, and (d) data synthesis.

Regardless of which method the historical researcher uses, the quality of an historical study is directly linked to the quality of the source materials and the objectivity of the researcher in interpreting this material. With that objectivity in mind, Van Dalen (1966) stated that "obtaining the best data available to solve a problem is an initial and
important task of a historian" (p. 162). Gay (1978) further added that:

Since summarization of historical research data involves logical analysis rather than statistical analysis, the researcher must take care to be as objective as possible. It is very easy to 'overlook' or to discard evidence that does not support, or contradicts, the research hypothesis. One may, for example, subconsciously apply stricter criteria when engaging in internal criticism of unwanted data. (p. 185).

As part of the historical research process, all gathered source materials were first analyzed for internal criticism. This was made easier by the fact that all hearings were available from the federal government. In order to minimize investigator bias, no hypothesis was formed prior to the collection and analysis of the source materials. The conclusions of this study were intended to serve as the hypothesis or defensible position.

**Description of Methodology**

**Selection of Leaders**

To determine the specific selection criteria used in selecting the vocational education leaders for this study, an historical review was conducted of legislative hearings prior to the 1984 Carl D. Perkins legislative act. The
review determined that those individuals who testified at and/or submitted statements to the legislature during the hearings fell within one of the following categories:

1. They testified and/or submitted statements and were representing some specific national level group or association (American Association of Retired Persons; National Coalition for Women and Girls in Education; American Association of School Administrators; etc.) or,

2. They testified and/or submitted statements and were representing some specific state or local group or association (Oregon State Board of Education; New York City Board of Education; Kentucky Home Economics Association; etc.) or,

3. They testified and/or submitted statements and identified themselves as a member of some national, state, or local group or association (Baltimore Metropolitan Manpower Consortium; National Association of State Directors of Vocational Education; etc.) or,

4. They testified and/or submitted statements and held a position of authority (Executive Director, Director, Chairperson, President, Vice-President, Associate President, Associate Director, etc.) in some national, state or local group or association (National Education Association; National Alliance of Business; National Association of Home Builders; New York State Advisory Council on Vocational
Education; American Association of Community and Junior Colleges; etc.) or,

5. They testified and/or submitted statements and held a political position (Representative in Congress, State of Alabama; Legislative Committee, Maryland State Department of Education; Representative in Congress, State of Connecticut; President, The Florida Senate; Delegate in Congress from the Territory of Guam; etc.) or,

6. They testified and/or submitted statements and held an administrative position in education or government (Chief Regional Administrator, Vocational Education Region 11; Director of the Division of Vocational Education, State of Florida; Superintendent of Schools, Baltimore, Maryland; Supervising Director of Federal Programs, Rochester Public Schools; Sex Equity Coordinator, Maryland State Board of Education; etc.) or,

7. They testified and/or submitted statements and held a position at a university or community college (Professor, Department of Education, University of Berkeley, California; Vice-President, Academic Affairs and Research, Eastern Kentucky University; Chancellor, Prestonsburg Community College, Kentucky; etc.) or,

8. They testified and/or submitted statements and held a position at a particular secondary or post-secondary school (Executive Director, A.W. Beattie Vocational Technical School, Allison Park, Pa; etc.) or,
9. They testified and/or submitted statements and either held positions of authority or were employed by business and industry (Senior Vice President, Business Systems Development, McGraw-Hill Book Company, New York; etc.)

Based on the above groups, the following list was compiled of all of the possibilities for the leaders who testified at federal hearings related to vocational education:

1. Was a representative of a national group or association.
2. Was a representative of a state group or association.
3. Was a representative of a local group or association.
4. Was a representative of a particular business or industry.
5. Was a representative of a particular institution.
6. Was a member of a national group or association.
7. Was a member of a state group or association.
8. Was a member of a local group or association.
9. Was a member of a political body.
10. Was an administrator of a particular university.
11. Was an administrator of a particular community college.
13. Was a federal level education/government administrator.
14. Was a state level education/government administrator.
15. Was a local level education/government administrator.
16. Was a member of the instructional/research faculty at a university.
17. Was an instructional/research faculty at a community college.
19. Was holding a position of authority in a particular business or industry (CEO, President, Officer, etc.)
20. Was an employee of a particular business or industry.

Because this list of the types of individuals who have testified at federal hearings related to vocational education is so large, the selection criteria for this particular study had to be narrowed and made more specific. The first restriction was to remove those who were testifying on behalf of a group or association.
To identify the personal philosophy of an individual who was representing a group or association was difficult. While they may have portrayed the views of the group or association, it is not known if they were also portraying their own particular views. Theoretically, it was possible for an individual to represent a view on behalf of a group and yet to have personally felt something different. Thus, those individuals who identified themselves as "testifying on behalf of . . .", or "submitting documents on behalf of . . .", or "representing . . .", or "submitting documents representing . . ." were not be considered within the scope of this study. The terms described above were the only terms that this researcher identified as those terms being used by an individual who may have testified and/or submitting documents that did not represent the individual's own feelings.

A review of prior federal hearings on vocational education also revealed that many individuals often participated in the hearings only when the hearings were geographically located near them. This researcher discovered that this occurred most often with state and local education/government administrators, with administrators of particular secondary/post-secondary institutions, with administrators of particular community colleges, and with individuals who were identified solely as "members" (but did not hold positions of authority) in
groups and associations. This was not intended to imply that they were not vocational education leaders or that they did not have an impact on the outcome of the federal hearings, but for the purpose of this particular study, these individuals were not included in the definition of a vocational education leader. The review of past hearings identified that federal education/government administrators, administrators and instructional/research faculty at universities, and individuals holding positions of authority (Officer, Director, President, Chairman, etc.) in groups or associations most likely tended to appear more than once. Their names appeared in subsequent hearings as an individual who testified and/or submitted testimony again and again.

Finally, two additional types of individuals needed to be addressed. First was the individual who held a political position (for example a Congressional member). While it was obvious that all individuals who held Congressional positions at the federal level at the time of the passage of a particular bill, had some influence on the outcome of the federal legislation (they were the ones who passed or defeated the legislation) the degree of influence of the state level or local level individual who held a political position was not known and difficult to determine. This study did not include those politicians at the state or local level in the definition of vocational education leader.
Second, were the individuals from business and industry. Again, as with the administrators, individuals who were solely identified as "employees" but who did not hold positions of authority in a particular business or industry were more likely to only participate when the hearing was conveniently located geographically. The individual who held a position of authority such as CEO, Officer, President, Manager, etc. tended to testify and/or submit statements more than once or for more than one hearing and tended to travel greater distances to appear before a hearing. Thus, those individuals who did not identify themselves as holding positions of authority in business or industry, but identified themselves as an employee of business and industry, were not included in the definition of a vocational education leader for in this study.

The definition and selection criteria of a vocational education leader that emerged after correcting for the above mentioned factors was listed as follows:

An individual who testified and/or submitted prepared statements at federal hearings for vocational education legislation and

1. held a position of authority in a group or association, or,

2. held a federal education/government administrative position, or,
3. held a federal level political position, or,
4. held a position of authority in business or industry, or,
5. held an administrative and/or instructional/research faculty position at a university.

Moss and Liang (1991) identified leaders as those who, when they perceived that change is needed, influenced the group by non coercive means such as persuasion. Finch (1989) adapted the Moss and Liang research in a study designed to identify the leadership behaviors of successful vocational education administrators. In his study, he concluded that "The successful administrator is adept as a listener and oral and written communicator. . .  [This] communication encompasses a broad range of written attributes" (p. 24).

The attribute identified by Finch, of a leader being a successful communicator, was important to this study because the review of prior hearings on federal legislation revealed that in all cases not enough information was present in the testimony/prepared statements to utilize Duck's model of classification of philosophies. Thus additional literature published by the individual was used.

Because of the need to review additional literature and the identification by Finch, of leaders' written communication skills, this study also included publication
as another criterion for selection as a vocational education leader. For the purpose of this study, at least one additional written document (book, journal article, research report) had to have been published by the leader on a topic related to education. If more than one published document was available, as many documents as needed to obtain the needed data were consulted. If only one document existed, then an attempt was made to classify the leader using Duck's model (if possible). If no published document existed, then that individual was not included within the scope of this research.

Each hearing relating to the 1990 Carl D. Perkins Vocational Education and Applied Technology Act was reviewed. The steps of historical research were used to identify each hearing and obtain documented data from each hearing. Once the testimonies from each hearing were obtained, they were reviewed to identify potential leaders. Every attempt was made to ensure that the testimonies from all hearings related to the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments were obtained and reviewed and that none were left out.

Each individual who testified and/or submitted prepared statements, was reviewed using a selection form. Appendix A contains a sample of the form used to establish an individual's qualification as a leader. If the individual met all of the criteria, and remained a "yes" at the end of
the selection chart, then that individual was included. If
the individual did not, then that individual was not
included in this study as a vocational education leader.

In order to identify whether or not an individual had
published at least once on a topic related to federal
legislation for vocational education and/or the future
direction for vocational education, the Educational
Resources Information Clearinghouse (ERIC) database was
reviewed for each individual. If a citation existed, this
satisfied the criteria of "having published" and the
document[s] were obtained for review. The number of
vocational education leaders lessened each time a selection
factor was imposed upon the individuals.

The testimony, submitted statements, and written
publications of these vocational education leaders were then
reviewed and applied to Duck's model to establish a picture
of the leaders' educational philosophy.

Philosophical Model for Classification

This investigator selected a model developed by Lloyd
Duck for classifying the philosophies of educational
leaders. The model, developed by Duck (1981), involved an
analysis using four separate indicators. The indicators
answered the following four questions:

1. What is the nature of the learner?
2. What is the nature of the subject matter?
3. How should one use the subject matter to guide students toward meaningful learning activities?

4. What behavior trend should one exhibit in order to carry out one's philosophical position?

Duck suggested that by answering the four questions, a set of preferences rather than a set of behaviors that belong to mutually exclusive categories can be identified. Duck's model used indicators to answer each of the four questions. Within each indicator lay an "infinite variety of possible answers to each question" (p. 3). By describing the two extremes, a continuum of possible answers fell between these two extremes.

For the question, "What is the nature of the learner?" Duck described the two extremes of the continuum by using the terms Lockean (passive) and Platonic (active) (Figure 1).

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Lockean                  Platonic
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Figure 1. The Nature of the Learner.

Lockean referred to the position suggested by John Locke that the mind is a tabula rasa or blank slate. "Sensory data which the learner absorbed formed the true source of knowledge" (Duck, 1981, p. 4). The child is a passive participant in the learning process.
Platonic referred to the position taken by Plato that knowledge lies within the mind and must be relearned through interaction. Using Socratic questioning, the teacher attempts to help the child draw forth and remember the knowledge locked inside.

This question sought to establish whether or not the leader believed that the learner was an active or passive participant in the learning process. If the leader viewed the learner as a passive participant in the learning process or one whose mind absorbs information simply by being exposed to it, then an environment rich in lecture, chalkboard use, and other traditional forms of instruction would have been recommended. The leader would have made statements suggesting that the student should memorize the information with the idea that practice makes perfect. A large amount of assigned reading, homework, and perhaps flash-card use would have been suggested.

On the other hand, if the leader viewed the learner as an active participant, or the most important ingredient in the learning process and classroom environment, then an environment rich in classroom discussion, problem solving activities, practical "hands-on" kinds of activities, and other forms of interaction would have been suggested. This leader would have wanted the student to actively engage in the learning process, to "discover" the information. Most educational leaders who argued in favor of vocational
education in the past have been of this philosophy. That is, they believed that the learner should be actively engaged in the educational process, not a passive participant, and therefore, they argued for a practical hands-on or manual arts form of education as suggested by Maria Montessori or Fredrich Froebel.

Another way to look at this question was to ask if the classroom or educational environment was recommended as being student-centered or subject-centered. A recommended subject-centered environment would have been one where the subject matter is truth and the student was led to this truth by total immersion in the truth, as if by constantly being exposed to the truth, the student gradually knew the truth.

A recommended student-centered environment would have been one where the student was the key. The truth lay within the student and the student had to discover this truth hidden inside by stimulation and Socratic questioning.

The question, "What is the nature of the subject matter?" was represented by an indicator with the extremes of the continuum labeled as Amorphous and Structured (Figure 2). Amorphous referred to the extreme which "denotes the ability to repeat items and details, without any corresponding capacity to demonstrate insights about relationships among separate items" (Duck, p. 7). Amorphous learning was characterized as rote learning where each item
to be learned is of equal importance and the child is not encouraged to find relationships among the items.

Amorphous  Structured
____________  ______________
   I            I           I

Figure 2. The Nature of the Subject Matter

The other extreme, labeled structured, "implies a view of subject matter expressed by Jerome Bruner, when he emphasized the "natural structure of a discipline" (p. 9). The subject matter was viewed as having a natural structure which helps to explain relationships among the components and to learn new information.

This question basically tried to categorize feelings the leader had about the value of the subject matter. If the subject matter was seen to be of extreme importance, then the simple accumulation of more and more bits and pieces of knowledge would have been the aim of education suggested by the leader. The leader who held this position focused on rote memorization and similar kinds of activities in an attempt to fill the student up with information. Duck (1981) stated that there are very few educators who belonged at this end of the continuum or would even suggest that teachers should "adopt this 'amorphous' position, except
those who would be working with very young students who are attempting to master basic skills of vocabulary" (p. 9).

At the other end of the continuum was the leader who saw subject matter as having a hierarchical nature. That is, some kinds of knowledge were more valuable than other kinds and the greatest value of any knowledge is for attaining new knowledge. Duck (1981) stated, "this method [of viewing subject matter]...has been overwhelmingly popular, especially in the physical and social sciences, since the various curriculum projects of the early 1960's" (p. 10).

The third question, "How should one use the subject matter to guide students toward meaningful learning activities?" used a continuum with the extremes labeled Cognitive and Affective (Figure 3).

Cognitive ________________ Affective

I __________ I ___________ I

Figure 3. The use of Subject Matter to Guide Students toward Meaningful Learning Activities.

Cognitive learning and affective learning are not mutually exclusive types of learning. Duck stated that "if cognitive learning emphasizes intellectual skills devoid of emotion, and affective learning emphasizes feeling and emotions, then it is obvious that both cognitive and affective learning can
be, and usually are, closely linked" (p. 13). Duck stated that the decision of where to place this indicator is decided by focusing on which of the two is emphasized. Which is the best way to develop skills and give information, by emphasizing the cognitive or by stressing the affective?

If the focus in education was to deliver facts, concepts, and generalizations, devoid of emotion, that represented the cognitive end of the continuum. If the focus in education was to deliver the knowledge by stimulating the students' underlying beliefs and values, (not to suggest that they be changed, only used to better help deliver the curriculum) that represented the affective end of the continuum. The leader who emphasized the cognitive end of the continuum made statements emphasizing the subject matter (the facts, the knowledge itself) that should be in the classroom. The leader who emphasized the affective made statements about how the students should "feel" about the subject matter (how to get them to internalize it, not just memorize it). In most classroom environments, the end result is some combination of the two extremes, but for the purpose of Duck's model, the question was to identify which extreme was more focused by the leader. For this research, if no clear-cut preference for one extreme or the other emerged, then it was reported as such. If, however, the literature of the leader
demonstrated an emphasis for either the cognitive or the affective, while it did not mean that educator represented the only the extreme, it was noted that the leader demonstrated a preference.

The final question, "What behavior trend should one exhibit in order to carry out one's philosophical position?" used an indicator with the labels Authoritarian and Non-Authoritarian at the ends of the continuum (Figure 4).

