AN ABSTRACT OF THE THESIS OF

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Title: A COMPARISON OF PHILOSOPHIES OF OREGON STATE UNIVER-

 SITY GRADUATES WHO ARE EXPERIENCED TEACHERS OF VOCA-

 TIONAL EDUCATION AND UNDERGRADUATE VOCATIONAL TEACHER

 TRAINEES ON AN ESSENTIALIST-PROGRESSIVE SCALE AT

 OREGON STATE UNIVERSITY

Abstract approved: *Redacted for Privacy*
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Purpose of the Study

The study measured and compared the philosophies of
education of OSU graduates who are experienced teachers of
vocational education and undergraduate vocational teacher
trainees on an essentialist-progressive scale at OSU.

The objectives of this study were to (1) determine if
experienced teachers of vocational education and undergrad-
uate vocational teacher trainees indicate significantly
different philosophical bases, and to (2) determine if educa-
tion coursework in the philosophy subject area significantly
alters philosophical direction.

Design of the Study

The sample consisted of forty-one (41) participants
enrolled in the sophomore block teacher education program

during the winter term of the 1974-75 academic year, and thirty-one (31) graduate students enrolled in the Educational Professional Development Act (EPDA) program of OSU during the 1973-74 and 1974-75 academic years.

During the first week of winter term 1974 a pretest was administered to a section of field-based students at OSU. The pretest instrument was the Inventory of Viewpoints on Education (IVE). This instrument consisted of sixty-five (65) pairs of opinions, beliefs, and proposed actions in educational situations. Scores reflected an essentialist (0) philosophy or a progressive (65) philosophy.

During the beginning of the academic years 1973-74 and 1974-75, experienced teachers of vocational education enrolled in the OSU EPDA program were also tested using the IVE instrument as the pretest. Upon termination of the program the same instrument was administered as the posttest.

Treatment of the data was designed to explore the hypothesis that there were no significant philosophical mean score differences between teaching experienced vocational instructors and undergraduate teacher trainees in vocational and general education. Samples used in the analysis were assumed to represent those groups which were studied at OSU.

The statistical analysis chosen to provide data on the hypothesis was the analysis of covariance. The pretest score was considered as the covariant (independent) factor and the posttest score was the dependent variable.

Findings of the Study

The hypothesis was <u>retained</u>. It was concluded that there were no significant differences between the mean scores of the experimental groups at OSU.

Conclusions of the Study

1. Students in graduate and undergraduate education programs have similar educational philosophical opinions.

2. Students in graduate and undergraduate education programs indicate a progressive philosophy when relating to essentialist and progressive indicators.

3. Because undergraduates usually do not have a formal knowledge foundation of the philosophy of education, study in the philosophy area might allow their understanding to expand.

4. Teacher education programs should continue to evaluate and change if they are going to have a contemporary effect on the philosophy of students.

5. The heart of teacher education is the human interaction between the teacher and the student.

Suggestions for Further Study

1. Culturally different students compose an important part of the educational system. Therefore, a study should be conducted to investigate the philosophical bases of educators from a multi-cultural setting.

2. The teacher's behavior is intimately involved in what he/she values. A future study should investigate the teacher's value clarification system.

3. The student's behavior is intimately involved in what he/she values. It is recommended that a future study investigate the student's value clarification system.

4. Competencies and accountability have focused upon the cognitive and psychomotor domains. The affective domain should be researched with equal emphasis.

5. It is suggested that a study be conducted to assess comparisons among educators within various institutions of higher education using the IVE instrument.

6. Every study has some limiting parameters such as sample environment or time restraints, and this study was no exception. A similar study could further test the validity of the reported findings.

A Comparison of Philosophies of Oregon State University
Graduates who are Experienced Teachers of Vocational Edu-
cation and Undergraduate Vocational Teacher Trainees on
an Essentialist-Progressive Scale at Oregon State University

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I. INTRODUCTION

Society has had to cope with problems of change since
the very beginning of time. All of these changes are based
upon individual values. Change is not only causing our na-
tional attention to focus on the way we live, but also on
how we make and prepare for our livelihood. These values
include individual philosophies of teaching. Smith and
Kapfer (70) tie education and society together.

> The main purpose of school, of course, is to engage
> students in meaningful activities that result in
> significant learning. The principles of behavior
> modification thus far work very effectively in the
> development of facilitative behaviors and in the
> elimination of disruptive behaviors. The same
> principles are also used with some success in
> "motivating" learning.
>
> Any type of reinforcement that is programmed by
> the teacher or the school, however, will be discon-
> tinued eventually (for example, when the student
> leaves school). Thus, the student must perceive
> some intrinsic value to learning, or self-motivated
> learning can be found outside of school and applied
> to the school environment.

In recognizing the forces affecting society and its
schools, the American Association of Colleges for Teacher
Education (2) asserts that it must take a position and accept
a major responsibility for the improvement of teacher edu-
cation programs. First on the list of problems confronting
society is the underlying rationale of this study.

> The affecting of curriculum and instruction
> changes, at both undergraduate and graduate
> levels, adequately reflect the societal needs
> and realities with which schools and teachers
> should be concerned.

Drumheller (24) reinforces the curricular emphasis.

> Formerly the school was guardian of the "3 R's"
> competencies of the citizenry. Now it must
> complement the family, neighborhood, and other
> public educational agencies in developing the
> functional behaviors of the child.

Not only is society looking for answers to the education dilemma, but teacher educators themselves are having a difficult time finding a direction. Silberman (68) points this out.

> There is probably no aspect of contemporary
> education of which there is greater unanimity
> (sic) of opinion than that teacher education
> needs a vast overhaul. Virtually, everyone is
> dissatisfied with the current state of teacher
> education, even the educationalist establishment
> itself.

Society has given educators indicators for direction. The Gallup Poll of Public Attitudes (29) toward education during the past three years have indicated skills which parents feel teachers and schools need.

> The good school has ... teachers who are interested
> in their work and in their students, teachers who
> make their classes interesting and relevant, var-
> iety in curriculum to meet the needs of all
> students, not just college bound, discipline and
> respect for authority with up to date teaching
> methods.

The prime object of teacher education has been to turn out individuals skilled in helping students learn. Even

though the approach has varied within universities and within departments, there has been constant concern for the changing of teacher preparation programs. Combs (14) helps to illustrate the intricacies of the problem.

> The task of our schools must extend beyond skills ... the sheer volume of information precludes any possibility that we can ever again hope to construct a common curriculum for everyone.

Statement of the Problem

The primary focus of this study was to determine if significant philosophical differences existed between experienced teachers of vocational education enrolled in the Oregon State University Vocational Leadership Program (EPDA) during the 1973-74 and 1974-75 academic years and undergraduate vocational teacher trainees enrolled in the Oregon State University School of Education's Theory and Practicum II (TP-II) program during the 1974-75 academic year.

The teacher education, reflected by society, continues to be caught up in the throes of change. Adaptability and survival are based upon the ability to change. Our philosophies must reflect the flexibility to accept and function within our environment of change, or we will become one of the endangered species.

Toffler (79) refers to the speed of change as "future shock" when he says that the school of the future must prepare the future citizen for living with and adjusting to

change.

The educational society seems to consider varying em-
phases regarding philosophy. Those protecting special areas
promote one direction of specialization, while generalists
protect the broad-based concept. This leads to problems as
indicated by Hamilton (38) when she says, "Duplication of
efforts cross departments. Even general education courses
are ordinarily segregated by occupation field (e. g., The
Philosophy of Education for Agriculture Teachers)."

Much of our educational dilemma stems from the trad-
itional. Drumheller (24) states:

> Our teachers are traditionally oriented to pass-
> ing on discipline-based knowledge through a lock-
> step textbook medium. And you can't get there
> directly from here. The textbook and the disci-
> pline are a security blanket for both the teachers
> and the students. One cannot take it away without
> an extensive re-education program and the sub-
> stitution of another security blanket.

The sensitive teachers must then be flexible enough to
meet the needs of the individuals. Randhawa (63) states
this well.

> The task of teachers is to keep an eye on the be-
> haviors exhibited in their classrooms and adapt
> instruction to meet the needs indicated. The
> alert sensitive teacher who can depart from the
> discipline to minister to an individual's needs
> makes a school curriculum vital.

The problem then begins to focus on a one-to-one basis,
the teacher and the learner. Is teacher preparation re-
stricting our citizens by directing society towards the tra-

ditional, or is society directing individuals toward the status quo? One way to look at this situation is to look at students entering teacher preparation as compared to the individuals that have gone through the process of teacher preparation and have been exposed to working within the "teaching environment."

The American educational system have been subjected to increased attacks from the public and from within their own ranks. This study looks at these attacks as bearing on individual philosophies of education. These attacks upon education can best be understood as symptoms of a society that is undergoing transformation--a transformation that produces conflict.

Objectives of the Study

The major objectives of the study were to (1) determine if experienced teachers of vocational education and undergraduate vocational trainees indicate significantly different philosophical bases, and to (2) determine if educational coursework in the philosophy subject area significantly alters philosophical direction.

Definition of Terms

The following definitions are included for the purpose of clarification within the study. Many of the def-

initions come from the <u>Dictionary of Education</u> edited by Good (33). Definitions of other terms or phrases used in the study are considered to be self-explanatory.

<u>Educational Professional Development Act</u> (EPDA) - A Federally funded program with the major aim to prepare selected participants from vocational teaching with broad professional knowledge and competencies as leaders to effect comprehensive vocational education throughout the nation.

<u>Essentialism</u> - The doctrine that there is an indispensable common core of culture (certain knowledges, skills, attitudes, ideas, etc.) that can be identified and should be taught systematically to all, with rigorous standards of achievement, it being regarded as a definite adult responsibility to guide education in this direction; presupposes not that individual pupil freedom is to be dismissed but rather that such freedom is to be made an aim or achievement instead of a means of education.

<u>General Education</u> - Those phases of learning which should be the common experience of all men and women; education gained through dealing with the personal and social problems with which all are confronted; and in this study, lower division students yet to be accepted into the School of Education's formal teacher education program.

<u>The Inventory of Viewpoints on Education</u> (IVE) - An instrument developed by Swanson designed to place viewpoints

of individuals and professional educators on a scale of essentialist-progressive.

OSU - Oregon State University

Progressivism - The theory that education is an instrument in the service of man, that academic values are primarily extrinsic and therefore functional, that content and subject matter should be modified as man's knowledge of himself and his world changes, and that all expressions of absolutistic thinking are impediment to process.

Teaching experienced vocational graduates - Secondary and post-secondary instructors who have taught in the vocational education area within public or private schools.

Theory and Practicum II (TP-II) - A teacher preparation program based on the notion that teacher preparation is more than the acquisition of classroom techniques and skills. The program, composed of campus and field-based experiences, involves an active commitment to the principle of inquiry into schools, learning and larger processes of education and socialization. The program encourages students to experience the nature of schools, the processes of learning, and the philosophical bases and values implicitly in human behavior.

Theory and Practicum II students - Students enrolled in the TP-II program during the 1974-75 academic year. This program offers a field-based teacher education experience at the sophomore level.

<u>Undergraduate vocational teacher trainees</u> - Students who have identified themselves within one of the five catagories identified as vocational education and who were enrolled in the TP-II seciton.

<u>Vocational Education</u> - A program of education organized to prepare the learner for entrance into a particular chosen vocation or to upgrade employed workers; including Trade and Industrial Education, Health Education, Agriculture Education, Business Education, Distributive Education and Home Economics Education.

<u>Vocational Instructor</u> - An individual who has identified his or her primary teaching responsibility to be in one or more of the specialized divisions of vocational education through a degree program or by occupational experience in lieu of a degree.

II. RELATED LITERATURE

Pressures from educators and the public are causing

turmoil between educational planning and traditional direc-

tion. Hard and fast criteria are expected to be developed

for accountability, yet many claim that teaching is an

"art" and cannot thus be classified.

By using the soundingboards of newspapers, school

board meetings and budget elections, the public has voiced

support of both conservative and liberal issues. Recall

petitions have flowered, administrators have resigned and

teachers have sought the security of unionism.

Morris (54) says,

There can be little question that in America
today one of the areas of greatest confusion and
uncertainty is education; in a troubled time we
are drummed by competing voices on the proper
schooling of our young.

Can we agree upon what is the proper schooling of our

young? We tie our actions into functional behavior with

abstract goals and tradition. Drumheller (24) mentions that

many teachers make a lifelong commitment to a profession

and try to resolve ambiguities, but only end up frustrated.

They may teach the old way and yet know of a better way but

not want to make the adjustment or quit. Unless this chasm

can be bridged, accountability efforts will be doomed to

frustration and failure.

One of the articles by Goodlad (34) supports the con-
fused issues.

> But the education scene today remains confusing.
> Put on one pair of glasses and the schools
> appear to be moving posthaste toward becoming
> centers of intense, exciting learning, marked
> by concern for the individual. Put on another,
> and they appear to be mired in tradition, in-
> sensitive to pressing social problems, and
> inadequate to the demands of learning.

Education still remains confusing. The vision seems
to be altered by the perspective. Some see education as
new and exciting when working within the educational envi-
ronment, yet the public may be seeing a bogged-down
bureaucracy.

Rationale of the Study

The very emphasis of change has been paramount through-
out the educational history of this country. There have
been many stages of development in trying to evolve a common
philosophy on which to legitimately base our educational
system. Voices that were advocating change were often lost
as radical, of limited use, or as passing fancies. The
identifying fact was that change was the consideration, not
the individual direction that was promoted. The very surviv-
al of society, and education itself, promotes change. Gold-
hammer and Taylor (32) state,

> Since the curriculum is handed down by tradition
> and relates to the structure of knowledge, not to
> the life needs of students, its function, one must
> presume, is not to be relevant to their needs and

concerns. The schools are steeped in the academic tradition which emphasize scholarship, not effectiveness in performing one's roles. The stated objectives of the schools relative to human growth and development have become pure verbiage, for the curriculum of the school persists without a basic concern for them.

In looking at the current educational dilemma, we can refer to current terminology among students when they say, "Where are you coming from?" This slang expression expresses the concern by individuals in knowing from what basis a person is speaking. Such concerns may clarify communications or establish boundaries that allow someone to feel comfortable within. Similar examples may be found when discussing politics, religion or cultural backgrounds.

Has the educational system promoted the essentialist direction through teacher education, or do we foster a progressive attitude. Maybe we are emphasizing the academic without equally considering human relations for a problem that may never appear just "black" or "white".

On the negative side of the ledger, Heilbroner (40) offers one view,

Perhaps even more important among these topical causes for our pessimistic frame of mind has been yet another development of the recent past--the failure of the present middle aged generation to pass its values along to its children.

The responsibility, however, of educating our society comes back to the educators. We may very well state our case

when Kinzer (49) says, "We are lost, but we're making good time!"

One approach to "finding our way" is to establish a baseline for comparison. By using the instrument, Inventory of Viewpoints on Education (Appendix A), we would be able to place teaching experienced graduates and undergraduate vocational teacher trainees and general education students on an essentialist-progressive scale for comparison.