According to Duck, an authoritarian educator would "encourage students to view subject matter only as experts in that field might view it; hence, these teachers habitually accept for each major question under examination only one right answer which all students are expected to adopt and understand" (1981, p. 22).

Authoritarian       Non-Authoritarian
I__________________I__________________I

Figure 4. Behavior Trends

Duck described the non-authoritarian educator as one who uses divergent thinking methods where more than one answer is encouraged for the question at hand. Duck added that these two terms did not relate to the idea of strictness and permissiveness.
This question was a synthesis of how the leader viewed the learner and the subject matter. This question sought to uncover whether or not the leader believed that knowledge had defined boundaries. That is, did the leader want the students to view the subject matter only in the way that a subject matter expert would view it? A leader with an authoritarian world view or one that focused on convergent thinking indicated his belief that there is such a thing as a subject matter expert (or that one can be an expert of that particular subject matter).

If the leader encouraged divergent thinking and several ways of thinking about the subject matter (there was not necessarily a right answer) than that leader was classified as having a non-authoritarian world view. If the leader indicated subject matter as something for which there is only one correct view, then that educator was said to be leaning toward the authoritarian end of the continuum. But if, on the other hand, the leader indicated a belief that the thinking process was also valuable and that teachers should ask questions that have many answers, then that leader was said to have leaned more towards the non-authoritarian end of the continuum. Duck (1981) suggested that the authoritarian behavior trend was most evident in the physical sciences and in mathematics, while the non-authoritarian behavior trend occurred most often in the social science and humanities classrooms. Some particular
statements that the leaders made to suggest their preference related to whether or not they desired measures of accountability that focused on achievement tests, performance tests, or if they made statements that suggested that the teachers should be a subject matter expert themselves. These leaders were demonstrating a preference for an authoritarian world view. If the leaders made statements that suggested that teachers and the curriculum should encourage many ways of looking at a problem, or that problems should be presented to the students that have no correct answers, then that leader was demonstrating a preference for a non-authoritarian world view.

After Duck described the indicators, he gave a full explanation of the various educational philosophies and how they might appear along the continuum for each question. Following are the five educational philosophies described by Duck and how these philosophies fell on the continuum for each question.

**Essentialist Educator**

Duck described the essentialist as one who places emphasis on the physical sciences as used by authorities. The essentialist would assume that there are no absolute truths and that success is based upon absorption of knowledge about the physical world.

The essentialist believes that students need to be led toward the absorption of prescribed subject matter.
Learning occurs as students correctly master the subject matter. Thus Duck answered the first question by saying the essentialist is more Lockean than Platonic, though barely. But not all essentialists believe in such an open manner of instruction. There are essentialists who rely strictly on the lecture-rote-memorization model of instruction. In these cases, it is entirely possible that the student simply memorizes the information without internalizing any of the information. In these cases, Duck felt that the indicator leaned much more towards Lockean than Platonic, thus Duck put a second indicator mark and indicated that the essentialist could fall anywhere between the two marks depending upon which teaching style they preferred. Following is the diagram of the essentialists as Duck felt they fell on the continuum (Figure 5):

![Figure 5. Nature of the Learner--Essentialist](image)

Duck felt the essentialist valued a curriculum that emphasized problem-solving skills. The nature of problem-solving causes students to sort through data and select items on the basis of their relevance to larger ideas. And
"where . . . [students] are asked to solve a problem dealing with subject matter, they are, in effect, creating a 'structure' because each point or each piece of evidence is either used or discarded in light of its relevance to a larger idea" (p. 40). So Duck rated the second question for an essentialist more towards the extreme of structured than amorphous.

In the instances where the essentialist preferred a lecture model of instruction and the student resorted to simple rote memorization, however, the subject matter became more amorphous than structured, so Duck drew the indicators as going both ways on a continuum between the two indicators. Figure 6 illustrates Duck's conclusions.

![Diagram](image)

Figure 6. Nature of the Subject Matter--Essentialist

An essentialist would not be concerned with how a student felt about the subject matter nor would the essentialist attempt to personalize the subject matter in any way. Instead, the essentialist prefers that students learn and understand the subject matter as an expert authoritarian would. The key is that the students are using
problem-solving methods to discover something that the expert already knows. Because of this, Duck rated the essentialist as leaning more toward the cognitive than the affective. Following is the diagram (Figure 7) illustrating the essentialist's view of subject matter:

```
Cognitive   Affective
   ^         ^
   |         |
   |         |
   |         |
   |         |
I         I         I
```

Figure 7. Use of Subject Matter--Essentialist

As mentioned earlier, the essentialist takes an authoritarian world view and encourages convergent thinking as the student is seen as working toward understanding that which is already known to others. This represents an authoritarian world view. Diagrammed in Figure 8, Duck placed the indicator mark towards the authoritarian extreme.

Some of the key aspects of an essentialist were outlined by Duck (1981) and appear below:

1. Learning, due to its nature, involves hard work and often unwilling application. If we examine this principle for extremes, we would perhaps find, on the one hand, belief in the pseudo-science of phrenology and the "mind-as-a-muscle" concept and, on the other hand, a mild faith in the adage that "practice makes perfect"—or at least that
"practice makes better." Many essentialists assume that a hearty initial effort at a task will create the interest and motivation for mastering the task, or that interest grows with effort. Learning should be used as a vehicle for the development of self-discipline.

Authoritarian  Non-Authoritarian

I

Figure 8. Behavior Trend--Essentialist

2. The initiative in education should lie with the teacher rather than with the pupil. The teacher is that special expert who serves as mediator between the adult world and the world of children. The teacher knows how to give the necessary guidance if kids are to attain "full potential" when they are physically mature. The teacher must decide what is worthy to be taught and how to teach it; however, one should be able to construct interesting lessons with at least some power to motivate.

3. The heart of the educational process is the absorption of prescribed subject matter. No matter how often students might like to think otherwise, the environment does not change itself in order to meet the needs of the learners more adequately. On the contrary, to
obtain intellectual and social skills prerequisite to survival and to the hope of success, students must learn as much about the environment as possible. Since the environment cannot be assumed to adapt to individual needs and since individuals can best prepare themselves for life by learning about this environment, it is best to learn how experts view the world as presented through the logical organization of subject matter.

4. The school should retain traditional methods of mental discipline. (pp. 46-49)

Experimentalist Educator

According to Duck, the experimentalist places emphasis on social science as a framework for problem-solving. He would assume that the physical world is constantly changing. Learners contribute many responses as the educator works to stimulate divergent thinking. Unlike the essentialist, where the learner is to discover knowledge that is already known and possible even memorize the information, the experimentalist seeks to get the students to think through the problem and offer as many solutions as possible. Thus Duck placed the indicator on the first question as being more toward the Platonic extreme than the Lockean (Figure 9).

With the experimentalist, the student is still expected to deal with a structure. "The student is continually
dealing with relationships between 'facts' and a 'larger idea'" (p. 71).

![Diagram: Lockean and Platonic nature of the learner](image)

**Figure 9. Nature of the Learner--Experimentalist**

This concept is present in any problem-solving situation. Therefore, Duck placed the indicator mark more toward the structured extreme (Figure 10).

![Diagram: Amorphous and Structured nature of the subject matter](image)

**Figure 10. Nature of the Subject Matter--Experimentalist**

The skills used by an experimentalist were described by Duck as being more cognitive than affective. Duck stated that "emphasizing the affective end of the continuum really concerns reminding students in a personal way, either forcefully or subtly, of what Existentialist call the 'death dread'" (p. 72). Experimentalists prefer that students attend to the intellectual skills involved in problem-solving rather than worry about "what they really cherish
about their own lifestyles" (p. 73). Thus Duck placed the indicator mark more towards the cognitive side (Figure 11).

Cognitive

Affective

I

I

I

Figure 11. Use of Subject Matter—Experimentalist

Duck placed the indicator mark for the fourth question more towards the non-authoritarian extreme because as he said, "the phrase 'authoritarian world view' connotes an . . . [educator] who typically attempts to sell students the expert's view of subject matter and who emphasizes convergent thinking. On the other hand . . . [the experimentalist] strives to help youngsters make their own interpretations of subject matter by stressing divergent thinking" (p. 68). Figure 12 contains a diagram of this fourth question.

Duck (1981) outlined some of the key factors of experimentalist thinking:

1. Education should be related directly to the interests of the child. . . . Experimentalism, or "Progressives" as they were formerly called, wanted to build a coherent pedagogical position which would contrast sharply with what they saw as the most heinous results of rote
memorization. . . . They advocated what many people since that time have viewed as an extremely child-centered approach to learning. In fact, they felt that the traditional subject-oriented curriculum and the way that curriculum was exposed to children were twin factors most directly responsible for the tendency to rely too heavily on memorization. Making the child's interest the focal point of the curriculum and using a problem-solving approach would necessitate innovative ways of presenting subject matter. Therefore, child-centeredness and problem-solving were to be key elements in their pedagogical creed. . . . Such a concept, which envisions curricula as evolving from the interactions of teachers and students with subject matter, differs widely from the Essentialist view of the teacher as expert curriculum-designer who selects specific content and chooses the teaching method by which that content is given.

Authoritarian

Non-Authoritarian

Figure 12. Behavior Trend--Experimentalist

2. Learning through problem-solving should replace inculcation of subject matter. . . . Progressives then believed, as Experimentalists believe today, that education
should stress examination of alternative possibilities as a course of action. In fact, knowledge is seen by both groups as the quality which results when learners interact with their environment to analyze possibilities.

3. Education should be life itself rather than a preparation for living. . . . Essentialists had always been in the habit of selling subject matter by making it seem that, as an adult, one would desperately need the information. Progressives, on the other hand, were determined that the school environment could be effectively infused with real-life situations; thus students would understand immediately why they would need to know certain information while they investigated problems meaningful to them as people.

4. The teacher’s role is not to direct but to advise. . . . The goal still concerns skillful management of the learning environment, so that students will want to investigate and grow cooperatively with the teacher and with each other.

5. The school should encourage cooperation rather than competition. . . . Progressives were convinced that traditional grading and promotion practices advocated by Essentialists were embodiments of crass Social Darwinist principles, because they were designed to weed out the academically and socially unfit from the educational establishment. In contrast to what they saw as a Social
Darwinist emphasis on unhealthy competitions, Progressives stressed the cooperative sharing of information. In addition, Progressives often emphasized that grading practices should not be based solely on a student's ability to meet a predetermined standard, but should also consider the student's personal improvement relative to a standard or to a skill objective. . . . For Progressives, consensus represented the most desirable element of democracy—a consensus which comes cooperatively through the open discussion of alternatives, after which a workable course of action is chosen with sound insights about possible consequences.

6. Only democracy permits—indeed, encourages—the free interplay of ideas and personalities which is a necessary condition for true growth. To Progressives, democracy was based on a shared experience, and that shared experience had to be made workable for classrooms if democracy were to be truly meaningful. . . . Their idea of democracy in classrooms goes back to child-centeredness and problem-solving and to a setting in which a teacher-advisor and a group of students interact to construct the most appropriate curriculum for themselves and for their needs. (pp. 77-84)

Reconstructionist Educator

Duck described the reconstructionist as one who "has decided what the 'perfect' form of society is and seeks to
reach that society through teaching techniques associated with Experimentalism/Existentialism" (p. 26). Duck saw the reconstructionist as having some predetermined societal ideal which served as the ultimate goal of the instructional process. The learners are involved in the process, but they "must stumble upon a dilemma, be stimulated to investigate it for themselves, and contribute potential solutions before they can really understand its importance and the need for reform action. Only then, when they have embraced a reform program for themselves, is the teaching effort worthwhile" (pp. 109-110). Because of the involvement of the student, Duck placed the indicator as being more towards the extreme of Platonic (Figure 13).

Because the problem-solving method is the preferred method, again Duck rated the subject matter as being more structured than amorphous (Figure 14).

The reconstructionist attempts to personalize the lessons and seeks to have the students feel the dilemma in a personal way, thus Duck rated the third question as being more toward affective than cognitive (Figure 15).

Lockean  Platonic

Figure 13. Nature of the Learner--Reconstructionist
The reconstructionist begins by pulling from the student divergent thinking, but if the students stray away from the desired conclusions, the reconstructionist will gently redirect the students to the best solution or intended solution. This represents a shift, and thus Duck’s model showed how the reconstructionist could go from a non-authoritarian world view to a authoritarian world view (Figure 16).

Some of the key characteristics of reconstructionists as outlined by Duck (1981) were as follows:

1. Education’s main purpose is to promote a clearly thought-out program of social reform. Although Reconstructionists approved heartily of the Progressive’s emphasis on inquiry problem-solving, they felt Progressives
placed too much emphasis on the condition of a society engaged in planning. They were not only willing but anxious to reject the goal of a society engaged in planning and, instead, to embrace the objective of a planned society; in other words, to focus more on the ends than the means, or to de-emphasize the process of planning in order to stress the product of social outcome.

![Authoritarian Non-Authoritarian](image)

Figure 16. Behavior Trend—Reconstructionist

2. Civilization now faces the possibility of self-annihilation, so education without delay must create a new social order which will fulfill basic values of our culture. Reconstructionists begin from a crisis mentality in order to convince the uncommitted that a certain program of reform is indispensable.

3. The new society must be a genuine democracy whose major institutions and resources are controlled by the people themselves. Any issue affecting the public interest is to be the responsibility of elected representatives. Any proposed program of reform must by instituted by changes
which are realized democratically—that is, through the process of rational discussion.

4. People must be persuaded to reconstruct society, and this persuasion should begin in school. No matter how much romantic critics may rail against the perniciousness of traditionally organized formal education, schools contain a very useful ingredient for social reform—namely, captive audiences.

5. The means and ends of education must be completely refashioned to meet the demands of the cultural crisis and to accord with findings of the behavioral sciences.

6. Reconstructionism stresses the extent to which the child, the school, and education itself are shaped by social and cultural forces. According to Reconstructionists, the Progressives overstated their case for freedom and didn’t emphasize enough how much we are all conditioned by the social forces. (pp. 113-115)

Existentialist Educator

Duck described the existentialist educator as one who emphasizes "problem-solving about highly controversial and emotional issues in any subject matter area . . . [and has the] assumption that learners 'define' themselves and their relationships to the environment by their choices" (1981, p. 26). Because the existentialist "places perhaps a higher premium on the desirability of original contributions from students than for any other role model, even to the point of
delaying the voicing of any personal opinions until students have had ample opportunity to explore for themselves issues and problems under study" (p. 137), Duck placed the indicator mark for the first question towards Platonic (Figure 17).

```
Lockean                        Platonic
                               I
                               I
                               I
```

Figure 17. Nature of the Learner--Existentialist

Again, because the existentialist uses the problem-solving method more than any other method, Duck placed the subject matter indicator toward structured (Figure 18). Duck (1981) added that:

although many Existentialists may talk about bringing the intellect to bear on solving problems after the students' emotions have been truly piqued, they usually do not think of problem-solving in such form terms as Essentialists and Experimentalists think of it. Their emphasis, rather than being on the discreet steps of problem-solving and of the thinking processes involved, focuses more on how a problem relates to an individual's personality development and how
that problem may really be attacked in haphazard ways by "fits and starts". In fact, Existentialists are perfectly comfortable with assuming that one may receive, probably through some sort of emotionally charged peak experience, a solution in a flash of insight, before one even identifies a problem to be solved. (p. 137)

Amorphous Structured

I ————I ———— I

Figure 18. Nature of the Subject Matter—Existentialist

Duck described the rationale for the third question as: Existentialists are careful to remind students of the "death dread"—that is, one day all of us will cease to exist in our present conditions, and perhaps no one will miss us. . . . [They do this] in an attempt to help people understand the overwhelming importance of making thoughtful choices and living according to those choices in order to create a meaningful and psychologically satisfying existence. (p. 138)
Duck added that this "death dread" is what makes the rating for the third question affective rather than cognitive (Figure 19).