The question, then, is whether there are significant differences in philosophy among undergraduate vocational teacher trainees and general education teacher trainees and experienced teachers of vocational education. Any such philosophical differences are important. Drumheller (24) says it this way.

> We want to know why teachers teach and administrators administer and way they do. And, make no mistake, no matter how much teachers and administrators may affect innocence about things philosophical, their behavior patterns in the school are outgrowths of the philosophical and policy positions they individually hold, whether they realize it or not.

By focusing on two aspects of the philosophical scale, essentialist and progressive, we will be able to measure with realiability what direction educators "are coming from." When we establish where we are, then we will be able to find out where we want to go, and hopefully, we can plan for the future with a positive direction.

Controversy in American Education

The craggy outlines of the new society are emer-
ging from the mists of tomorrow. Yet, even as
we speed closer, evidence mounts that one of our
most critical subsystems--education--is dangerously
malfunctioning.

(Toffler, Future Shock)

The freedom of a democratic system promotes controver-

sy, so education is now faced with a new problem. Full (28)

adds to the controversy when he speaks of Dewey,

What is it that is worthy of the name education?
This was no rigid standard that he was proposing,
but one flexible enough to meet changing conditions
and situations.

Education may be the promoter of education, and the

merry-go-round may be run by tradition. Is the system pro-

moting the status quo? How successful have we been? Venn

(83) states:

Education has been too successful in doing what
society has expected it to do. Two centuries of
success tend to keep pressure on the schools to
do more and better what they are presently doing.
When weaknesses appear, the response is to in-
crease the effort. The generally accepted belief
is that more of the same will result in continued
success.

Legal issues have begun to surface to make the problems

more intense. The accountability aspect has begun to awaken

conscientious planning administration. As the system tries

to move to justification, some people feel that the movement

is too slow while others feel neglected altogether. Just

recently two newspaper articles focused on the legal aspects.

The Sunday Oregonian (60) printed an article labeling
education as the "classic example" of consumer fraud. It
would appear that the question would be: Are we delivering
what we are advertising? The article concluded by stating,
"the education system turns out automatons, with the pro-
cess beginning in kindergarten and continuing through the
next 12 years."

Higher education is also feeling some of the intensity
through consumer action. As mentioned in the Chronicle of
Higher Education (66), a woman enrolled in a teacher educa-
tion program was required to take a course and claimed that
it was "worthless". She is seeking a refund of tuition plus
the cost of books and legal fees.

A strong condemnation of education came from Velie (82)
through the Reader's Digest. He said, "the slowest learners
in our schools are not the pupils. They're the educators who
run them."

Even from within comes the attack. Goldhammer and Tay-
lor (32) tarnish the traditional system by saying that the
primary legitimation in scholarship is an end in itself de-
signed to screen out of the system the academically unfit.
"Applications to life and life's problems are purely coinci-
dental."

Taba (75) likes the security of the discipline of the
past; the nature of the content determines what process to

use and how it is to operate. Can this essentialistic

approach stand up?

Brubacher (10) says that traditionally man has sought

stability in the faith that there are permanent traits in

reality.

> Consequently, in a flux where some things alter
> more slowly than others, one can achieve a not
> inconsiderable measure of stability by viewing
> the flux from the standpoint of those things hav-
> ing a low probability of changing either soon or
> often.

If we interpret Brubacher's "reality" as society, then

it would seem that our sochool system is reflecting our

society and doing what it has been called upon to do. If

the school is to represent society, does the school change

at the same rate as society, or are the school and society

one and the same? In "The School as a Model of Society"

Grannis (35) says,

> Every school presents to its students a model
> of society and its possibilities. In the very
> composition of the students and teachers, in the
> authority and decision-making structure of the
> school, in the ways that people talk with one
> another, and in the expectation the school holds
> for its students--in all these ways, and more,
> the school instructs about society.

As the school represents society, is the picture real-

istic or is it a mere sample? Society starts to emphasize

accountability or performance contracting and compromises

individual freedoms. How do we balance the requirements of

society and the individual?

Von Hilsheimer (84) does not agree with Grannis. He seems to see schools as models that are not reflective of society but rather are idealistic models.

It seems that we cannot focus our efforts. Mistakes are made and we struggle along as best we can. With the educational pressures for change swinging from the content area to the individual, or at least a dual emphasis, Gardner (30) adds similar support to Goodlad.

> What we must reach for is a conception of per-
> petual self-discovery, perpetual reshaping to
> realize one's best self, to be the person one
> could be. This is a conception which far exceeds
> formal education in shop. It includes not the
> intellectual but the emotions, character and
> personality. It involves not only the surface, but
> deeper layers of thought and action. It involves
> adaptability, creativeness and vitality.

As the individual begins to receive more notice and attention from the critics of education, the educational process should consider adaptions if the criticism is valid. The need for change needs to be reflective of society, and our teacher education planning should consider the validity of items brought to the surface by critics.

Education is Change

> Education is change--sometimes subtle, sometimes
> cataclysmic--in the consciousness of man ... and
> thus in the structures Man has evolved to define
> and extend himself.
> Education doesn't happen through bureaucratic teaching
> Through perfunctory learning.
> Education has to do with Man becoming
> Aware

```
To learn
To take effective action
To improve the condition of human beings in
The world and one's self.
But since
The world is large.  History is long.  And the
Sum total of human knowledge is infinite.
Disciplined understanding is essential
To change
The world
And ourselves.
We begin
With respect
For ourselves
For each other
And
For all that can be learned.
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                    (Goddard College)

The educational emphasis should not focus upon just
the delivery, but should strive for a product that relates
to process application. This application, then, needs to
proceed along a route of "disciplined understanding," plan-
ning for change.

As we develop the planning, the foremost consideration
should be towards the learners involved. This planning per-
meates the education function through the teacher. Planning
should, therefore, strive to eliminate educational barriers.
As Peterson (58) says, the world will demand:

> ... a person with genuine flexibility and freedom,
> a person who thrives on sensing and solving problems
> as complex as subtle and new as the technological
> environment of tomorrow. In this new world, rigid-
> ity may actually be a greater barrier to progress
> than ignorance.

The educational delivery may become less important when
we observe the need for considering change. Bebell (4) says,

> ... the goal of education, if we are to survive,
> is the facilitation of change and learning. The
> only man who is educated is the man who has
> learned how to learn; the man who has learned
> how to adapt and change; the man who has realized
> that no knowledge is secure, that only the process
> of seeking knowledge gives a basis for security.

Because of the difficulties of meeting the needs of our

society in general and for individuals specifically, the

planning for change tries to bring the two together.

As society is changing, doubt reflects the need for

planning for change. The security of tradition should be

bent but not broken. We need the strength of tradition with

the flexibility of change. At times this has been stated

as not throwing away what we can use from the past, but not

being blind as to what we can use in the future. As Berkson

(5) would say, "Doubt is a first step in freedom of the mind

and is often constructive."

The road of educational change has not been smooth nor

has the traveling been swift. For this reason, many experts

have been uncomfortable and have voiced their criticism.

Pucinski and Hirsh (61) speak of public education.

> Public education, for the most part, has been long
> on rhetoric and short on results. Many of the
> most stalwart, aggressive, inventive change agents
> have eventually found themselves "killed off" by
> the system--victims of bureaucratic freezeouts ...
> scorn and apathy from colleagues and superiors,
> opposition from the public, or sheer exhaustion
> from the magnitude of the task. Discouraged at
> extending so much energy with such disappointing
> results many have ended up modifying their dreams
> or retreating to other areas. This tragic trend
> must be halted; we must develop the courage to
> change.

Anderson (3) says that much of the blame for education's resistance to change has been the teachers. Many ideas and programs brought into the schools have been rejected without adequate trial. It is, therefore, essential that programs of teacher education prepare teachers for the schools of the future rather than for those of the past.

The emphasis on teacher education surfaces at the point of delivering a philosophy of change from generation to generation within society.

Change is survival, and if teacher education is to survive, then we need to change teacher education as society changes. But the problem still is not this easy. Horton (42) says,

> We have a propensity for seeking easy answers
> rather than asking hard questions. If there is
> a crisis in the classroom; if we are suffering
> from future shock; if there is a greening of
> America in the form of a new consciousness and
> awareness; and if there is wisdom in deschooling
> society we are forced to deal with new realities
> demanding new priorities if teacher education is
> to survive in a recognizable form.

Educators many times have good intentions that falter because of poor implementation. The implementation may be hindered by goal conflicts, philosophy conflicts, or procedural emphasis. Smith (69) says that we indulge in such conflicts in supporting individualized instruction, and yet we do not reduce class sizes or add support staff.

We promote new instructional methods and deliver through the lock-step classroom. Is this not true?

There is hope, but it is about time that we do something to turn around our present direction. The emphasis has to come from within. Courtney (21) does not see us improving very much.

> Our universities are still turning out teachers
> who perceive their roles as being dominators of
> learners. In contrast, the teacher of the future
> will necessarily be an affectively-oriented per-
> son whose major role will be to facilitate,
> rather than dictate learning experiences. Like
> the tideland animal, he will be characterized as
> being very flexible and quite adaptive to his
> changing environment. He will reflect the chang-
> ing society of which he is a part.

As we perceive the multitude of problems, the answers and solutions may be varied and unclear. The philosophers themselves have diverse views as to where we are headed, or "where we are coming from".

Levine (50) begins to clarify one problem when he says, "the problem, then, is how to rethink philosophy without causing further fragmentation."

One of the major approaches to the situation identified by Levine has been to move towards humanizing the educational approach. This approach begins to focus on the learner rather than the content. This is quite similar to the definition this study refers to for progressivism. Bebell (4) says,

> "Humanizing the Curriculum--the Person in the
> Process" was the theme for the 1967 convention
> of the Association for Supervision and Curricu-
> lum Development. The empahsis throughout the
> meeting was clear: the purpose of education is
> the fullest practicable development of the
> individual, and this can only take place when
> he is valued by those who would educate him.

Yes, the professional meeting and educational get to-
gethers still stimulate the discussion that teaching is an
"art" rather than a "science". Bork and Burnstyne (8)
respond.

> Often a successful teacher can by the very
> strength of his personality carry students as
> a group with him through the curriculum. This
> is the teacher who is "born, not made." However,
> with the growing emphasis on learning rather than
> teaching an individual group activities, this
> kind of success is no longer so important. To-
> day, a teacher needs to be successful in under-
> standing the guiding of the individual student.

The humanistic approach tries to internalize the motiva-
tion for learning. It also stresses the relationships be-
tween one another. A few years ago results of studies were
publicized mentioning that most occupational terminations
were the results of human relation problems rather than a
lack of skill on the job. We need to know ourselves and how
we relate to society for our own survival. Hamachek (37)
says,

> Most of our personal and interpersonal problems
> arise not from disagreements about reality, but
> from distortions and misperceptions of reality.

Iannone and Carline (47) add the product to Hamachek's statement. They say that teacher education's most important product would be the teacher who is true to his feelings and knows how to help children realize their potential.

As we start to dissect the humanistic approach, we look at the delivery system. This system is usually centered around the individualized approach. In order for the teacher to work in this environment effectively, it is often necessary to develop an adaptable philosophy. Smith and Kapfer (70) support this when they state, " ... learning packages, whether used in individualized settings or in group instructional situations, require student behaviors that usually differ from traditional expectations."

It is still important to remember that the teacher is the orchestrator and conductor for the educational delivery system. The personal contact with the learner may or may not be the motivational factor to stimulate or terminate learning formally.

The change in education, therefore, is attitudinal. Changes in individuals whether they are learners, teachers, administrators or members of society must be considered. We need to allow for differences, and in fact, search out the direction for exploring differences. The plan should allow for these differences through the flexibility of change.

The words from the song "People's Park" reflect this individual philosophy.

> If you aren't the way you want to be
> It may depend on the way you see
> And if there's anything that you want to be, the change
> lies in your hands you'll see
> We're the keepers with the keys