Finally, Duck placed the indicator for the fourth question towards non-authoritarian because existentialists seek divergent thinking in their students and go out of their way to make sure that each person thinks and decides for himself without the influence of any other person (Figure 20).

Some of the key concepts of existentialism according to Duck (1981) were:

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### Figure 19. Use of Subject Matter--Existentialist

[Diagram showing the continuum from Cognitive to Affective with a single arrow pointing from Cognitive to Affective]

### Figure 20. Behavior Trend--Existentialist

[Diagram showing the continuum from Authoritarian to Non-Authoritarian with a single arrow pointing from Authoritarian to Non-Authoritarian]

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1. Philosophy should become a passionate encounter with the perennial problems of life and with the inevitability of death. In more direct terms, Existentialists see it as supreme duty to bring the "death dread" the Angst, to full consciousness in themselves and in others.

2. Existence precedes essence. . . . Existentialists point out that objects exist before man puts meaning into those objects, and the fact that objects exist is more basic, or more real, than any meaning a person may add to them. Any essence or meaning humans abstract from the world is less real than the data from which it is abstracted.

3. The universe is without meaning or purpose. A person is not part of a single cosmic design, because what we call "design" only represents a person's attempt to project order onto this chaotic world.

4. Human beings have absolute freedom because they do not form part of any universal system. This emphasis on absolute freedom is what allows one to become truly heroic. Freedom is not seen as liberating in the popular sense of the term because it is omnipresent and totally burdensome.

5. Human beings make themselves. If humans have absolute freedom then they truly define themselves by the actions they take. By consciously analyzing and sifting choices and options, one makes oneself through actions upon options as perceived.
6. The philosopher has an obligation to expose tendencies which dehumanize people. ... Dehumanizing processes in themselves tend to remind people of that final denial of humanity when we will each cease to exist in our present conditions and when we perhaps may not be missed. (pp. 140-142).

Perennialist Educator

Duck described the perennialist as one who places "emphasis on humanities as presented in great books" (p. 26). There is an assumption in perennialism that "there are absolute truths and standards more real than the physical world" (p. 26).

Because Duck saw the perennialist as one who uses Socratic questioning to spur active learning to contribute original knowledge, it at first seemed to be Platonic in nature. But Duck added that probing deeper, would uncover that the socratic technique only served to recall what the learner already knew. To demonstrate this, Duck placed the indicator towards Platonic to represent what appeared on the surface and then placed a bowed line under the diagram to show what was actually occurring (Figure 21).

Perennialists saw learning as a search for the ultimate truth. Duck interpreted this search for truth as a problem-solving exercise "emphasizing the structure of whatever subject matter is under study" (p. 185). Therefore, he placed the indicator towards structured (Figure 22).
The perennialist, through the great books, seeks to emphasize the "rational, orderly thought processes, and to stress what we have called the 'cognitive'" (p. 186). Thus Duck placed the indicator more towards the cognitive side (Figure 23).
appeared incorrect to place the indicator towards authoritarian. After all, what could possibly be more divergent than to ask open-ended socratic questions? However, the perennialist believes that truth is absolute and never changes. Thus, the great books hold as much today as they did thousands of years ago. This being the case, coupled with the fact that the learner seeks only to know those Truths, he must think convergently and ask the proper questions to reach the Truth. Therefore, Duck placed the last indicator towards the authoritarian extreme (Figure 24).

![Figure 24. Behavior Trend--Perennialist](image)

Duck described the key issues of perennialism as:

1. Human nature remains the same everywhere; hence, education should be the same for everyone. . . . It simply takes more time and effort to give slow learners the same kind of education as that given to gifted children.

2. Since rationality is humanity's highest attribute, we must use it to direct the instinctual nature in accordance with deliberately chosen ends. A person's
rational qualities must be emphasized and highly developed because he or she is free and, therefore, responsible for his or her own actions.

3. Education’s task is to adjust human beings to the truth, which is eternal, rather than to the contemporary world, which is not. Perennialists reject a curriculum geared mostly to contemporary problems. Such problems are, after all, transitory; moreover, they will be attended to naturally within a democratic society because people have been educated to think for themselves, not because they were forced to deal with specific social problems while they were in school.

4. Education is not an imitation of life, but a preparation for life. . . . Those holding this principle should forget any attempt to infuse the school with real-life problem situations, whether those are based in the cognitive or affective domains.

5. The child should be taught certain basic subjects that will acquaint him or her with the world’s permanencies. Subjects which deal with the world’s impermanencies, auto mechanics for instance, have no place in a school’s curriculum.

6. Education should introduce the pupil to the universal concerns of humanity through the study of the great works of literature, philosophy, history, and science. Following this principle allows one to learn truths far more
important than those he or she would acquire by pursuing personal interests or by studying the contemporary scene. A summary of all indicators for each philosophy can be found in Figures 25-29.

Analysis of Data into Model

Once all source materials were gathered from legislative hearings and transcripts and the vocational leaders were established, a literature search was conducted. Once all published literature for each leader was obtained, the literature and testimony were organized and critiqued. An analysis was conducted of the data for each author or vocational education leader, and the four questions in Duck's (1981) model were applied. An indicator diagram was drawn for each question in Duck’s model based upon the literature and documents of each vocational education leader. The indicators represented the degree that the philosophies of each leader leaned toward one or another of the extremes. The completed indicators were then checked against the indicators for the five educational philosophies proposed by Duck and matches or near matches in indicators were noted. If indicators matched only for specific questions or if the indicators matched with one philosophy for one question and another philosophy for another question, it was noted that the possibility existed of the representation of more than one educational philosophy for the philosophy of that particular vocational education
leader. The identified philosophies were then checked across the vocational education leaders to identify any trends.

Analysis of Philosophical Influences on Legislation

Once the philosophies of the leaders were defined, the major provisions of the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments were compared to each philosophy identified as being held by a leader to establish if the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments contained any similarities to the philosophies of the leaders. The philosophical rationale held by the leaders during their testimony and the philosophical rationale of the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments were compared to the major philosophical premises of the philosophies identified as being held by the leaders.

If a valid conclusion could be drawn that the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments reflected the philosophy of the leaders who testified for the act, it was so noted. Also noted was if the major provisions of the act were congruent with the philosophies of the leaders who testified.
Nature of the Learner

Nature of the Subject Matter

Use of Subject Matter

Behavior Trend

Figure 25. Essentialist
Lockean  \rightarrow  Platonic

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\begin{tabular}{c}
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\hline
\end{tabular}
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Nature of the Learner

Amorphous  \rightarrow  Structured

\begin{center}
\begin{tabular}{c}
\hline
\hline
\end{tabular}
\end{center}

Nature of the Subject Matter

Cognitive  \leftarrow  Affective

\begin{center}
\begin{tabular}{c}
\hline
\hline
\end{tabular}
\end{center}

Use of Subject Matter

Authoritarian  \rightarrow  Non-Authoritarian

\begin{center}
\begin{tabular}{c}
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\end{tabular}
\end{center}

Behavior Trend

Figure 26. Experimentalist
Figure 27. Reconstructionist
Figure 28. Existentialist
Lockean  \hspace{1cm} \rightarrow \hspace{1cm} \text{Platonic}

\hspace{1cm} I \hspace{1cm} \rightarrow \hspace{1cm} I \hspace{1cm} \rightarrow \hspace{1cm} I

\text{Nature of the Learner}

\begin{align*}
\text{Amorphous} & \quad \rightarrow \quad \text{Structured} \\
\hspace{1cm} I \hspace{1cm} & \quad \rightarrow \quad I \hspace{1cm} \rightarrow \hspace{1cm} I
\end{align*}

\text{Nature of the Subject Matter}

\begin{align*}
\text{Cognitive} & \quad \rightarrow \quad \text{Affective} \\
\hspace{1cm} I \hspace{1cm} & \quad \rightarrow \quad I \hspace{1cm} \rightarrow \hspace{1cm} I
\end{align*}

\text{Use of Subject Matter}

\begin{align*}
\text{Authoritarian} & \quad \rightarrow \quad \text{Non-Authoritarian} \\
\hspace{1cm} I \hspace{1cm} & \quad \rightarrow \quad I \hspace{1cm} \rightarrow \hspace{1cm} I
\end{align*}

\text{Behavior Trend}

\text{Figure 29. Perennialist}
CHAPTER IV
DATA ANALYSIS AND CONCLUSIONS

SELECTION OF LEADERS

There were a total of 12 hearings relating to the reauthorization of the Carl D. Perkins Act held over a six month period. Six of the hearings were held before the Subcommittee on Elementary, Secondary and Vocational Education of the United States House Education and Labor Committee of the United States House of Representatives. Six of the hearings were held before the Subcommittee on Education, Arts, and Humanities of the United States Senate Labor and Human Resource Committee of the United States Senate. Several key witnesses testified at both the Senate and the House hearings on the reauthorization of the Carl D. Perkins Act. Of the hundreds of professionals, Congressional members, educators, and business people who testified, many were eliminated as leaders of vocational education immediately because they either represented some group or because they did meet other criteria established by this study. This is not to suggest that they did not have an substantial impact on the outcome of the 1990 Perkins Amendments. Those that spoke on behalf of some organization or group probably had a very large impact, however, it is
not possible to distinguish whether their presentations reflect their personal views and philosophies or that of the group they represented.

This first elimination resulted in a total of 87 individuals who met the initial criteria. A search of published literature through the Educational Resource Information Clearinghouse (ERIC) eliminated 60 of those individuals because no published literature, other than their testimony at the hearings, could be found. As a result, 27 of the professionals, Congressional members, educators, and business/industry people who testified or submitted statements at the hearings on the reauthorization of the Carl D. Perkins 1990 Amendments surfaced as having met the secondary criteria specified under the provision of this research.

The published literature of all 27 of these leaders were obtained and a thorough review and analysis of this literature resulted in a further reduction. Several of the 27 leaders published at least once (outside of the hearings) but the published document(s) either did not relate in any way to education, or did not contain enough information to determine an educational philosophy by applying Duck’s model.

Table 3 shows the number of individuals who testified at House hearings and the number of individuals who were
eventually identified as leaders once all selection criteria was imposed.

TABLE 3
SELECTION OF LEADERS WHO TESTIFIED AT HOUSE HEARINGS (HR7)

<table>
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<th>DATE</th>
<th># OF INDIVIDUALS WHO TESTIFIED</th>
<th># OF INDIVIDUALS WHO MET INITIAL CRITERIA</th>
<th># OF INDIVIDUALS WHO MET SECONDARY CRITERIA</th>
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Table 4 shows the number of individuals who testified at Senate hearings and the number of individuals who were eventually identified as leaders once all selection criteria was imposed. Table 5 shows the total number of individuals who testified at both House and Senate hearings and the number of individuals who were eventually identified as leaders once all selection criteria was imposed.
TABLE 4

SELECTION OF LEADERS WHO TESTIFIED AT SENATE HEARINGS (S1109)

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<td>1</td>
</tr>
<tr>
<td>7/27/89</td>
<td>25</td>
<td>5</td>
<td>3</td>
<td>2</td>
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<tr>
<td>TOTAL</td>
<td>122</td>
<td>34</td>
<td>16</td>
<td>3</td>
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*This was an individual identified as a leader during analysis of the House hearings and thus was not included in the total.

TABLE 5

SELECTION OF LEADERS WHO TESTIFIED AT BOTH HEARINGS

<table>
<thead>
<tr>
<th># OF INDIVIDUALS WHO TESTIFIED</th>
<th># OF INDIVIDUALS WHO MET INITIAL CRITERIA</th>
<th># OF INDIVIDUALS WHO MET SECONDARY CRITERIA</th>
<th># OF INDIVIDUALS IDENTIFIED AS LEADERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>213</td>
<td>87</td>
<td>27</td>
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</tbody>
</table>
Following is a listing of all 27 individuals who were initially identified as leaders who impacted the 1990 Carl D. Perkins Vocational Education Amendments:


2. Sue E. Berryman, Faculty, Teacher’s College, Columbia University.

3. Gene Bottoms, Director, Southern Regional Educational Board.

4. Ralph Bregman, Unknown

5. Don Bright, President, American Vocational Association and Professor, Bowling Green State University.

6. Lauro F. Cavazos, Secretary, United States Department of Education.

7. William D. Ford, Representative from Michigan, United States House of Representatives.

8. William J. Gainer, Director, Employment and Education Issues, United State General Accounting Office.


10. Orrin G. Hatch, Senator from Utah, United States Senate.

11. Augustus Hawkins, Representative from California, United States House of Representatives.

13. Jesse L. Hudson, Assistant Dean, Pittsburg State University (Kansas).

14. James M. Jeffords, Senator from Vermont, United States Senate.

15. Nancy L. Kassebaum, Senator from Kansas, United States Senate.

16. Spark Matsunaga, Senator from Hawaii, United States Senate.

17. Jack Michie, Professor, Arizona State University

18. Barbara A. Mikulski, Senator from Maryland, United States Senate.


20. Dale Parnell, President, American Association of Community and Junior Colleges.

21. Claiborne Pell, Senator from Rhode Island, United State Senate.

22. Carl C. Perkins, Representative from Kentucky, United States House of Representatives.

23. Lee Richmond, Professor, Loyola College of Maryland.

24. John D. Rowlett, Vice President of Academic Affairs, Eastern Kentucky University.

25. Paul Simon, Senator from Illinois, United States Senate.

26. Steve Symms, Senator from Idaho, United States Senate.
It is unfortunate that the philosophies of all 27 leaders could not have been analyzed in depth because a review of their testimony during the hearings showed that their testimony often sparked deep philosophical discussion.

**Philosophical Classification of Leaders**

**Charles S. Benson**

Charles Benson served as the Director of the National Center for Research in Vocational Education at the University of California at Berkeley. A literature review resulted in a listing of numerous published documents by Benson. Appendix B lists the specific documents reviewed to classify the philosophy of Benson. After obtaining copies of the published documents and reviewing Benson's testimony at the Senate hearings on the reauthorization of the Perkins Act, an analysis of Benson's educational philosophy was done using Duck's model of classifying educational philosophy. Following is a summary of the findings of the analysis.

**Nature of the learner**

When looking at the first question, "What is the nature of the learner?", an analysis of the published literature by Benson revealed a Platonic emphasis. Benson leaned more toward the active participation of the learner. Much of
Benson’s literature centered on the comprehensive high school and the quality of vocational education at comprehensive high schools. One recurring theme in Benson’s work was the observation that a downfall of the comprehensive high school was its isolation from the workplace both theoretically and physically. Benson (1982b) stated that "physical closeness [to industry and business] allows students to visit places of employment, to better see people earning a living practicing the skills that are being taught" (p. 106). Benson added that the active participation in and the relationship with business and industry allowed the students to better learn the skills they are studying because they saw the relevance of those skills. Benson continually stressed that the students must be actively involved in the learning process. This represented a Platonic emphasis on Duck’s continuum.

Nature of the subject matter

With regard to Duck’s second question, "What is the nature of the subject matter?" several points made by Benson suggested that he viewed subject matter as structural. First of all, Benson felt that a quality vocational education program would have a comprehensive training sequence. He gave an example of this when he said:

Courses available in office skills might consist of typing and short hand. In my view that is not comprehensive. Also included should be basic
accounting, basic computer programming, office management, a heavy emphasis on word processing, and specialties in medical secretary and legal secretary. (Benson, 1982a, p. 27-28)

A similar criteria described by Benson was depth of instruction. Depth of instruction, according to Benson, (1982) was just what it says--how deep within the infrastructure of the discipline does the curriculum delve?

These two references to a sequence of courses and a depth of instruction represented subject matter having a structure of hierarchical nature and not of an uniform, equal nature.

Use of subject matter

Duck's third criterion, the "uses of subject matter" had cognitive and affective ends of the continuum. Benson's literature indicated a neutral emphasis between the cognitive approach to subject matter and the affective approach. Benson stated that the best measure of quality of a vocational program

would be quantitative evidence on the levels of skill development actually attained by graduates of programs in different institutional settings. This is the ultimate test of instructional efficiency. (Benson, 1982a, p. 27)
Benson also stated that "good employment opportunities and desirable wage levels are necessary components of a highly rated vocational education program" (p. 116).

All of these are external measures of success (not internal to the student). Quantitative, external measures are more clearly associated with the cognitive domain rather than the affective domain according to Duck (1981).

However, quantitative evidence of skill attainment in the affective domain is possible. Possibly, Benson also wanted to emphasize affective measures in the instruction of these students. A trip to the local industry that hires graduates of a program might stimulate the students' attitudes, beliefs, and values more than help them memorize some skill. Benson also noted the importance of the role of the counselors in advising vocational students (Benson, 1982a). So he couldn't be placed as particularly leaning toward one end of the continuum or the other. Because of this, he was placed at both ends.

Behavior trend

The final question in Duck's model dealt with whether or not the world was viewed as authoritarian or non-authoritarian. Because Benson wanted to see qualitative measures of accountability and evaluated the success of a program on the skill attainment level, it was concluded that Benson leaned more towards an authoritarian world view. "Skill attainment" implied that there was a hierarchical and
increasing attainment level from one end (having no skills) towards perfect performance of given skills. Another indicator of Benson's world view was in the area of tenure. Benson (1982a) stated:

Tenure, like local control of education, is an ideological component of American educational policy. It gives teachers the power to speak their minds on issues unpopular to some of their constituents. Like freedom of press, tenure is intended to ensure that our country remains an open marketplace of ideas [divergent thinking if you will]. (p. 29)

But Benson went on to state that vocational education teachers do not need tenure. He added, "I . . . doubt that many vocational teachers enter into ideological debates with their students" (p. 29). Benson's literature indicated he felt that vocational teachers are dealing with clear-cut convergent thinking issues--not divergent thinking. They are teaching a skill and the student is learning it.

Benson's ratings plotted on Duck's model appears in Figure 30. This did not fit into any one particular educational philosophy. However, it came closest to the experimental and reconstructionist educational philosophies.

A further analysis was performed using Duck's description of the two educational philosophies compared to Benson, to determine his relationship to each. Duck (1981)
described the experimentalist and the reconstructionist philosophies as branches of the progressive philosophy.

Lockean $\rightarrow$ Platonic

Nature of the Learner

Amorphous $\rightarrow$ Structured

Nature of the Subject Matter

Cognitive $\rightarrow$ Affective

Use of Subject Matter

Authoritarian $\rightarrow$ Non-Authoritarian

Behavior Trend

Figure 30. Benson

Duck chose not to include progressive educational philosophy in his classification system because he felt that

The term "Progressive" usually implies a definite period in educational history, from the early translation of John Dewey's ideas into action in his laboratory at University of Chicago through the Progressive Educational Association's demise in 1957. (p. 84-85)
But since, it appeared that Benson’s philosophy matched more closely with the progressive educational philosophy than either the experimental or reconstructive philosophy, a description of progressive philosophy as described by Duck is provided here and compared to Benson.

According to Duck, after the demise of the Progressive Educational Association, two groups emerged. The first group tended to talk about classroom democracy as "'shared experience' with 'shared experience' as a necessary condition of 'true growth,' although they did not explore fully the social overtones of their doctrines. In other words, they did not dwell on the question: growth toward what?" (p. 94). This group eventually became labeled the experimentalists. Duck added that the second group sought to answer the question: growth toward what? In fact, they wanted to define the "good society" and move on to the business of using Progressive teaching strategies with captive audiences in schools in their attempt to bring forth a more perfect world. (p. 94-95)

This group became labeled the reconstructionists. Duck clearly differentiated between the two groups by stating that reconstructionists placed their "emphasis on social reform" (p. 117) while experimentalists placed their "emphasis on pedagogy" (p. 117). Benson did not necessarily place his emphasis on social reform though he did mention
the social benefits of vocational education. He did however, emphasize the end result of vocational education—employment for the graduates. Thus, he was not like an experimentalist who focused on the process only. Benson’s philosophy was really a modified combination of the two.

Because of this, it was better to describe Benson’s philosophy as a progressive philosophy rather than attempt to fit it into either experimentalist or reconstructionist philosophy.

Sue E. Berryman

Sue Berryman was a faculty member at Teacher’s College, Columbia University. The literature search on her revealed many published articles. Appendix B lists the specific documents reviewed to classify the philosophy of Berryman. Together with Berryman’s testimony a clear picture of her educational philosophy emerged when her literature was applied to Duck’s model. A summary of the findings follows.

Nature of the learner

When it comes to Duck’s first question, "What is the nature of the learner?", Berryman’s writing clearly showed that she believed the student must be an active participant in the learning process. During her testimony, Berryman stated that we must engage the learner if they are to learn. She stated, "I suggest to you that this is precisely the challenge ahead of us—to make thinking and problem solving
a regular part of a school program for all of the population" (Berryman, 1989, p. 388). Using Duck's model, this placed her indicator more towards Platonic than Lockean.

Nature of the subject matter

The second question in Duck's model asked "What is the nature of the subject matter?" Berryman (1989) argued that our over-emphasis on "student scores on multiple choice tests of basic skills [as currently used as a method of accountability in many areas]--militate against the structuring of learning of subject matter to encourage the development of higher order cognitive thinking" (p. 338). Her statement clearly showed that she not only believed that the curriculum is structured, by nature, but also that it should be presented in a structured format in the educational system.

Use of subject matter

The third question in Duck's model asked whether the focus in the classroom should be cognitive or affective. Berryman stated that schools should focus on higher order thinking skills in conjunction with "physical and cognitive tools that are a vital and defining part of virtually all practical activity" (p. 389). Berryman believed that within the world we are preparing our students to face, "to be truly skillful, people must develop situation-specific forms
of competence" (p. 390). She went on to argue for a curriculum and method of delivering the curriculum that was specific by nature and related to the environment that the student will enter, one that required the student to make quick, competent, systematically determined decisions based upon experience in the classroom. This was a more cognitive form of presentation than an affective form. That was not to say that the curriculum presentation absolutely did not include the affective. The curriculum presentation could have been affective, but Berryman tended to lean more toward the cognitive than the affective.

Behavior trend

Duck’s final question asked whether the educator should encourage convergent or divergent thinking. Berryman was very specific on this issue. She stated, "By definition, there are no right or wrong answers in the higher order cognitive world--only better and worse thinking" (p. 388). She added that therefore, "Schools should include learning situations where not only students, but also teachers do not know the answers" (p. 391). Berryman definitely leaned more towards a non-authoritarian world view rather than an authoritarian world view.

When Berryman’s responses were plotted using Duck’s model, what resulted was clearly the educational philosophy of an experimentalist (Figure 31).
An experimentalist believes that "learning through problem solving should replace inculcation of subject matter" (Duck, 1981, p. 79).

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**Nature of the Learner**
- **Lockean** → **Platonic**

**Nature of the Subject Matter**
- **Amorphous** → **Structured**

**Use of Subject Matter**
- **Cognitive** ← **Affective**

**Behavior Trend**
- **Authoritarian** → **Non-Authoritarian**

---

Berryman stated that "higher order thinking . . . involves imposed meaning, finding structure in apparent disorder" (p. 387). Duck stated that an experimentalist believes that "the school should encourage cooperation rather than competition" (p. 83). Berryman stated:

For the most part, school is designed so that one student's success or failure at a task is
independent of what other students do (aside from grading on a curve). By contrast, a great deal of activity outside of school is socially shared: work, personal life, and recreation take place in social systems in which what one person is able to do depends fundamentally on what others do and in which "successful" functioning depends upon the mesh of several individuals' mental and physical performances. (p. 389)

She added that this "argues for much more team and cooperative learning, the student being held accountable for both individual and team performance" (p. 390). Berryman’s educational philosophy clearly fell under that of an experimentalist when using Duck’s model of classification.

Gene Bottoms

Bottoms had a long history of active involvement in education and vocational education. For years he was Director of the AVA, however, at the time of the hearings on the reauthorization of the Perkins Act, he was Director of the Southern Regional Education Board. A literature search uncovered well over 20 published documents relating to education. Appendix B lists the specific documents reviewed to classify the philosophy of Bottoms. A summary of the analysis of Bottom’s literature follows.
Nature of the learner

Duck’s first question sought to establish whether or not the educator views the learner as a blank slate that absorbs or as one who must interact in order to learn. Despite the fact that Bottoms had published extensively, nowhere did he give any clear-cut indications of a particular emphasis that he felt applied to all students. Instead, Bottoms suggested that the nature of the learner is different in each case, that some students learn better by sitting and listening to lectures, while others learn better by active participation. Bottoms (1989a) stated "Some students learn better through the direct application of concepts; other through the more traditional theoretical approach" (p. 553).

Nature of the subject matter

Regarding Duck’s second question, it was clear that Bottoms saw the subject matter as being structured. As a leader in the movement to integrate academic and vocational education, Bottoms saw the benefit of this integration as an emphasis on the natural structure of the subject matter. He stated, "There is a need to shift from a collection of unconnected courses to a coherent program of study" (Bottoms, 1989b, p. 10). He further clarified this statement, "The structure for a new approach involves a shift from offering a fragmented collection of unconnected courses to the development of a coherent and challenging
program of study that combines academic and vocational education" (p. 10-11). Bottoms (1989b) reasoned that "a planned program of study has the potential of providing a structured and purposeful high school experience" (p. 11). Bottoms (1989b) saw a quality vocational program as one that "carefully balances classroom and on-the-job-experiences, weaving them into a structured, progressive, and well-supervised program" (p. 351). In his testimony before the United States House, Bottoms (1989a) stated:

The primary purpose of new vocational education legislation is to allocate federal resources to assist states in developing a combined program of vocational and academic instruction that is coherent, coordinated, sequential, and challenging. (p. 564)

This was a structured emphasis on subject matter.

Use of subject matter

Duck's third question related to whether or not the curriculum should emphasize the cognitive or the affective domain. Some evidence of Bottoms' feelings on this issue was gleaned from his recommendation for remediation of low and under-achieving students. Bottoms (1989b) stated that these students should be provided help that

May take many forms, such as bi-weekly coaching classes, weekly Saturday schools, daily or weekly parental involvement in learning activities at
home, weekly peer tutoring, summer school, or a combination of these kinds of practices to give more assistance, time, and support to students who lack key skills, fail tests, or are at risk of falling behind in grade level. (p. 22-23)

Nowhere did Bottoms suggest that perhaps another emphasis should be placed on the subject matter, such as an affective emphasis rather than a cognitive one. Instead, Bottoms suggested more drill, more practice, and more of the same kinds of activities to bring the student up to the satisfactory level.

Bottoms (1989b) also believed that there was a need for all teachers to have demonstrated ability to do college-level academic work. He suggested that "the board of education should require existing and new non-degree vocational teachers to complete a degree within a designated number of years and to make minimum progress each year toward the goal" (p. 26). His reason for this was to broaden the teachers' academic and technical competencies. Bottoms suggested this requirement so that non-degreed teachers would have the cognitive skills themselves to pass along to the students. This did not represent the affective domain. Lastly, Bottoms (1989b) stated that the failure in vocational programs is partially due to the fact that "neither local nor state school board policies have clearly
stated that a primary purpose of vocational education is to advance student's academic competencies" (p. 8).

Therefore, while it was possible that Bottoms also emphasized the affective domain, he leaned more towards emphasizing the cognitive domain.

Behavior trend

Nowhere in any of Bottoms' literature did he consistently show evidence of a specific inclination towards either convergent or divergent thinking. While Bottoms mentioned problem solving and other divergent thinking kinds of classroom approaches, he also stressed the importance of achievement testing and other measures of accountability, to be given after the students have completed a rigorous, structured, and sequential program of study. This program of study was to include a heavy dose of applied academics. The overall tone of Bottoms' work was that all students need to be raised to some as yet unidentified higher level of competence. And to do this, he expected all teachers to have college degrees and to be considered subject matter experts. The educator who sees teachers as subject matter experts leans towards the authoritarian world view, according to Duck.

A plot of Bottoms's emphases (Figure 32) revealed a mix of experimental and essentialist educational philosophies. When it came to the nature of the learner, Bottoms saw some students as an essentialist educator would (a blank slate
that absorbs information) and some students as an experimentalist would (the student must be an active participant in the learning process).

Nature of the Learner

Lockean

<table>
<thead>
<tr>
<th>I</th>
<th>Platonic</th>
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Nature of the Subject Matter

Amorphous

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<thead>
<tr>
<th>I</th>
<th>Structured</th>
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Use of Subject Matter

Cognitive

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<thead>
<tr>
<th>I</th>
<th>Affective</th>
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Behavior Trend

Authoritarian

<table>
<thead>
<tr>
<th>I</th>
<th>Non-Authoritarian</th>
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Figure 32. Bottoms

Bottoms was more of an experimentalist when it came to the nature of the subject matter, and his attitudes towards the use of the subject matter was similar to both that of an essentialist and an experimentalist. Finally, his world view was more closely related to that of an essentialist than that of an experimentalist. When put together, he has deep experimentalist traits, but his strong sense of the
importance of the traditional academic skills makes him appear to have somewhat of an essentialist educational philosophy.

Lauro F. Cavazos

As the Secretary of Education, Cavazos gave more testimony at the hearings on the reauthorization of the Perkins Act than all of the other leaders. Cavazos testified at both the Senate and the House hearings. A literature search also uncovered several published documents relating to education. Appendix B lists the specific documents reviewed to classify the philosophy of Cavazos. An analysis of the testimony and the published literature was conducted and the information was applied to Duck's model. The summary of the analysis of Cavazos's educational philosophy follows.

Nature of the learner

Cavazos's emphasis on Duck's question about the nature of the learner leaned toward the Platonic or active. In an article published in 1990, Cavazos cited several specific strategies that could be applied in the classroom to enhance students' knowledge of subject content. Among these he stated that educators should "use hands-on learning techniques to teach students how to apply mathematical and scientific concepts" (p. 67). He also stated that educators should develop "students' investigative and higher-order
skills through independent research projects" (p. 67). Both of these are strategies that require the active participation of the learner. Cavazos did not make any statements that suggested he believed that the learner is a blank slate or should be passive, therefore, Cavazos's emphasis was towards Platonic and active rather than Lockean and passive.

Nature of the subject matter

Cavazos's emphasis on developing students' investigative and higher-order skills through independent and scientific research projects implied that Cavazos saw subject matter as having a structure. Duck stated that the educator who leaned towards structured subject matter would place more value in the historical or scientific method. That is, they would use subject matter to find out new information. Cavazos placed emphasis on students doing intensive, scientific, investigative, research. Cavazos did not make any statements that suggested he viewed subject matter as a collection of facts and generalizations of equal value. Thus Cavazos's emphasis was placed at being more structured than amorphous.