> We're the makers of all confusion, we're the planters
> with the seeds

The Education of Teachers

Wiggins (86) identifies the major element of teacher education.

> If we are agreed upon anything at all about education in America, it is that the quality of teaching is the most important single factor in the value of schooling. The education of teachers, then, is the central issue in American Education.

If the central issue in education is agreed upon, it is entirely another problem in determining an approach to solving the dilemma. The approaches are varied and yet similar, new and yet traditional, hard to prove and yet tried, and extremely difficult to get a consensus upon. Rogers (64) says that the facilitation of learning rests upon certain attitudinal qualities which exist between the teacher and the learner, not in textbooks, audio-visual aids or programmed learning.

Silberman (68) looks at our problem from another direction. He ways that we need to have our teachers develop a philosophy of education. This means developing teachers'

ability and their desire to think seriously, deeply, and continuously about the purposes and consequences of what they do.

As was mentioned earlier, once we decide upon the question, possible approaches come into the conflict. Cook and Leeds (19) mention this.

> There is considerable disagreement in education circles relative to a variety of topics involving the relationship of teachers and pupils. These topics are still largely matters of opinion with little reinforcement from scientific evidence.

Like the tideland animals changing for survival mentioned by Courtney, Iannone (46) sees a need for educators to change, not only because of changing truths, but also because of society. Survival is a strong motivator.

Whether the change is immediate or slow in coming, education may need to consider the philosophical basis from which planning and decision-making is taking place.

Teacher decisions, assumptions, methodology, and objectives depend upon theoretical framework based upon philosophy. Therefore, says Wirsing (88), a conscious linkage between philosophical belief and teaching practice needs to be sought from the outset of one's professional preparation.

Figure #1 illustrates the formation of a methodology pyramid. Wirsing (88) says that this concept focuses on the actions that an educator would take.

METHODOLOGY "Pyramid"

(Figure 1)

TEACHING AND PHILOSOPHY: A Synthesis. Marie E. Wirsing.
    Page 68.
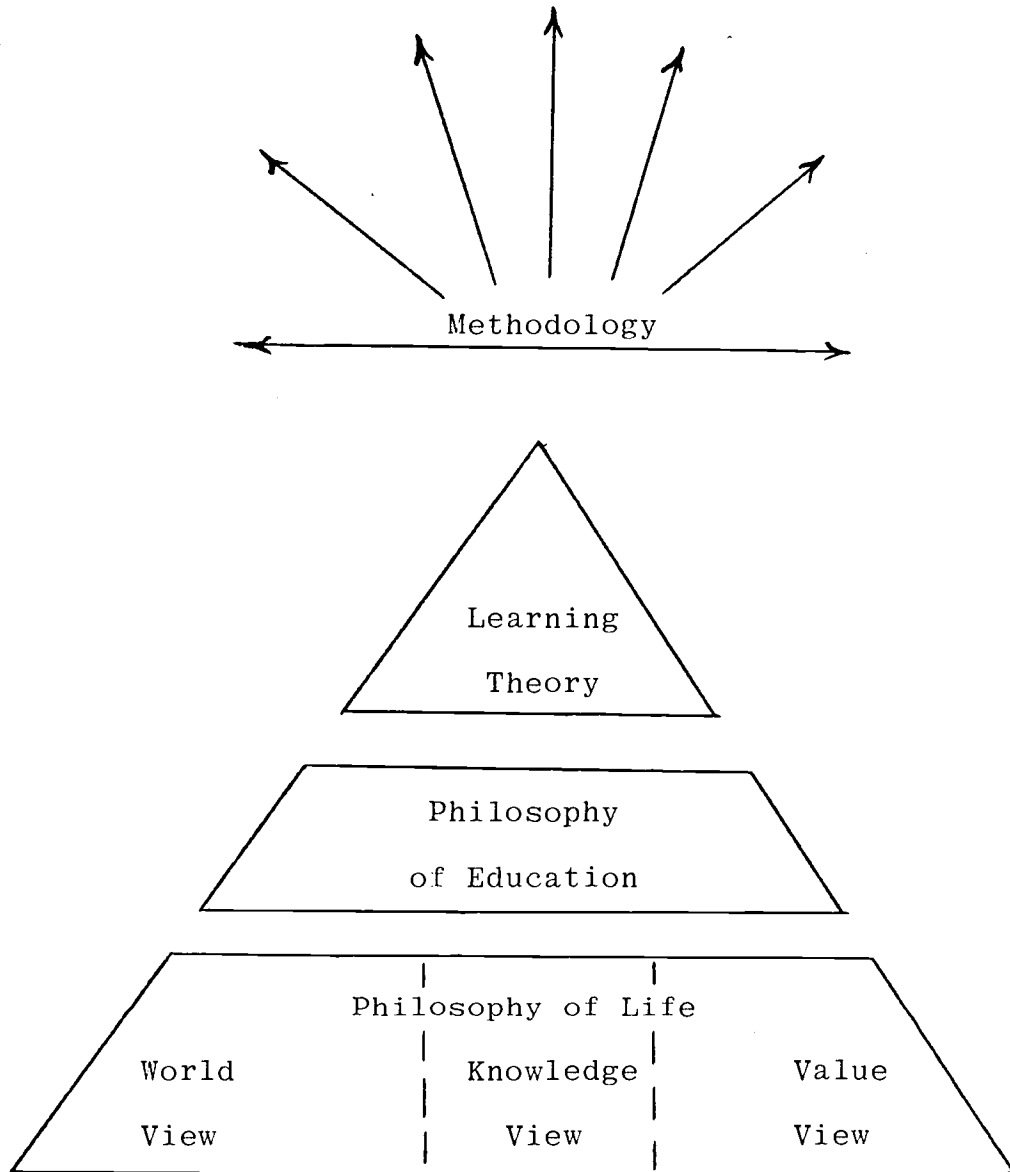
> What should be clear at this juncture is that
> there should be no separation between a teacher's
> total philosophy of life, his philosophy of
> education, his learning theory, and his method-
> ology.

As we said before, in order to understand learners, we need to be able to understand ourselves. The philosophical basis may be an indicator that would allow educators to understand their actions. A person's philosophy is transmitted through relating experiences. To the students without similar foundations, it may be confusing.

Another approach may be more diagnostic. Randhawa and Fu (63) suggest that we should take the time to look at the classroom learning environment as an interaction phenomenon; is it important for a developmental history of each member of the group?

Iannone (45) suggests that we get teacher trainees involved. We should offer more human experiences. Considerations could include alternative types of education, counseling experiences and the opportunity for prospective teachers to get their senses involved.

As we start to get a handle on the problem, Rogers (65) says that he doesn't believe that we can teach teachers. He says that, "anything that can be taught to another is relatively inconsequential, and has little significant influence on behavior."

In trying to read between the lines and ferret out the truth between Rogers and other experts, a compromise offered

by Patterson (57) may bring us back to an operational basis.
He says that the problem in education is that we do not deal
with people. Coladarci (13) seems to agree with Patterson
using different words. He attacks the process; content and
procedures of teacher education demonstrate no relevance to
actual teaching.

Like the wounded shark, we see teacher education attack-
ing itself. Shaffer (67) says that if we continue to prepare
future teachers as if their preparation consists primarily
of learning isolated facts and skills, then they will view
their own work as imparting them.

The educational system perpetuates itself. As the
United States is a relatively "new" country, King (48) gives
us a little bit of history for reflection.

> Most of the subject specialists teaching in aca-
> demic schools of the continental tradition (which
> are after all more 'normal' throughout the world
> than anything to be found in Anglo-Saxon countries)
> perform more of a lecturing role than would be
> permissible in the most modestly progressive
> school in English-speaking countries. It is the
> ambition of most of them to attain a university
> lecturing appointment, and this is indeed the way
> in which most university teachers on the continent
> are recruited.

Educators relate that students teach like they have been
taught rather than the way we taught them to teach. If this
is a fault, then it should be corrected. With the strong
influences of the teachers in the classroom, Silberman's
(68) statement is important.

What educators must realize, moreover, is that
how they teach and how they act may be more
important than what they teach. The way we do
things, that is to say, shapes values more
directly and more effectively than the way we
talk about them.

It would appear difficult to separate product and
process in some of the education courses. However, both
the delivery and the curriculum give hints to philosophical
bases. Could this be the common thread? Van Til (81) says,

An education which takes into account the indi-
vidual, his society, and his values--an education
which builds upon the soundest possible scholar-
ship derivative from psychological, social, and
philosophical foundations--is imperative in de-
veloping a curriculum appropriate for twentieth-
century man.

We need not neglect one aspect of the educational
process in favor of the other. Nolte's (55) concept of
children describes rhetorically one person's feelings for
this consideration.

If a child lives with criticism,
    He learns to condemn.
If a child lives with hostility,
    He learns to fight.
If a child lives with ridicule,
    He learns to be shy.
If a child lives with shame,
    He learns to be guilty.
If a child lives with tolerance,
    He learns to be patient.
If a child lives with encouragement,
    He learns confidence.
If a child lives with praise,
    He learns to appreciate.
If a child lives with fairness,
    He learns justice.
If a child lives with security
    He learns to have faith.

> If a child lives with approval,
>   He learns to like himself.
> If a child lives with acceptance and friendship,
>   He learns to find love in the world.

The influence of philosophy is being felt in teacher education by the trends that affect curriculum. As the influences of controversy build, teacher education curriculum trends are changing. Wooten (89) mentions a few of these trends for the decade of 1964-1974. More of a humanistic approach to curriculum development is being utilized, individualized instruction is more noticable, and alternatives and opinions are being sought.

Major words that appear in educational writings relate to change as "new," "modified," and "emerging." This in itself would lend support to a progressive direction in our curriculum development.

Berman (6) supports the "new trend" ideas. She said that curriculum should deal with two major characteristics: (1) Its major concern is with the ongoingness rather than the staticism of life; and (2) the substance is related to human processes.

Mitzel (53) coins a new phrase for this kind of education; adaptive education. This would be the tailoring of subject matter presentations to fit the special requirements and capabilities of each learner.

We still return to the major ingredient of teacher education--the teacher. One Oregon State University study

by Watson (85) reinforces this. He states that students
appear to consider teachers more effective if they are
open-minded, flexible, and concerned about their students.

Among various influences on teacher education, one
direction seems to be in vogue--getting prospective teach-
ers involved with students early. Randebaugh and Johnson
(62) show this to be true with experienced teachers as
well.

> Another major difference appears to be that
> excellent teacher actions are designed to stim-
> ulate student actions. There was a tendency
> for the excellent teachers to ask students to
> evaluate, students to work problems, and stu-
> dents to follow rules, while the non-excellent
> teachers themselves tended to work problems,
> evaluate student responses, and give student
> rules to follow.

Educational research does not itemize a nice clean
simplistic set of criteria for a "good" or an "excellent"
teacher, but Combs, Avila, and Purkey (16) give some indica-
tion.

It was found that good teachers wanted to perceive
their students with desirable traits. It was a positive
approach rather than negative. It proved to be helpful
rather than a hinderance.

Educators are continuously faced with teacher educa-