Use of subject matter

Regarding Duck's third question, it was unclear if Cavazos leaned towards one end of the continuum or the
other. In testimony before the United States House, Cavazos (1989a) suggested that the new bill should:

require states to develop performance standards related to students’ improvement in basic skills, students’ success in the labor market, and any other areas to which the states determine are appropriate. (p. 441)

This implied an emphasis towards the cognitive; however, sufficient evidence was not in the literature to conclusively state that Cavazos had a preference towards the cognitive. In one published article, Cavazos (1990) stated that schools and districts should "provide social and emotional support to students by having teachers and counselors become actively involved in their students' lives" (p. 67). This could be interpreted as an emphasis on the affective, but again, not enough information was present to conclusively state a preference. Because Cavazos was part of the federal government and the federal government has a history of being reluctant to direct actual classroom practices, it may have been that Cavazos deliberately chose to avoid these issues.

Behavior trend

For Duck’s final question, Cavazos seemed to have a preference for an authoritarian world view. In testimony, Cavazos repeatedly mentioned the need for testing, performance measures, and other quantitative measures of
accountability including job placement. An educator who placed an emphasis on divergent thinking would not so strongly recommend achievement and performance testing and other measures of testing learning that are closely related to the stimulus-response (S-R) Associationist theories of learning.

When plotted (Figure 33), what emerged was an educational philosophy closest to a perennialist than any other educational philosophy.

![Figure 33. Cavazos](#)
The perennialist believes that the student "should be taught certain basic skills that will acquaint him or her with the world's permanencies" (Duck, 1981, p. 190). In this respect, Cavazos seemed to lean toward a perennialist educational philosophy. Because Cavazos's literature did not give enough information to draw positive conclusions using Duck's model, it was not possible to draw positive conclusions regarding what educational philosophy Cavazos adhered to. It was only possible to suggest which educational philosophies Cavazos was closest to.

William D. Ford

Ford, a member of the United States House from Michigan during the reauthorization of the Perkins Act, played a large role in the House hearings on the reauthorization of the Perkins Act. Additionally, a literature search revealed two published articles, one in 1972 and one in 1983. Both articles related to education. Appendix B lists the specific documents reviewed to classify the philosophy of Ford. An analysis of Ford's testimony and his published literature was done and Ford's comments were subjected to analysis using Duck's model for classifying educational philosophies. The summary of the analysis follows.

Nature of the learner

Despite all of the hours of testimony by Ford, it was not completely clear how Ford felt about the learner; he did
seem to have a slight preference, though. As the sponsor of the Tech-Prep bill in the House, Ford pushed to include more academics, more math, and more science in the educational curriculum. If his Tech-prep bill (now included as part of the 1990 Perkins Amendments) was interpreted as including an integration of academics and vocational education in order to help those who learn better by active participation, then it might be concluded that Ford leaned towards the Platonic end of the continuum. But if what was written in the bill was read in a literal context, it appeared that Ford would like all students, including vocational students to have more exposure to the traditional, liberal, academic subjects delivered in a traditional method. This was a more Lockean viewpoint. Ford (1989a) stated:

I introduced H.R. 22, the Tech-Prep Education Act. It will amend the Carl D. Perkins Vocational Education Act to establish a program of Federal matching grants to consortia of secondary and postsecondary institutions to encourage the implementation of 4-year tech-prep education programs linking the last 2 years of secondary school with the first 2 years of postsecondary education . . . Tech-prep education . . . provides a high level of competence in mathematics, science and communications. (p. E171)

Ford added that the Tech-Prep Education Program
is intended to broaden vocational education so that students can have available a somewhat more rigorous program that extends from the last 2 years of high school through the first 2 years of postsecondary education. (p. E172)

More insight into how Ford felt about the learner was gleaned from an article on education written by Ford. In it, Ford (1983) stated that "The school year averages 240 days in Japan, East Germany, the People’s Republic of China, and the Soviet Union, in contrast to 180 days in the U.S." (p. 29). Ford further stated:

The number of high school students taking calculus each year in the Soviet Union has reached 5,000,000; for the U.S., the comparable number was 105,000. In addition to two years of calculus, all youngsters in the Soviet Union are required to complete five years of physics, four years of chemistry, four years of biology, and five years of algebra. (p. 29)

While these statements did not actually say anything specific about how the learner learns, Ford went on and implied that other countries’ educational systems are superior because they require more years of subject matter study and more days in school each year. This was not consistent with a Platonic view of the learner. A Platonic view would suggest that to help our students achieve a
higher competency level, the delivery of education needs to be restructured, not only the amount of time spent teaching students. Either way, there was insufficient information on how Ford viewed the learner to conclusively state a particular emphasis for Ford.

Nature of the subject matter

Regarding Duck's second question, it was clear that Ford saw the subject matter as structured. His Tech-Prep Act was a suggestion for a more structured program of articulation between the secondary and postsecondary institutions, especially in the mathematics and science subject area. Ford saw the 2-plus-2 program as a natural structured progression from basic, general, academic skills to more job-specific skills based upon those basic, general academic skills.

Use of subject matter

For Duck's third question, it seemed that Ford's emphasis leaned towards the cognitive more than the affective. His remarks quoted earlier regarding longer school years and more years spent in the study of each academic, liberal subject, was interpreted as an emphasis on the cognitive. Ford never stated in any of his testimony or published literature that the teacher or the educator should focus on the affective domain or that teachers should present subject matter in an affective manner. Instead,
Ford argued that teachers should develop more cognitive skills in math and science through pre-service and inservice instruction. The possibility existed that Ford wanted these teachers to have more cognitive skills so that they could better teach the subject matter by emphasizing the affective. Shulman (1987) suggested that the less knowledge an educator has of a discipline, the more likely that educator is to focus on the facts, generalizations and cognitive aspects of that discipline, while the more knowledge and the stronger the background of an educator in a particular subject, the more likely the educator will emphasize higher order and more affective aspects of the subject. However, it was not likely that Ford had this in mind when he stressed that our teachers needed a stronger background in math and science. In his literature and testimony the general tone was that a "back to basics" approach to education was needed. His back to basics included a strong emphasis in math and science and these two subjects are the areas most often associated with the cognitive domain according to Duck (1981).

Behavior trend

Regarding Duck's final question, Ford leaned towards the authoritarian world view. Ford wanted teachers to be subject matter experts and he wanted all students to achieve some defined level of competency in the basic skills (though he did not advocate testing as a means to measure the
attainment of this competency). Nowhere in his published literature did Ford discuss divergent thinking or problem-solving skills as a necessary component of a good education or curriculum or even delivery of the curriculum. He mainly focused on the subject matter itself and the need for students to obtain competency in the basic subjects. When Ford did mention the learner, it was usually in the context of the learner finding meaningful employment and helping society maintain its place in the world market as an international competitor.

When all responses to Duck's questions were plotted on the continuum, what initially emerged was the philosophy of either an essentialist or perennialist, depending upon how Ford felt about the learner. Figure 34 plots Ford's position towards each of Duck's questions. Because it could not be determined which direction Ford leaned regarding the nature of the learner, further analysis was necessary.

The further analysis revealed close similarities between statements made by Ford and that of an essentialist. Duck stated that the essentialist believed that "learning, due to its nature, involves hard work and often unwilling application" (p. 46). By advocating longer school years, more time spent in each subject area, and more rigorous emphasis on math and science, Ford made the recommendation of an essentialist.
Duck further stated that an essentialist believes that "the initiative in education should lie with the teacher rather than with the pupil" (p. 47). Duck added:

The teacher is that special expert who serves as mediator between the adult world and the world of children. The teacher knows how to give the necessary guidance if kids are to attain "full potential" when they are physically mature. (p. 47-48)
This corresponded with what Ford suggested. The teacher must be an expert in his/her subject in order to teach the subject. Also, the general tone of Ford's literature and testimony fit with the mind-as-a-muscle concept; and all that was necessary to improve the condition of the learner was to stress harder work in exercising that muscle. Ford suggested that in the long run, this would help the learner by developing skills that make the learner more employable. Ford suggested that the role of federal education legislation and of educators was to decide for the learner what was best (he even suggested that "best" was more math and science) and then to require all students to study it. Finally, of an essentialist, Duck stated:

The heart of the educational process is the absorption of prescribed subject matter. No matter how often students might like to think otherwise, the environment does not change itself in order to meet the needs of learners more adequately. On the contrary, to obtain intellectual and social skills prerequisite to survival and to the hope of success, students must learn as much about this environment as possible.

(p. 48)

Again, this corresponded well with Ford's remarks. Both Ford's testimony and literature consistently commented on the nature of the world of work in the future and how
individuals must be prepared to face this changing world of work. Students are not educated to change the world but rather, students are educated so they efficiently fit into the world as productive citizens.

Edwin L. Herr

Herr met the initial criteria of having testified at the hearings on the reauthorization of the Perkins Act. Herr then met the second criteria with his position as Professor at Penn State University. Lastly, Herr met the final criteria when a literature review revealed several published articles by Herr that contained specific statements relating to education and the classroom. Appendix B lists the specific documents reviewed to classify the philosophy of Herr. An analysis was conducted of Herr's testimony and published literature. The summary of this analysis follows.

Nature of the learner

Regarding Duck's first question, Herr saw the nature of the learner as active or Platonic. Herr (1985) stated that "the importance of vocational education [is] as an educational process rather than simply a vehicle for producing persons with entry-level occupational skills" (p. 51). Herr added that "instruction should emphasize applied learning rather than merely job tasks" (p. 53). Both of these statements suggested that Herr saw learning as
something that required the active participation of the learner. When Herr stated that vocational education should be seen as a process, he was talking about the instructional strategies employed in vocational classrooms. Vocational education typically has involved the active participation of the learner in the learning process. And Herr’s second statement represented a recommendation for a shift from the Lockean (rote, training) kind of instruction that characterized earlier vocational education. Rather than mindless hand-training for a job, Herr believed that instruction should require students to actively use their minds to apply the concepts or to actively apply the concepts that they have learned. Herr also stressed the importance of field-based learning. He stated (1985) that "learning experiences in the workplace or in community service are integral to secondary education and are important opportunities for all students. . . . Supervised, field-based learning experiences should be made available to all secondary students" (p. 54-55). This was an emphasis on active participation or the Platonic end of Duck’s continuum.

Nature of the subject matter

For Duck’s second question, Herr (1985) saw the nature of the subject matter as being structured. He stated that vocational education can "provide students with an opportunity to participate in mastery learning or in the
application of basic academic skills to real world problems in ways which general education typically does not" (p. 52).

Herr suggested that the nature of the world of work is structured in such a way that vocational education can be used to facilitate the acquisition of the basic academic skills, which then can be applied to the greater "real world" of work. This was an hierarchical approach to knowledge. Herr (1987) addressed this issue in another publication. He stated that career education's attempt to make all education more career relevant has been translated into systematic efforts to "infuse" into any form of subject matter examples from work or career development concepts which help students make the connection between what they are studying, however scientific or philosophical it may be, to the application of this content in the problem-solving or task performance which characterize various forms of work. (p. 25)

Herr believed that academic knowledge was not an end in and of itself, but its importance lie in how it related to the real world of work--how it served as a basis for future learning. Herr (1987) reiterated this when he stated: Basic education which treats knowledge of the principles of technology, self-understanding, and personal decision-making skills, career management
and job access as by-products of general education rather than as central educational goals tend to ignore the perspectives of Franklin and Dewey and the experiences of other nations that education which includes a firm grounding in the basic academic skills is not incompatible with or in conflict with an education which also emphasizes education for choice and education for employment. . . . Given the increasingly technical nature of work in the United States, students who do not have the basic academic skills are disadvantaged. (p. 22)

Use of subject matter

Regarding Duck's third question, Herr leaned more towards the affective than the cognitive. This seemed unusual at first, given Herr's vocational background and statements regarding the need for basic academic skills, but what set Herr apart from the others was his view (cited earlier) that the true value of basic skills and education in general was in the application of those skills and that education in the real world situation. Herr (1985) stated that a goal of vocational education "should [be to] develop self-esteem, positive attitudes towards work, safe work habits, job seeking skills, and other general employability skills" (p 53-54). Herr (1987) added that "Specific occupational skills are less crucial for entry-level
employment than a generally high level of literacy, responsible attitudes toward work, the ability to communicate well, and the ability to learn" (p. 22-23). Herr had the individual at the center of the educational process. He stated:

Whether one talks about career education or vocational education one is in fact dealing with values pertaining to the distribution of society's tastes and roles, how one views the work ethic, the relationships between education and work, access to and equality of opportunity, the meaning of career, contrasts between generalists and specialists. Put somewhat differently, the presence of career education or vocational education is a statement that the school or other setting believes that persons should value work, planning, purposefulness, productivity, seriousness about life's meaning, usefulness, commitment to growth and learning. (p. 24)

This was clearly an emphasis on the affective domain.

Behavior trend

Regarding Duck's final question, Herr leaned toward the non-authoritarian world view. His literature and testimony continually stressed the need for problem-solving skills and the ability of the learner to think divergently. Herr (1987) stated:
A positive attitude and sound work habits are of basic importance. Employers place a high value on reliability and cooperation. At the same time, with increased employee participation in decision making, the ability to offer constructive dissent without hindering teamwork will assume greater importance. (p. 23)

Herr felt that divergent thinking must be stressed in the classroom if the learner is to be successful in the real world.

When all of Herr's responses were plotted using Duck's model (Figure 35), what emerged was unexpected. Herr's statements appeared to fit with the philosophical views of an individual who has an existentialist educational philosophy. Because it did not seem possible that a vocational educator was existentialist as the theories of vocational education did not fit well with the concepts of existentialism, further analysis of Herr and his literature was conducted. Duck stated that an existentialist believes that "human beings make themselves. If humans have absolute freedom, then they truly define themselves by the actions they take. By consciously analyzing and sifting among choices and options, one makes oneself through actions upon options as perceived" (p. 141-142). Herr made statements that verified his existentialist educational philosophical tendencies as defined by Duck. For example, he stated:
Not only can career education deal with the decision-making strategies which can be used in the process of choice, it serves to accent the power of choice to create one's realities. Many young people and adults do not know or acknowledge that choice-making converts possibilities into actualities and in doing so shapes one's present and future opportunities. (Herr, 1987, p. 25)

Research into Herr's background revealed that an existentialist educational philosophy was not so unusual
after all. Herr's position at Penn State University was as Head of Counselor Education, Counseling Psychology and Rehabilitative Services Education. At the time that he published many of his writings, he was also Professor and Head of Career Studies. To find a traditional vocational educator who has an existentialist philosophy would have been unusual because the very nature of vocational education in the past has been to prepare the individual to fit in to society as a productive individual rather than to prepare the individual to create his/her own life and mold his/her own future.

Dale Parnell

As President of the American Association of Community and Junior Colleges, Parnell had powerful influence over a large number of people. His testimony before the Senate committee drew quite a few questions from the committee members. In the forward to one of Parnell's published reports, Robert Taylor (1982) gave a good description of Parnell's background. Taylor stated:

Dr. Parnell is an educational leader who has served as a teacher, principal, and superintendent in secondary schools. He was the Superintendent of Public Schools and Community Colleges for the State of Oregon. He was the founding President of Lane Community College, Eugene, Oregon; Chancellor, San Diego Community College System,
California; and President of the San Joaquin Delta College in California. He is an author and lecturer in areas that have enhanced vocational education in community and technical colleges, such as competency-based approaches to vocational program. He has held membership with and provided service to many organizations including the Association of American Colleges, the American Vocational Association, Phi Delta Kappan, and the Council of Chief State School Officers. Currently, he is the chief spokesperson for community and technical colleges in the United States as President of the American Association of Community and Junior Colleges. (Taylor, 1982, p. 4).

A literature search found dozens of published articles by Parnell, relating to education. Appendix B lists the specific documents reviewed to classify the philosophy of Parnell. Parnell had been an outspoken leader for the 2-plus-2 program and the Tech-Prep program, initially describing the concept in a paper published as early as 1984.

Nature of the learner

One issue that stood out strongly in Parnell’s literature was his belief that education should actively engage more students. He had a definite Platonic view of
the learner in that he felt education must move away from teaching students theoretical concepts and towards applied concepts. Parnell stated in 1985, "The nonbaccalaureate degree students need more physics, but they don't need more theoretical physics. They need more applied physics, applied math, communication skills, some humanities, as well as solid technical education" (p. 9). Parnell added that "education must develop a greater degree of connectedness, connecting real life with what goes on in the classroom" (Parnell, 1985, p. 8). Parnell pushed for the implementation of the Tech-Prep and 2-plus-2 programs as a means to actually include the learner in the educational program by facilitating the learner's interest and building upon that interest.

Nature of the subject matter

Regarding Duck's second question, Parnell made it clear that he felt subject matter was structured by nature, and should be delivered in a structured manner. He stated, "I agree with the general emphasis of the reform reports that say give us more structure in the school and college programs" (Parnell, 1985, p. 9). In another article Parnell (1984) stated that human beings need and want "greater structure and substance in their educational programs" (p. 3). And in still another published article, Parnell (1990) stated that education needs "sequential curriculum planning for all institutions" (p. 7). In pushing for Tech-
Prep, Parnell wanted to see subject matter structured so that it flowed from high schools through community college in a natural, sequential way. This was a structured view of subject matter.

Use of subject matter

Analysis of Parnell determined that Parnell placed a little more emphasis on the cognitive than the affective regarding Duck's third question. As an example of this emphasis, he stated that education needs "more substance in the program, that means a math base, science base, literacy base for all students" (Parnell, 1985, p. 5). He did not state anywhere in his published literature that the affective needed to be stressed more frequently. He only stressed the need for more subjects, more facts, more concepts, etc. Parnell also recommended that education change the definition of what vocational education is. He stated, "There is a tremendous need for people who can speak other languages, who can communicate effectively. . . . Studying a foreign language ought to be considered an important element of vocational programs" (Parnell, 1982, p. 9). Parnell did not suggest that the learner needed to study other cultures which could be structured affectively. Instead, he spent a great deal of time arguing for more study of the specific languages. Nowhere was there any evidence that Parnell suggested the use of subject matter should be in the affective domain. Instead, he emphasized
the need to raise the intellectual skill level of all
students to the basic academics as well as more subjects,
more math, more science, more foreign language, etc. This
was clearly an emphasis on the cognitive rather than the
affective.

Behavior trend

Lastly, Parnell held a non-authoritative world view. That is, he stressed the need for divergent thinking rather than convergent thinking. He was not hooked on accountability measures. Instead, he stated that we need to spend more time in education on "process skills--problem-solving, synthesis, analysis, critical thinking, etc." (Parnell, 1984, p. 13). Parnell felt that we needed to move away from the S-R training kinds of education to a more broad preparation for life kind of education. He stated that it was "necessary for secondary schools to become less involved in specific job training" (Parnell, 1982, p. 10). In his testimony, Parnell (1989) said, "It is the Vocational Education Act, not the 'Vocational Job Training Act', and that makes it quite different for me. If it were the 'Vocational Job Training Act', then I'd say narrow, specific job training would meet the needs" (p. 1017). Specific job training education is based on convergent thinking and is based upon the concept that with practice, one can master the skill to some "expert" level of competency (authoritarian world view). Parnell's focus on a more non-
authoritarian world view and his position against the S-R Associationistic, authoritative, convergent, world view certainly was not the philosophy of someone who Taylor described earlier as a leader in the competency-based education movement.

When all of Parnell's inclinations and preferences were plotted out on Duck's model (Figure 36), it solidly revealed the philosophy of an experimentalist educator.

Duck stated that an educator who held an experimentalist educational philosophy would believe that "education should
be life itself rather than a preparation for living" (p. 81). Parnell’s literature and testimony revealed his belief that one of the major problems with education is its removal from the real world. Parnell (1985) stated that educational programs should "connect the practical arts with the needs of real life . . ." (p. 15).

In conclusion, Parnell’s literature and testimony matched that which Duck described as an educator with an experimentalist educational philosophy.

John Wirt

Wirt was the Director of the National Assessment of Vocational Education (NAVE). NAVE was asked by the U.S. House Subcommittee on Elementary, Secondary and Vocational Education to study the condition of vocational education and then report their findings to both houses of congress. Wirt testified before both houses and much of his testimony related to the findings of the NAVE study. However, Wirt did offer personal statements, and together with his published literature, enough information was found to analyze the philosophy of Wirt using Duck’s model. Appendix B lists the specific documents reviewed to classify the philosophy of Wirt. The summary of this analysis follows.

Nature of the learner

Wirt’s literature clearly showed that he felt the nature of the learner is more Platonic than Lockean. Wirt
(1989b) stated that

The applied, often "hands-on" approach to instruction in vocational education stimulates student interest in school. As a result, it may provide opportunities to apply the abstract principles taught in mathematics, English, and other "core" subjects that contribute significantly to academic achievement. (p. 76)

Wirt's strong push for applied, hands-on methods of instruction demonstrated his leaning towards the Platonic.

Nature of the subject matter

Regarding Duck's second question, the analysis of Wirt's literature showed a preference for a belief in structured subject matter. Wirt stated over and over in his literature the need to integrate. His reasons for wanting to integrate included his belief that "students [should] come to vocational programs well equipped with fundamental academic skills" (Wirt, 1989a, p. 35). Wirt saw academic skills as prerequisites for learning occupational skills, and this represented a structure of the subject matter, from general to specific.

Use of subject matter

Regarding Duck's third question, Wirt placed a more cognitive emphasis than an affective emphasis on learning. In his reasoning for pushing integration, Wirt (1991) stated
that students need more academic skills and higher level academic skills in order to succeed in the future world of work. He gave an example using the subject areas of math. He stated that by integrating math with vocational education, "the results clearly show that vocational education can be a vehicle for increasing student achievement in mathematics" (p. 428). The desire to increase student achievement in math was an emphasis on cognitive skills not affective skills. Wirt also suggested that students' academic competencies be measured. He stated that "These academic competencies may not be primarily the result of vocational education, but any system of performance accountability for vocational education must include the total educational achievement of the students" (Wirt, 1989c, p. 20). Wirt (1989c) added that "the challenge is to significantly raise the educational achievement of average and below average students, including especially students in these groups who are from special populations" (p. 6). All of these statements represented a cognitive focus.

Behavior trend

On Duck's final question, Wirt had a non-authoritarian focus. He stated that students should learn problem-solving skills and should learn to work in teams. Wirt felt that students needed to be taught skills that helped them face a changing world of work where there was not one right answer
or one essential skill. The worker of the future needed a broad range of skills including "higher-order capacities of thinking and reasoning" (p. 428). Wirt also stated:

Rapidly we are learning that the crucial factor determining the health of our economy is not the skills of elites but of the work force as a whole: their ability to learn on the job, their technical knowledge, their ability to solve problems and their capacity for taking responsibility. The economic challenge facing the country is to improve the quality of education to the point where the American work force as a whole can out-think and out-do workers in the countries with whom we are competing. (Wirt, 1989c, p. 6-7)

And Wirt suggested that it is an educator’s job to teach students these divergent thinking skills. This placed Wirt towards the non-authoritative world view on Duck’s continuum.

When all of Wirt’s responses were plotted on Duck’s model, what resulted was the philosophy of an experimentalist educator (Figure 37).

Further analysis concluded that Wirt did indeed match with the philosophy of an experimentalist. Duck stated that an experimentalist believed that "learning through problem solving should replace inculcation of subject matter" (p. 79). Wirt (1991) agreed with this statement when he
said, "A substantial body of research in cognitive science shows that providing students with real problems to solve in context is essential if they are to develop more complex modes of thinking and using knowledge in solving problems" (p. 428).

Wirt's literature matched in all areas with the concepts that Duck stated an experimentalist would embrace. Thus the conclusion that Wirt was an experimentalist was a valid conclusion.
This researcher found that of the leaders who were reviewed and analyzed in depth, more of them favored the experimentalist educational philosophy than any other educational philosophy. Two of the leaders were a mixture of more than one educational philosophy or it was not clear exactly which of the philosophies they leaned towards. Two of the leaders required further analysis above and beyond Duck's model before a preference could be established. Table 6 illustrates these findings. The next step was to review the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments in relation to the philosophies of the leaders.

The major philosophical issues (integration) of the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments were examined to see if they reflected the experimentalist educational philosophy--since the majority of the leaders did. This study revealed that the leaders of vocational education promoted legislation that was reflective of an experimentalist educational philosophy. The leaders sought to start with something that was of interest to the learner (the vocational interest) and then use that interest to help the learner find his or her place in the world. Over and over again they remarked that
many students were not connected to the curriculum offered in traditional educational programs.

The 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments encouraged education that began with the experiences and interests of learners to help them master basic academic subjects.

TABLE 6
FINDINGS OF THE ANALYSIS OF THE PHILOSOPHIES OF THE LEADERS

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<td>Cavazos</td>
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<td>Herr</td>
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<td>Parnell</td>
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A = Essentialism
B = Experimentalism
C = Reconstructionism
D = Existentialist
E = Perennialism

The results of this study revealed that vocational education leaders who testified in the hearings talked about
technology and the future work place as if they were some giant for which society must be braced and prepared. And the leaders' use of such phrases as "preparing for the future world of work," "preparing for the technology revolution," "technology explosion," and "the changing world of work," accentuated their views that vocational education's purpose was to prepare the learner to adjust to the world. When the leaders suggested that problem-solving skills, divergent thinking, etc. be taught, they were suggesting that students be taught how to adapt to this changing world they will experience, so that they may become productive components of the new world. In this aspect, this study revealed that the vocational education leaders successfully pushed for 1990 amendments that fit nicely into the experimentalist educator's view of a changing world of work.

The 1990 Perkins Amendments specifically mentioned this changing technology. The statement of purpose of the law was defined as providing students with skills "needed to work in a technologically advanced society" (Carl D. Perkins Vocational and Applied Technology Education Act Amendments, 1990, Sec. 2). The 1990 Perkins Vocational and Applied Technology Education Act Amendments were designed with the future workforce and the changing nature of the world and technology in mind. They were designed to help the learner prepare for this change and adapt to this change.
Reality to an experimentalist is not a thing; it is a process. Morris and Pai (1976) described an "Idealist, Realist, and Thomist . . . [as] view[ing] reality as a thing--either material or immaterial" (p. 67). But according to Morris and Pai, "To an experimentalist, reality is a process: experience. And as a process Experience is better likened to an activity, a moving, flowing event, than to a substantive thing. Reality is more like a verb" (p. 67). So if vocational education leaders felt that the purpose of vocational education was to prepare the learner for the world, for reality, then it was also to prepare the learner for change and to deal with the process of change. Or more correctly stated, if the experimentalists believed that education was not an imitation of life but life itself (as Duck has suggested), then education and learning was change in itself. Again, it was not a thing; it was a process. This study revealed that several of the leaders did in fact make statements of this nature. For example, Herr (1985) stated, "The importance of vocational education [is] as an educational process rather than simply a vehicle for providing persons with entry-level occupational skills" (p. 51). So in this aspect, the researcher found that the vocational education leaders influenced the 1990 Carl D. Perkins Vocational and Applied Technology Act Amendments towards an experimentalist educational philosophy.
The concept of integration fits well with the experimentalist view that education is a process. This idea leads nicely to the theory that, as a process, there is merit in integrating vocational education with academic education. If vocational education is a better delivery system, then perhaps it really is an excellent tool for teaching basic academic skills. Integration is based upon the concept that the traditional forms of delivery of the basic academic subjects tend to lose students as many can’t relate the content of the academic subject matter to any real world situations. To an experimentalist, subjects, in-and-of themselves, really don’t have any value. An experimentalist believes that an academic subject’s true value lies in its application to the real world. For example, math is valueless until it is applied to the world. Value is obtained in its use. And its use is not for sake of itself but to assist the learner in calculating or obtaining new information. Thus, the experimentalist believes that it is when it becomes a process or the tool in the process that math becomes valuable to human beings.

This study revealed that many of the leaders who testified (as well as the 1990 Carl D. Perkins Vocational and Applied Technology Act Amendments themselves) were clearly based in this kind of philosophy. The mandate to integrate vocational education with academic education stemmed directly from the belief that making academic
subjects more practical and real, that is demonstrating their use as a process--their applicability in the real world, would help to motivate students to learn them better. The law stated:

The Congress finds that-- . . . a combination of nontraditional school-to-work technical education programs, using state-of-the-art equipment and appropriate technologies, will reduce the dropout rate for high school students in the United States and will produce youths who are mature, responsible, and motivated to build good lives for themselves. (Carl D. Perkins Vocational and Applied Technology Act, 1990, SEC.342)

Finally, at the very center of an experimentalist educator's educational system is the learner. An experimentalist believes it is the learner, not the subject matter which is of most importance. They feel that the interests of the learner must be aroused before learning can occur. Integration is vocational education legislation's first move towards a learner-centered environment. Previous Vocational Education legislation was not based on learner centered theory though vocational educators have often assumed that the foundations for vocational education do lie in learner centered theory. Many vocational education teachers and practitioners have been taught, or have concluded on their own, that the founding fathers had an
experimentalist educational philosophy at heart when they pushed for the inclusion of vocational education into the educational environment. Vocational educators often remarked that they believed it was the learner and the learner's interest which drove vocational education. This could not have been true in view of the job-specific, manual kind of training that characterized vocational education prior to the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments. That kind of vocational education was subject-centered and subject-driven. At best, a sort of matching took place between the interests of the learner and the skills required of the vocation or subject matter that society needed.

Greenwood (1978) found in her research that the founding fathers of vocational education did not have an identifiable educational philosophy. She concluded that the philosophy of the founders of vocational education evolved "independently from all of the other educational philosophies of the early twentieth century" (p. 336). She also concluded that, like the essentialists and the perennialists, the founders of job-specific vocational education believed that students needed to know a given set of facts to survive and be happy in the world. The only difference between the founders of job-specific vocational education and the traditional essentialists and perennialists was that the founders of vocational education
had a different set of facts in mind (occupational skill facts). There was no philosophy to describe what they believed.

The strong support for integration by the leaders demonstrated that they believed that the rationale of previous vocational education philosophy has become less valid over time. Many of the leaders who testified stated that the set of facts that the founding fathers had in mind are no longer valuable to the learner, given the technological change that has moved our society from an industrial nation to a technological one. But they did not suggest that education return to the traditional form of education that it had—the form that the perennialist and the essentialist would like to see. Instead they suggested that education move towards being learner-centered with content that is an integration of academic and vocational education.

The 1990 Perkins Amendments facilitated and encouraged the move to a learner-centered educational system. Over and over, the leaders stated that job specific manual training was not in the interest of the learner. The learner may be interested in the vocational skills, but the vocational skills themselves must not be the focus or the end of the educational process. The vocational skills must become the process by which the interest the learner already has is cultivated into knowledge useful in the real world. And the
leaders who influenced the 1990 Perkins Amendments defined this knowledge as something more generic and general such as basic academic skills.