tion selection problems. In order to screen the "appropri-
ate" people for teachers, many programs have instituted
early contact with students so that individual career goals

can be influenced. Mager (51) says, "our success in in-

fluencing future performance is in part a function of our

success at sending students away with tendencies to approach,

rather than avoid, the things we want them to think about,

feel about, and do about." This early field exposure can

take many forms, but the objectives are often quite similar.

Cooper and Sadker (20) balance Mager somewhat.

> Besides helping the prospective teacher dis-
> cover earlier in his career whether or not he
> really wants to teach, the field experiences
> also enable him to approach the rest of the
> teacher curriculum from a reality perspective.

The student related experience seems to be working.

Birm's (7) research reflects this. By using the interview

technique, he said that eighty per cent of the teacher train-

ees involved in his study said that direct interaction with

children altered their attitudes.

The purpose and rationale of the field experience pro-

gram at Oregon State University (TP-II) stress similar out-

comes as Combs. The Theory and Practice II Field Exper-

ience Handout (76) states:

> Purpose and Rationale: This section of Theory and
> Practice II is based on the notion that teacher
> education is more than the acquisiton of class-
> room techniques and skills. It is our belief that
> teaching must involve an active commitment to the
> principles of inquiry into schools, learning, and
> larger processes of education and socialization.

Without an early field exposure, the learner in a teach-

er education program may not decide his or her fate until

late in his or her educational life after a major commitment

of time and finances. One example of this is related by the

American Association of Colleges for Teacher Education (2).

> It is said of the student that he is a bundle
> of quivering nerves at this late date in his
> pre-career, right up to the deadline and on his
> mettle, so he just has to succeed at this one
> chance. And his main preoccupation during his
> student teaching must be to reconcile, if at all
> possible, the respective philosophies of his
> cooperating teacher and his college supervisor.

In some situations the teacher education curriculum

may be cross departmentalized. As identified by the Oregon

State University Bulletin Catalog (56), undergraduate

courses in Philosophy of Education covering "application of

current philosophical methods to educational problems"

would have to be taken through the College of Liberal Arts.

The planning of the teacher education institutions may

relate to change, but the basis for accountability might be

hard to identify. By using a statewide sample for a voca-

tional study, Spaziani (71) mentions the greater emphasis on

individualized instruction, teaching at individual learning

rates, and the writing of performance objectives.

Again referring to Oregon State University, a report by

Dale and Kline (22) dealing with TP-II stated:

> Six "content" areas were delineated by the TP-II
> staff, but it is interesting to note that only
> three teams seemed to clearly establish outlines
> for addressing each of the content areas. Even
> within the framework of the course outlines it is
> difficult to determine if each area was treated
> with equal depth or was, in fact, treated at all.

As the goals become unclear, so do the outcomes. We say that we produce teachers, but is this really the outcome? DeNevi (23) says that we really do not produce teachers but rather try to develop individuals that have the ability to stimulate learning in others.

Teacher education may be more than just the under-graduate levels. Trends concerning retraining have been mentioned. Hamilton (38) and others mention that there is a growing awareness of the importance of staff development. Retraining may be one alternative to our educational dilemma.

Regardless of the direction and level of teacher educa-tion, Tuckman (80) suggests the advent of the student-centered curriculum, should it ever come to pass, would re-quire some basic changes in the instructional system. Butts (12) is more forceful when he says,

> My conclusion is that education and teacher
> education must somehow blend an empirical regard
> for hard facts with conceptual frameworks that
> will organize and generalize relevant knowledge
> in such a way as to be useful for helping to
> solve the critical problems that face the civili-
> zation of the world ... I can find no other way
> to say it: The only antidote within reason for
> these Powers is Educational Power.

We will continue to see many variations for educating educators. The critics will remain in the same environment as Haberman (36).

> As an integral part of the university structure,
> schools of education and their teacher education

program cannot support dramatic changes in
lower schools or in themselves--regardless of
social need, professional ethics, or the
dean's rhetoric.

Teacher educators are not deliberately malevolent.
Pressures from politicians and the public accountability
coupled with the financial squeeze in teacher education
institutions have caused educators to seek easy answers
rather than to confront difficult philosophical issues.
In the quest for simple solutions to complex social prob-
lems, it is understandable that an instituion sometimes
has difficulty resolving problems. Perhaps a good teacher
education program cannot be defined.

The educational philosopher may be the person similar
to the King in the parable by Horton (42).

In a certain ancient country the crops came in
and they were poisonous. Anyone who ate them
became insane. The king said, "There is but
one thing to do. We must eat the grain to
survive, but there must be those among us who
remember we are insane."

Summary

Changes in society constantly bombard educational
planning necessitating looking into the future from the
basis of the past. Toffler (79) is concerned that we are
not adequately looking into the future. This change is as
valid for education as it is for industry or government.
We should be concerned. Education is hope that will allow

society to shift into the future tense.

This educational revolution is noted by Bruner (11) as he says that education must be the rudder for our future survival. It will not be easy, but what option do we have?

About the only conclusion we can get from our options says Bracht (9), is that some students will be more successful with an alternative instructional program.

Our options rely on flexibility and change. A degree of planning must be incorporated into the process of change. Change and progress are not identical says Wiggins (86). Finding the key to solving the problems is not easy. Wirsing (88) mentions that "very different sets of answers exist for every conceivable question about classroom teaching."

Each of us functions to a degree within an organizational structure. This structure may or may not promote our individual philosophy. Therefore, we should be aware of multiple variables. Gardner (30) says that most organizations have a structure that was designed to solve problems that no longer exist.

Change threatens status. Individuals have set down procedures, and new ideas cause discomfort for those attached to the status quo. Depending upon the personality and location of change agents within the organization, changes may be seldom or frequent, easy or difficult, progressive or regressive

Educators are aware of the need for changes within teacher education. They are promoting criterion-referenced testing, individualized instruction, new methods of measuring and reporting progress, and involvement of greater numbers of consumers into the educational decision-making process. Renewed emphasis has reinstituted traditional values and standards. Education seems to have made a full cycle.

We need to clarify the goals and responsibilities of education. Will (87) says that the development of the prospective teacher as a person is an essential responsibility of any teacher education program.

There does not seem to be a mold for producing teachers. Combs (17) says,

> The good teacher is not one who behaves in a
> given way ... His methods must fit the goals
> he seeks, the children he is working with, the
> philosophy he is guided by, the immediate con-
> ditions under which he is working, to say noth-
> ing of his own feelings, goals, and desires.

Some changes are occuring. The Center for Vocational and Technical Education at Ohio State University (26) has rearranged its curriculum through a self-study to emphasize occupational orientation courses for educators to be. Many colleges have gone to the field-based undergraduate models for teacher education. Process has come under more scrutiny with less emphasis on content.

Some improvements in education can be brought about by spending more money, by building better schools, and by

introducing new courses of study, new standards, or new equipment. But really important changes will come about only as teachers change.

Maybe we are looking in the wrong direction. Another avenue may be open to us. McCluskey (52) gives us a hint.

Perhaps we have been looking in the wrong place.
Perhaps the way to discover what makes a good
teacher is not to look at the teacher at all.
Perhaps we should rather be looking at the pupils.

III. DESIGN OF THE STUDY