In the final analysis, the results of this study revealed that many of the leaders who testified, pushed for, and influenced the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments had an experimentalist educational philosophy and the amendments reflected a tendency towards this experimental influence.
CHAPTER V

DISCUSSION AND IMPLICATIONS

Summary

Maybe not a Unifying Philosophy

What was interesting about the 1990 Perkins Amendments was that they had the ability to appease educational leaders who had differing philosophies and views of education. Secretary of Education Lauro Cavazos was found to lean towards a perennialist educational philosophy rather than an experimentalist educational philosophy. The 1990 Perkins Amendments stressed a "back to basics" or at least an integration of the basic academic subjects with vocational education so that vocational students would also get the basics. How someone with a perennialist educational philosophy would find the 1990 Perkins Amendments more pleasing than federal legislation which places dollars in programs that only train students for entry-level, manual-skills positions is logical. On the surface it appeared that the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments were a sneaky way of returning to more traditional forms of education and educational subjects. Also, it appeared that the 1990 Carl D. Perkins Vocational and Applied Technology Education Act
Amendments might have been the beginning of the gradual elimination of federal funding for job specific labor education. While this would not have been how an experimentalist would have interpreted the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments, it could have been interpreted this way by someone who held a perennialist educational philosophy.

One of the leaders was found to have an essentialist educational philosophy and another was found to have some traits of an essentialist. As with the perennialist, there were many aspects of the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments that would appeal to an essentialist. The perennialist and essentialist educational philosophies are similar in their philosophical rationale. The major difference is that perennialist encourages subject matter firmly rooted in the past (the traditional academics and classics) while the essentialists wants curriculum more centered the present scientific knowledge base. The process of instruction, the delivery of the subject matter is the same for both educational philosophies, but the content is not the same. Thus the reasons that a perennialist would find the 1990 Perkins Amendments appealing would also be valid for the essentialist. That is they would find the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments appealing because it placed an emphasis on
integrating such subjects as science with vocational subjects.

One leader was found to have an existentialist educational philosophy. Existentialists place the focus of the educational process and life on the individual. In this aspect, the 1990 Perkins Amendments would also please an educator who had an existentialist philosophy because it was a definite shift away from stringent job-specific, subject-centered curriculum and toward a more student-centered curriculum.

What was unusual was that the essentialist, the perennialist, the existentialist, and the experimentalist would all find the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments having merit and value because of its shift away from the job-specific, subject-centered curriculum and educational process.

If vocational education and previous federal vocational education legislation did not have a basis in an educational philosophy (as suggested by Greenwood), maybe it now does. At least it doesn't seem to conflict with the major educational philosophies anymore. Unfortunately, vocational education has not necessarily moved towards any specific philosophy either. Vocational Education has gone from having federal legislation that did not appeal to or match with any specific educational philosophy to having federal
legislation that appeals to and matches with many educational philosophies.

The essentialists and perennialists supported the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments because it shifted towards more basic academic skills and away from job-specific skills training. The experimentalists and the existentialists supported the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments because of the focus the amendments placed on the student and the experiences and interest of the student. They also supported the amendments because it focused on problem-solving. Lastly, they supported the amendments because it shifted towards the application of the subject matter to real world situations.

Vocational education may never find a philosophical home. This researcher found that the 1990 Carl D. Perkins Amendments can not be said to be Federal legislation representing only one particular, specific educational philosophy. While the leaders who influenced it had particular educational philosophies, the legislation itself is an amalgamation of the concepts of several educational philosophies. And integration requires an amalgamation of the concepts of several educational philosophies.

Law (1979) stated that, "careful historical review will prove that the philosophical bases upon which vocational education loosely operates are a conglomerate of rationales,
indiscriminately interwoven, parts of which are mutually exclusive and often contradicting" (p. 9).

He added:

My own belief is that we operate on the basis of . . . [an] evolving philosophy . . . but we have not redefined and stated lucidly such philosophies. Instead, we retreat to the original tenets of our founding fathers for support and, thus are schizophrenic. Is it any wonder we appear to friend and foe alike to be inexplicable even to ourselves? (p. 34)

The 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments did not represent a return to the original tenets of the founding fathers (as suggested by Lakes). They forged new ground with the act and the concept of integration, but still did not bring vocational education any closer to a clear concise philosophy. Vocational education still seems to be operating on a "conglomerate of rationales, indiscriminately interwoven, parts of which are mutually exclusive and often contradictory (Law, 1979, p. 9). Because the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments' concept of integration did not fit well with the concepts of any one particular educational philosophy, integration and the implementation of the act may not be successful.
Flaws in the Rationale (Doomed to Fail?)

The 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments were an artfully and skillfully written piece of legislation, designed to appease everyone. The amendments represented vocational education's response to the reform reports' of the 1980's call for a back to basics and more academic educational system. But in the attempt to satisfy the needs of so many differing educational views and philosophies, it is possible that the amendments may actually fail to please anyone.

The perennialist/essentialist and experimentalist/existentialist philosophies were very different. They had differing goals and beliefs underlying them. Perennialists and essentialists placed the focus in education on the subject matter and the end product while experimentalists and existentialists placed the emphasis on the process. Perennialist and essentialist educators generally tended to teach academic subject matter. While there may be a few vocational educators who had a perennialist or essentialist educational philosophy, it was less common because the goals and content of vocational education did not mix well with the beliefs of the perennialists and essentialists. Vocational educators tended to have either experimentalist educational philosophies or they fell into a philosophy that was not identifiable (as Greenwood suggested).
All of these differing educational philosophies were interwoven into the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments by the concept of integration. But the philosophic rationale, goal, or mission of integration is not specified in the act. The perennialist and essentialist educators wanted the focus of vocational education to merge with the traditional focus of education. They wanted to see the traditional academics that they believed represented the ultimate truth stressed in all education, including vocational education. They pushed for integration because they wanted vocational education to drop the job-specific skill content that had served as the end result of vocational education and replace it with basic academic content. But the perennialists and essentialists did not see that integration could mean general academic classes merged with the vocational classes whereby instead of academic content being the focus, the vocational content is the focus. The perennialists and essentialists did not see that, in integration, value might not be placed on the academic subjects themselves. The value of the basic academic subjects will be placed on their utility to the world of work. In fact, as far as outcomes of the educational process go, integration will require the outcomes and goals of the traditional academic subjects to change the most. Vocational education has always had and will continue to have occupational preparation as its goal.
With the implementation of the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments, academics will also have occupational preparation as its goal. While this may please the experimentalists, it goes against the true beliefs of the perennialist and essentialist educational philosophy.

The bottom line is that integration, which was the major issue of the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments, will require more change from the perennialist and essentialist educators than the from the experimentalist and existentialist educators. Perennialist and essentialist educators saw the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments as a triumph for their beliefs because they thought the amendments represented a change in Federal vocational education legislation towards their beliefs -- towards more academic content. But in reality, when the philosophical constructs of the amendments were analyzed carefully, they really did not represent such a triumph. The academic content will indeed be there in integration, but the stress will not be on the academic content. The stress will be on the occupational outcomes. Instead of vocational courses changing to an academic orientation, general academic courses will change to have a vocational outcome. The perennialists and essentialist failed to see the fact that this is vocational education
legislation, not academic education legislation. And as such, it was designed to help vocational students gain basic academic competencies by teaching and demonstrating the basic academic subject's relevance to the world of work. The perennialist math teachers with a passion for math, who were happy to see the stress placed on math in the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments, may not be so happy when they realize that they will be forced to teach math as it relates to some specific job skill or some specific occupation. Again, this communicates to the student that it is not the math itself that is important, it is the job skill for which math is required that is important. The 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments took basic academic subject matter and defined it as something necessary for the world of work. Perennialist and essentialist see the value of the basic academic subject matter in and of itself; it represents ultimate truth.

There was another serious flaw in the logic of those who believed the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments represented what they wanted. If perennialist and essentialist academic instructors are required to teach academic content with a focus on its relevancy to the world of work, there will be difficulties when a connection between the two can not be made. Despite what many would like to think, there is just
some academic content that must be learned of and for itself, and unless one enters a very specific occupational area (e.g. nuclear physics), that content has no practical, real world application (for example, learning the Periodic Table of Elements in Chemistry). The response of an academic teacher who must grapple with academic content for which a real world application cannot be found is not known. How the teacher will approach this dilemma is not known. And the response of the student to this situation is not known. It is possible that the students will simply "tune out" when the educator can not draw real-world connections between the academic content and the world of work. Perhaps, basic academic content may be difficult to define. The point at which the content ceases to be basic and become "beyond basic" is not identified. Exactly who will interpret what is basic and what is beyond basic is not known. Furthermore, a perennialist or essentialist educator who believes that the content is the ultimate truth would have great difficulty classifying this ultimate truth into the hierarchical levels of basic and beyond basic.

Another flaw in the philosophical rationale of the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments as it pertains to the educational philosophies was that the excellent academic teachers were excellent because they had a true passion for their content. They studied it extensively and thus had a good
understanding of the content and its uses. But they did not become content experts because they studied the content only for its real-world applicability. They studied it because they valued the content in and of itself. This sort of teacher might resent having to reduce content to the "sticks and bricks" of vocational education. The premise of the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments was that if the vocational teacher and the academic teacher work together, the vocational teacher will be able to show the academic teacher how to relate the academic content to the vocational world. Another premise of the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments was that the academic teacher would learn something of the vocations in order to place a vocational focus on the academic content. Some academic teachers, then, may harbor inward hostilities because they are being forced to teach in a manner that goes against their educational philosophies.

Yet another flaw was that in addition to utility being the new goal for academic content rather than content of-and-for-itself, basic academic courses will need to shift from being subject-centered (the subject themselves being ultimate truth) to being student-centered, with basic academic subjects becoming the process by which new knowledge is acquired.
There have been many successful integration efforts reported (Grubb, 1990; Bottoms, 1990). But, unless the integration efforts result in a new educational belief, position, or philosophy for the educators involved, it is possible that the educators of neither philosophical posture will be satisfied.

Again, it is the perennialist and essentialist academic teachers who must change, not the vocational teacher. The 1990 Carl D. Perkins Vocational and Applied Technological Act Amendments were really not a triumph for perennialist and essentialist educators, though it appeared to be so on the surface.

Experimentalist were not really getting what they wanted either out of the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments. Experimentalist vocational educators may have hastily and carelessly applauded legislation that in reality did not agree with their basic tenets. One of the emphases of experimentalists (according to Duck, 1981) is on the structure of subject matter. This researcher found that experimentalist leaders consistently stressed the structured nature of knowledge and subject matter when touting the benefits of the integration of vocational and academic education. This researcher also found inconsistencies in their testimony and serious flaws in their logic.
This researcher found that experimentalist leaders stated that the structure of knowledge progressed from the basic academic skills to the specific job skills. They stated that a solid foundation in basic skills was necessary to prepare the learner to enter the world of work. If a learner had basic academic skills, that is the ability to communicate, and a solid foundation in the basic concepts of math, science, etc., then industry could teach the learner the specifics when he or she came to the industry. Experimentalist educators also stated that if the learner had basic academic skills, then the learner would have a better foundation to prepare for changes in technology and many job changes over a life-time. This described a natural structure from the general (basics) to the specific. Job specific skills being the purpose or goal of the educational process and basic academics serving as a prerequisite step along the process.

Then experimentalist leaders suggested that occupational courses be integrated with academic subjects because occupational skills would help facilitate the learning of basic academic skills. They stated that vocational programs had the delivery system (the process) by which academics could be made more applicable and practical, thereby helping the student learn the basic academics. But, this was an entirely different structure. The problem is, then, in knowing if the structure of knowledge and subject
matter requires an understanding of the basics as prerequisites for job-specific skills, or if job-specific skills facilitated the understanding of the basics. And a paradox ensued: how could one have the job-specific skills that facilitated an understanding of the basics without first having the basics that were prerequisites for the job-specific skills?

For example, how could one use the skills of laying out a foundation to teach the concepts of math when one needed to have an understanding of math in order to understand how to lay out a foundation? This seemed like a never ending "chicken or the egg" kind of dilemma. There was of course the "ah-ha" factor whereby when being taught both simultaneously, the learner experienced a sudden flash of insight and understood both the math and how to lay out a foundation at the same time. This did not represent a hierarchical, natural structure of knowledge and subject matter.

Another seeming paradox the experimentalist leader faced was in describing the nature of the world of work as being so technologically complex and changing that the best that education could hope to do was to provide the learner with the basics. How, then could that leader also suggest that the world of work be used to teach the basics? Hierarchical structure meant that one must precede the other, so which will it be: Basic academic skills before
occupational skills, or occupational skills before basic academic skills? Another way of looking at this paradox is that if vocational education is the process by which basic academic education is learned, then it can not also be the end result of the process. Vocational skills will either facilitate the acquisition of basic academic education (which will be the goal), or basic academic education will form the basis for the learning of vocational skills (which will be the goal).

So the concept of integration, the major philosophical premise of the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments, did not really fit with the philosophy of the perennialist, the essentialist, or the experimentalist. The concept appeared sound at first but will not really do what any of the leaders are expecting it to do based upon their philosophies.

More than likely, what will happen is that the focus in the classroom will depend upon who is teaching the course. If an experimentalist vocational teacher is teaching the applied academic course (the term used for courses containing content that is vocational and academic education integrated), then the course will have a student-centered, occupational orientation and focus. The teacher will stress the need to learn the academic content because it has application to the world of work (the world of work being the goal or end result). But if a perennialist or
essentialist academic teacher is teaching the applied academic course, then the course will probably still have an academic, subject-centered orientation and focus. World of work examples will be used to help the student understand the academic content with the knowledge of the academic subjects still being the goal or end result. There are differing philosophical orientations in these two situations. For an educational concept to be successful, it must have a clear and concise philosophy and those who are to implement it must "buy into" that philosophy.

Another flaw in the logic displayed by the vocational education leaders was in the value placed on vocational education itself. Many vocational educators were so enthusiastic to jump on the "academic bandwagon" that they sold themselves short. In other words, they overlooked the value that vocational education had for the sake of legitimizing their arguments for integration. There was no doubt that the job-specific, manual training skills that many vocational classrooms were teaching were out of date and of little use to learners in today’s world, but this did not mean that there was no value in those classrooms. Perhaps one of vocational education’s greatest assets was not in the skills being taught but in the process of learning the skills. Perhaps one reason that vocational teachers were so successful in reaching at-risk students was not because they were teaching a manual skill but because
they were teaching something, anything, at which the learner could be successful. Perhaps it did not matter that the skill was out-of-date. Perhaps it was success at learning itself that helped the learner go on to other things (including academics). Perhaps it was this success that gave the learner confidence to go on and try new skills. Given this, it would at first seem to make sense for the vocational educators to move into the arena of teaching academic subjects. Maybe, just maybe, vocational educators can reach the students and help them learn the academic content and give the learners success with academic content.