This study was conducted to determine whether significant philosophical differences existed between experienced teachers of vocational education and undergraduate vocational teacher trainees. In addition, comparisons were made to determine whether significant philosophical differences were found to exist between teacher trainees entering teacher preparation programs identified as vocational education and those entering teacher preparation programs identified as general education.

Selection of the Research Instrument

The instrument used in the research was the Inventory of Viewpoints on Education (IVE - Appendix A) developed by Robert Swanson of Stout State College. This instrument is designed to place viewpoints of individuals in education on a scale of essentialist-progressive. The Inventory of Viewpoints on Education consists of a series of sixty-five (65) pairs of opinions, beliefs, and proposed actions in educational situations.

The instrument measures a number of elements associated with educational philosophical activities. Teacher activities based on educational philosophy include:

1. Teachers formulate or accept objectives.

2. Teachers <u>formulate</u> or accept student experiences (content) to accomplish these objectives.

3. Teachers arrange for pupils to experience content - <u>method</u>.

4. Teachers <u>evaluate</u> growth toward objectives.

5. Teachers <u>reappraise</u> objectives, experiences and methods.

Levels of activities within each of the above were incorporated into statements of application, analysis, synthesis, and evaluation.

The scale of the instrument is of the equidistant interval type with the essentialist's polarity being exemplified by several conditions, including the philosophical assumptions that (1) things never change, (2) the teacher knows best what the learner needs to learn, and (3) it is content centered.

Progressive polarity is exemplified by (1) needs of the person, (2) plays heavily upon student interest, and (3) wants to know how well the person dealt with the problem.

The scale values for the instrument range from 0 - 65 as shown below:

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|————————————————————————————————————————————————|
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0 - essentialist   progressive - 65

The instrument was validated through the use of a jury of experts who stabilized the content against an operational philosophy,

Randall (1957) established reliability indices for the instrument using the method described by Hoyt and Stunkard (43) which consists of an analysis of variance procedure. This method provides a stright-forward solution to the problem of determining internal consistency reliability. Randall used reciprocal averages in his procedures with the items being differentially scored in order to maximize reliability. The technique weighted the items heaviest which agreed with the total score and he continued this iteration process until the reliability stabilized. With the IVE instrument, four (4) iterations were required for obtaining maximum reliability.

Dependent Variable

The dependent variable in this study was the score assigned to the respondent according to the posttest on the IVE. Even though uniformity was stressed throughout this study, initial differences existed between the groups involved. The analysis of covariance adjusts for uncontrolled factors using regression procedures. Analysis of covariance was used to adjust for initial statistical differences in the data using pretest score results. By making these adjustments, sampling error was reduced and precision was increased.

Treatments

The treatments involved three groups; namely, EPDA,

TP-II (vocational) and TP-II (general education). In the

case of the EPDA program, the treatment consisted of aca-

demic and intern participation aimed at developing the

broad knowledge and competencies required of professional

leaders in education. The Final Report of the Professional

Vocational Leadership Development Program (27) says,

> The method was field oriented. This was accom-
> plished through coordination of participant
> internship assignments with the State Depart-
> ment of Education, centers in public secondary
> schools, intermediate education districts,
> community colleges, programs for students with
> special needs and the disadvantaged, and with
> four-year colleges and universities.

The TP-II treatment consisted of a field experience

within junior high and elementary schools. This field-

based program included the following goals as stated by the

OSU Handbook for Student and Cooperating Teachers (39):

> Enable students to clarify his/her value sys-
> tem, beliefs and philosophy involving children,
> education, learning and the schools through
> the methodology of critical analysis.
>
> Develop students' abilities to observe the in-
> stitution of education in terms of schools as
> a social institution, goals of education, what
> goes on in classrooms and what schooling does
> for and to children.

Sample Selection

Three groups were utilized in this study to identify the existence of philosophical differences. One group consisted of 31 graduate students in vocational education selected to participate in the OSU EPDA program for the 1973-74 and 1974-75 academic years by their individual states. Their educational viewpoint scores were compared with the educational viewpoint scores of 41 students in lower division courses who had yet to be accepted into formal teacher education programs, but who had enrolled in the TP-II program during the winter term of 1974-75 academic year at OSU. Of these 41 students, 9 were identified as vocational and 32 as general education. The matrix for the sampling plan is as follows:

	E_1 (EPDA)	E_2 (Gen Ed)	E_3 (Voc Ed)
Pretest	n=31	n=32	n=9
	T R E A T M E N T		
Posttest	n=31	n=32	n=9

(Figure 2)

The EPDA program (E_1) is described in the Final Report of the Professional Vocational Leadership Development Program (27) as having the following objectives and aims:

The major aim of this project was to prepare selected participants with broad professional knowledge and competencies as leaders to affect comprehensive vocational education programs in the nation.

Specific proficiencies for the participants were as follows:

1. Conceptualizing community education by participation in various community cultures and identifying the various roles of the parent, the peer, the power group, and the public change agent.

2. Perceptualizing the comprehensive occupational task by being in constant contact with living examples where career education is liberal education and also practical.

3. Learning to live with ambiguity in administration by perceiving and having it demonstrated that the administrator is a change agent.

4. Sensitizing research to all groups by case studying actual problems of the disadvantaged and the problem of inflexibility of some service areas and college bound.

5. Counseling in career context by applying the career ladder approach under the direction of a competent counselor.

6. Cooperating with a highly competent supervisory staff by proceeding into the unknown with vigor toward a goal-oriented program.

7. Emulating a comprehensive teacher education program by observing and participating in a field-oriented teacher preparatory program.

8. Coordinating occupational offerings by developing a proposal that requires articulation with local communities, State Department of Education and OSU.

9. Reinforcing the competencies participants bring to the program by involving university and state staffs with local communities and subculture groups.

10. Delineating specific competencies essential
to participant goals by studying and organ-
izing the material in four nation-wide
studies relative to vocational leadership.

Oregon State University and the public schools provide
students in teacher education with an organized sequential
set of classroom teaching/observing/aide experiences. In
the field-based component of TP-II, the students were pro-
vided an opportunity to work with public school teachers
and children as aides or tutors for approximately three hours
a day for one term. The goals of this practicum are explain-
ed in the OSU Handbook for Students and Cooperating Teachers
(39) as:

1. Provide the student an opportunity to devel-
op questions, perceptions and a basis for
the on-campus program during the following
term as well as subsequent years.

2. Provide an opportunity for the student to
observe interactions between teachers and
learners and the characteristics of indivi-
dual students (social, psychological,
physical, and intellectual).

3. Provide field experience that will allow the
student, through an introspective process,
to know more of his/her personal philosophy,
values, and beliefs and their relation to
teaching.

4. Provide field experience that will provide the
environment in which students can develop into
"hypothesis testers" who are able to approach
the school as a social institution, the learn-
ing process and their role as a teacher in an
analytical manner rather than in a manner
based on an untested belief system.

Statistical Design

A. The Covariance Analysis

The basic design employed in this study was the Experimental-Control Group (Pretest-Posttest) Design utilizing unequal cell sizes. The following procedures were used:

1. The respondents (n=31) for the experimental group (E_1) consisted of students enrolled at OSU during the 1973-74 and 1974-75 academic years in the EPDA program.