The problem with that thinking is that academic subjects are not the same as the job-specific subjects. The whole concept of vocational education was founded on the theory that some people are better oriented to "hands-on" kinds of skills and others for "mental" kinds skills. While this theory may not be valid, many of the leaders who testified at the Perkins hearings did state that some students are more practically and manually oriented. Many of the leaders stated that the future world of work required people who have basic academic skills. They stated that the days when a person could learn a trade and go out and work at it for a life-time are over. And they suggested that education integrate vocational education with academic education so education can provide the kinds of skills that will be needed for the future work force (academic skills).
What they really seemed to be saying was that as a discipline, vocational education was itself no longer valuable. Vocational education must change and teach basic academic content because these are the skills that the future workplace requires. If this is true, this jeopardizes the future of vocational education. Academic instructors can learn to relate to the world of work. If it is only the process of teaching (the methods) that vocational educators use that is important, academic teachers can learn that process (those methods). And if the future world of work requires people who only have basic academic skills, then at some point vocational education may disappear entirely from education.

What the leaders who testified for the Perkins Amendments failed to see or emphasize was that even those courses that were teaching out-of-date skills had merit. The skills were not what made the course important. What was important was the student and the fact that the student was learning something. And teaching a student to use a hammer and saw had value not because the student learned to use the hammer and saw but because in the process of teaching the student how to use the hammer and saw, the student learned many other things about himself, about the world, and about life. The value was in the process, the process of learning the vocational skill, the process of learning to do something, not the process or method of
teaching and not what the "something" was that the learner learned to do. That process may not transfer to academic content. The rewards of learning a basic academic skill are not the same as the rewards of learning a basic trade or vocational skill especially for the type of student who benefitted from vocational education. The difference is perhaps in what brings pleasure to the learner; physical pleasure versus mental pleasure.

The reward of learning an academic skill is intrinsic to the learner. The learner must take pleasure in the fact that the content is learned for the content's sake. Not as much immediate physical pleasure is gained in the classroom from learning the academic skills as from learning the vocational skills (Gardner, 1973; Gardner, 1975). And these kinds of values (the desire for physical pleasure versus mental pleasure) may already in place by the time the students reach the secondary teachers. The suggestion that if educators would only show the student how academic content has applicability in the real world that it would somehow make learning the academic content the same as learning a vocational or trade skill is not true.

Now vocational education stands to lose that which was its greatest asset. The vocational leaders who testified for the Perkins Amendments suggested and supported education containing less job-specific courses. The 1990 Carl D. Perkins Vocational and Applied Technology Education Act
Amendments only funds programs that integrate vocational and academic education at the secondary level.

The 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments did not really match with any particular educational philosophy. And the concept of integration did not match with any one particular educational philosophy. This researcher found that when the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments were analyzed in depth, what at first appeared to be great legislation was riddled with flaws in the philosophical and logical thought underlying it. In actuality, vocational education may be worse off now than it was before the 1990 amendments. If it could be said that there was not a logical and consistent philosophy that served as the basis for vocational education prior to the implementation of the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments, then the condition of vocational education worsened after the implementation of the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments for what little bit of unifying philosophy that the discipline had, was washed away in the logic of the act. In other words, if the threads that held the profession together did not fit into a particular educational philosophy (the concept of education for the working class), at least they were unifying threads. Now the threads have been fragmented so there is no longer
anything holding the profession together. There is no unifying philosophy, and there are no unifying goals, foundations, or concepts anymore.

Because of these flaws, the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments may be doomed to fail unless a new mode of thinking, a new philosophy, is established and the old philosophies are abandoned for this new integrated philosophy.

The educational philosophies of vocational education leaders who testified at the hearings for the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments are reflected in the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments but further analysis revealed that philosophies of the leaders did not match well with the philosophical rationale of the major provisions of the act.

"Hidden Leaders"

While the scope of this research did not include any provisions for leaders who did not testify, there were a few people who did influence vocational education but did so in a way that did not show up in this research. This study would not be complete without some mention of these leaders.

First, some mention must be made of those who may have been the authors of the Act. While the federal government did not divulge the true author of bills (those congressional members who introduce them got the credit),
one individual in particular surfaced as having played a key role in the process leading to the passage of the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments. John F. (Jack) Jennings, Counsel of the Subcommittee on Elementary, Secondary and Vocational Education was cited numerously during hearings for his work on the bill. Jennings was a lawyer in Chicago when he was brought in a subcommittee counsel. Radcliff (1985) stated that Jenning's "intelligence, integrity and skill would improve the quality of the work of the entire committee in the years to come" (p. 27). In 1989, when the process leading to the passage of the Act took place, Jennings had been with the committee for some 22 years.

The Congressional Record reported that Representative Ford (1989b) stated before the full House on May 9, 1989 that "special recognition should also be accorded to Jack Jennings, the counsel of the Subcommittee on Elementary, Secondary and Vocational Education, who pulled the strands of this legislation together and kept it moving with great legislative skill" (p. H1705). The extent of Jennings' influence on the outcome of the act was not known. What was known was that Jennings was present at every single House hearing, and though he never spoke a single word, there were references made about him directing the order in which congressional members were allowed to ask questions of the presenters. At one hearing, Ford (1989b) stated:
We are also joined on my right by Jack Jennings, the counsel of the Subcommittee on Elementary, Secondary and Vocational Education, which is his official title, but he is really the top education staff person on the full Education and Labor Committee. And even though he still maintains his youthful appearance, he's got a great many years on that committee working with the legislation.

(p. 918)

All these statements really did not say just how much influence the staff members really had. More information was gleaned from an article written by Jennings and published in the NASSP Bulletin in November 1989. The article was titled "The Congressional Committee Staff Member: The Hidden Link in the Legislative Process." In this article, Jennings (1989a) stated that "staff members who work for committees are the ones who concentrate exclusively on writing the nation's laws" (p. 13). He added that "these few hundred are the most essential--and least understood--link in the process of writing laws" (p. 13). Still later he stated that "much of the 'nitty-gritty' of writing the bills and the speeches and reports and organizing the coalition is left to the committee staff" (p. 14).

A third indication of the importance and influence of Jennings was inferred from the fact that when the American
Vocational Association found flaws in the proposed bill, Charles Buzzell, the Executive Director, did not write to the congressional members. Instead, he wrote a letter citing the mistakes to Jennings. This letter was included as appendix B in the AVA Guide to the Carl D. Perkins Vocational and Applied Technology Education Act (1990).

From these statements, the records of the hearings, and the letter, it would not be hasty to conclude that Jennings played a large role in drafting the 1990 Perkins Act. Unfortunately, not enough published literature by Jennings existed to apply to Duck's model. It was possible however, to obtain an idea of who might have influenced Jennings.

Jennings (1989a) stated that the "Congressional committee staff member . . . must strive to closely represent their bosses' views" (p. 13). But he added that "staff members act as connectors with groups and organizations interested in a field [and] . . . Staff members also talk to lobbyists, writers, reporters and many others" (p. 14).

The review of literature revealed that Jennings had been around and had kept abreast of vocational education issues for some time. One such group with which Jennings had kept company was the staff of the National Center for Research in Vocational Education. This Center, housed at the University of California at Berkeley, was once housed at
Ohio State University. It was possible that this group influenced Jennings.

The shift of the Center from Ohio State to Berkeley was more than just a political adjustment. It also forged the way for a new direction for vocational education. U.C. Berkeley, one of the seats of the radical political movements of the 1960’s, also was the home of some vocational historians who suggested that the founding fathers of vocational education really did not have the individuals’ best interests at heart when they pushed for the initial vocational education legislation. They were the authors of such phrases as "social efficiency" and "social control." These leaders had an entirely different view of the philosophical foundations of the history of vocational education and an entirely different philosophical view of education from those at Ohio State. Not included in the scope of this research was determining the exact amount of influence that these leaders may have had on the outcome of the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments, but the fact remained that the shift in the amendment represented a shift towards the direction these leaders suggested for Federal vocational education legislation.

For example, in a videotape of a teleconference on the issue of integrating academic and vocational education that was sponsored by the National Center for Research in
Vocational Education, both Jennings and Gene Bottoms (another leader identified by this study) participated. Interestingly, nobody representing the American Vocational Association appeared as either a presenter or as a discussant during the teleconference. While this could have been because nobody representing the AVA had any contributions to add to the integration issue, it was also possible that the AVA was not part of this new group of leaders who were influencing the direction of vocational education and thus were being left out of the process.

Jennings (1989b) stated during this teleconference that the reform reports of the 1980's called for more academic skills and "Vocational education has to become part of school reform if it is to survive". He interpreted the integration of vocational education and academic education as the answer to that reform. To determine if Jennings's push for integrated vocational and academic education and away from job-specific training represented his own philosophy in order to save vocational education, or if his push was a result of the influence of the National Center and Berkeley philosophy was not possible. Either way, Jennings's views were not representative of the whole group of vocational education leaders.

One incident that seemed to demonstrate the division between this new group of leaders and the AVA was an exchange of comments between Jennings and Buzzell that
occurred in the AVA's journal, the *Vocational Education Journal*. In the April 1990 issue, Buzzell stated:

A congressional staffer recently asserted, with great political fervor, that vocational educators need to jump enthusiastically on the education reform bandwagon. His reasoning was that the national reform movements should become our vehicle for making needed changes, in particular to help us enhance academics. By doing so, we would qualify for federal funds in the eyes of legislators. (p. 10)

Buzzell added that it was not the sole responsibility of vocational educators to promote and teach the academic subject matter.

In response to that article, Jennings (1990) said: Charles Buzzell is to be commended for devoting his column in the April VEJ [Vocational Education Journal] to such an important topic as increasing the competency of vocational students in basic skills. But I am concerned that you have so poorly understood my views on the need to better coordinate academic and vocational education.

(p. 6)

The problem here may not have been so much one of semantics as one of a philosophical difference between the two leaders. Perhaps this was good example of why the 1990 Carl
D. Perkins Vocational and Applied Technology Education Act Amendments did not fit well with the educational philosophy of all of the leaders and thus may be doomed to failure. While no analysis was done to establish the educational philosophy of Buzzell, it might be that Buzzell represented the kind of philosophy of the founding fathers of vocational education. While this philosophy did not fit into any particularly defined educational philosophy (Greenwood, 1978), it was very different from the philosophies that underlie the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments. Or it may be that Buzzell had the wisdom to see that the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments represented a fragmentation in the basic tenets of vocational education and as such, he was trying to rescue the fate of vocational education.

Jennings suggested during the teleconference that in order to survive, vocational educators had to take the initiative and embrace the kinds of changes mandated by the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments. Some leaders have done just that. They have adapted to, and in some cases even pushed for, the change. These leaders included such individuals as Gene Bottoms and Dale Parnell.

Other leaders, such as the radical historians, though they did not show up in this study, have always held a
philosophy that goes against the foundations of vocational education and now may have influenced the change in the philosophy of Federal vocational education legislation. Finally, some leaders will never embrace the changes and perhaps will slowly dissolve away as the vocational education profession initially designed slowly dissolves away.

Conclusions of the Study

This researcher found that the majority, though not all, of the leaders who pushed for and influenced the 1990 Carl D. Perkins Vocational and Applied Technology Education Act, were of an experimentalist educational philosophy. One leader was found to have an existentialist educational philosophy, one leader was found to have a perennialist educational philosophy, and two leaders were found to have combinations of one or more educational philosophies or it could not be determined which of the two the leader had a stronger inclination towards.

This researcher found that the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments, on the surface, appeared to match well with the experimentalist educational philosophy. But this researcher also found that on the surface it appeared to match well with all of the other educational philosophies. The act contained verbiage that, when read literally, appeased all of the leaders who influenced it. If this is the goal of
federal legislation, the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments were well written. But during further analysis of the act as well as the philosophies of the leaders, this researcher found that while there was a match on the surface, the act itself went against the philosophies of all of the leaders. Stated differently, this study concluded that in the long run, the implementation of the act will either require the leaders and educators to change their philosophies or else be dissatisfied with the act because it goes against their beliefs. Or a third possibility is the failure of implementation of the provisions of the act.

This researcher found that the perennialist and essentialist leaders supported the act because of the the focus it placed on basic academic skills. But the goal of the educational process will still be the occupational outcome, not knowledge of the subject matter itself. Since the results of this study revealed that this did not match with the perennialist and essentialist educational philosophies, the perennialists and the essentialists will not be satisfied unless they change their philosophies. This researcher found that the experimentalist leaders supported the act because of the the focus it placed on the student. But in pushing for integration, the leaders may have in fact done the reverse and begun the process whereby vocational education will slowly erode away. This
researcher found that the experimentalist leaders had several flaws between their philosophical positions and the logic they used when pushing for the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments. Because of this, they appeared confused in identifying what it is they really want. And this researcher found that the existentialist leaders also supported a focus on the student, but when the act is implemented in classrooms across the educational system, they may likely find a stringent, academically oriented focus with a strong measure of testing and accountability which, in fact, goes against their philosophical beliefs. So this researcher concluded that the existentialist leaders will not be satisfied unless they too change their philosophical beliefs.

Finally, this researcher found that if there was no unifying philosophy for vocational education before the implementation of the Act, vocational education may now be in even worse shape for not only is there still not a unifying philosophy, but the threads that held the profession together have been cut and the profession may tumble dangerously close to, if not into, extinction. This researcher found that vocational education has gone from vocational education legislation and a foundation of vocational education, that did not match with any identified educational philosophy, to vocational education legislation that outwardly seemed to match everyone's educational
philosophy but which, in doing so, forsook the founding concepts and goals of vocational education—and still did not match any identified educational philosophy.

Recommendations for Further Study

While there have been many studies that have sought to identify the philosophical foundations of vocational education and many studies that have sought to identify the philosophical foundations of the early leaders of vocational education, this study breaks new ground in its attempt to look at the philosophies of the leaders who influenced major changes in federal vocational education legislation and the relationship between legislation and the philosophies of the leaders. But this not meant to be an ending point, rather a beginning point. Several issues have emerged during the course of this study that beckon additional inquiry.

Some areas of further study include:

1. What were the philosophical foundations and the extent of the influence of the particular groups, organizations, and associations who lobbied for change in federal vocational education legislation? To what extent does federal vocational education reflect the efforts of these groups, organizations and associations?

2. To what extent was the shift in federal vocational education legislation representative of the need for vocational education to preserve the profession from the backlash of 1980 reform reports? Which influenced federal
vocational education the most--the need to shift to a new philosophical direction for the sake of the profession or the introduction of new vocational education leaders who had different philosophical foundations?

3. To what extent did the hidden leaders really influence the direction of federal vocational education legislation?

4. To what extent does Federal vocational education legislation impact what really goes on in the profession and vice versa?

5. What will be the impact of the act on the vocational education profession? Will it serve to create a new direction, or will it destroy the profession because it destroys the tenets upon which the profession was founded?

6. And finally, at some point in the future, further study should be conducted to determine if the 1990 Carl D. Perkins Vocational and Applied Technology Education Act Amendments forces the creation of a new educational philosophy. Will the results of the act be that all of education and all educational philosophical thought will shift to represent this new way of thinking? Or will the results be the failure of the act because the roots of the differing philosophical positions are so deep that the leaders can not change?
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APPENDIX A

Checklist Form to Identify Leaders
NAME

HEARING

DATE

Testifying on Behalf of? NO YES (Do not include)

Holds a position of authority in a group or association?

Holds a federal govt. administrative position?

Holds a position of authority in business or industry?

Holds an administrative, research, or instructional position at a university?

Published at least one time? NO (Do not include) YES

1. 

2. 

3. 

4. 

FOUND ENOUGH TO DRAW CONCLUSIONS? NO YES
APPENDIX B

List of Published Literature
Reviewed for Each Leader
CHARLES BENSON


SUE BERRYMAN


GENE BOTTOMS


LAURO F. CAVAZOS


WILLIAM D. FORD

EDWIN L. HERR


DALE PARNELL


JOHN WIRT