2. The respondents for the experimental group in general education (E_2) were selected from the total number of students enrolled in section 210-A during the winter term of the 1974-75 academic year in the TP-II program at OSU.

3. The respondents for the experimental group in vocational education (E_3) were selected from the total number of students enrolled during the winter term of the 1974-75 academic year in section 210-A of the TP-II program at OSU.

4. The three groups were pretested using the IVE instrument and the mean pretest score was established as the covariant for the groups.

5. The EPDA experimental group (E_1) was exposed to the independent variable (Professional Vocational Leadership Development Program) and the experimental groups (E_2 and

E_3) were exposed to the "practicum" or field-based component of the TP-II program.

6. Following the three treatments, the three groups were given a posttest; the mean posttest scores for all groups were computed.

7. An analysis of covariance was utilized to determine if significant differences existed between EPDA experimental (E_2 and E_3) group mean scores in terms of the effect of the treatments.

The F statistic was used for testing for significant differences between adjusted mean scores. All samples were assumed to represent the OSU groups from which they came. The resulting ratio tested the hypothesis that the adjusted mean scores for the three groups did not differ significantly on the philosophical viewpoints scale scores.

The following hypothesis was tested through the covariance portion of the study's design:

$$H_O : \mu E_1 = \mu E_2 = \mu E_3$$

The hypothesis decision utilized tabular F values with $\alpha = .05$ and df = 2, 70. The critical F was 3.13.

The following analysis of covariance table established the model for testing of significance between the adjusted mean scores.

TABLE 1

ANOCOVA Layout with Adjusted Sources of Variation

Source of Variation	Adjusted			
	df	ss	ms	F
Between Groups	2	A	A/2	MS_A/MS_B
Within (Error)	68	B	B/68	
Total	70	C		

The degrees of freedom have been adjusted to accomodate the covariance design and are based upon a total n of 72 for the E_1, E_2 and E_3 samples.

IV. RESULTS AND CONCLUSIONS

The first section of this chapter presents the statistical data obtained from the analysis of the objectives of this study as outlined in Chapter I. The data were analyzed using the analysis of covariance technique to determine if significant differences existed among group mean scores in terms of the effect of the treatment. The F statistic was used for significance testing of differences between adjusted mean scores.

The second section of the chapter presents the conclusions obtained from the analysis of the material utilized in this study. The formulations presented focused on determining whether experienced vocational educators and undergraduate teacher trainee scores indicated significant alteration of philosophical direction.

Statistical Analysis and Findings

The hypothesis which was of primary interest to the research was that there are no significant philosophical mean score differences between teaching experienced vocational instructors and undergraduate teacher trainees in vocational and general education.

The analysis of covariance was used in testing the hypothesis. The analysis of covariance utilizes both analysis of variance and regression procedures. The present

problem was involved with covariance analysis and it was used to adjust treatment means of the dependent variable for differences in the independent variable score. For this study, the pretest score was considered as the covariant (independent) factor and the posttest score was the dependent variable. The computed F value generated by the analysis of covariance was found to be greater than the tabular F value at the .05 level of significance, the hypothesis was rejected. If the computed F value was found to be less than the tabular F value, the hypothesis was retained.

The analysis of covariance results are shown in Table 2. The computed F value generated by the analysis of covariance was determined to be .363 and the tabular F value at the .05 level of significance was 3.13. Hence, because the computed F value was smaller than the F value, the null hypothesis was retained.

Because the hypothesis was retained, it was concluded that there were no significant differences existing among the mean scores of the three experimental groups. Table 3 reflects the means for the groups.

TABLE 2

ANALYSIS OF COVARIANCE Layout with Adjusted Computed Values

Source of Variation	df	XX*	XY	YY**	df	Adjusted SS***	MS****	F
Groups	2	1118.396	593.014	317.023	2	19.153	9.576	.363
Error (within)	69	2829.589	1093.555	2076.629	68	1657.001	24.367	
Total	71	3947.981	1686.569	2396.652	70	1676.154		

   * Factor M is pretest
  ** Factor Y is posttest
 *** SS = Sum of Square
**** MS = Mean Square

Tabular F
α = .05
df = 2, 68 = 3.13
$H_0: \mu Exp._{(E_1)} = \mu Exp._{(E_2)} = \mu Exp._{(E_3)}$

TABLE 3

MEAN SCORES with Adjusted Posttest Scores

Group	Observations	Mean X*	Mean Y**	Adjusted Mean Y
Experimental 1 (EPDA)	31	46.935	49.387	47.667
Experimental 2 (Gen Ed)	32	38.593	44.906	46.410
Experimental 3 (Voc Ed)	9	41.000	46.777	47.352

  * X Factor is pretest
** Y Factor is posttest

The experimental group adjusted mean scores of the posttest were 47.667, 46.410 and 47.352 respectively for E_1 (EPDA), E_2 (Gen Ed) and E_3 (Voc Ed). No groups experienced significant mean gains or losses. Thus, it was concluded that the experimental treatments did not cause significant differences to occur among groups.

Conclusions

The present research was designed to study the philosophical educational effects on students involved in teacher education. The problem involved three major dimensions:

1. Involvement of three groups of students in teacher field-based programs.

2. The assignment of a score to each student group indicating philosophical preference on an essentialist-progressive scale.

3. The statistical analysis of the data in order to identify similarities or differences among philosophical indications within groups.

Regardless of what research method we use, we may never have a complete procedure guaranteeing good teachers; such is the case when working with people. Actions usually speak louder than words, and teachers' actions are based upon their philosophy of education.

Implications

During the course of the investigation, all three groups indicated a move toward the progressive philosophy. Appendices B, C, and D illustrate this transposition.

Using the review of literature, the data analysis, and its conclusions, the following statements are projected as having significant implication for teacher preparatory programs at OSU.

1. Students in graduate and undergraduate education programs have similar educational philosophical opinions. Although no statistical tests were made for differences between sex, age or individual differences, this study supports the philosophical similarities. Similar studies listed in the Final Report of the Professional Vocational Leadership Development Progam (27) mention that group mean scores from 1971-75 taken from five institutions using the IVE indicated a range from 41.5 to 50.5. However, when looking at scores taken during 1955, a group mean score of 38.6 was noted. With the limited information available concerning the earlier study, it can only be noted that the group mean score was lower.

2. Students in graduate and undergraduate education programs indicated a progressive philosophy when

relating to essentialist and progressive indicators.
The listing from the Final Report (27) indicates to
ten groups, including OSU, and shows a preference for
the progressive end of the scale with low group mean
score being 38.6. Spindler (72) graphically illustrates
this by showing a continuum ranging from traditional
values to emergent values. He notes some students
slightly closer to the traditional values, while the
older teachers and some of the students lean towards
the emergent values.

As a progressive emphasis is noted, educational
leaders could benefit from this trend by knowing what
direction staff are generally moving. This may be
useful in reference to decision-making situations.

The instrument used in the study measures five
activities based upon educational philosophy and we are
able to consider these items when looking at teaching
methodology. Rather than contrast the essentialist
and progressive activities, this study watched the
progressive direction as indicated by the information
gathered from the sample.

One of the main components of the education
delivery system centers on the teacher's objectives.
The progressive emphasis focuses upon the individual.

Students needs dictate objectives as well as establish
activities. Such as individual teachers using a sim-
ilar method of establishing objectives whether he is
within one discipline area or is moved from discipline
to discipline. The educational environment, whether
strongly conservative or liberal, may make the instructor
successful or unsuccessful, secure or unsecure, happy
or unhappy. It is anticipated that a strongly pro-
gressive teacher may be uncomfortable with a strongly
essentialist administrator or within an ultra-conserva-
tive community.

The educational experience has definite bearing
upon the educational development of the student. As
in the above, the focus is upon the student. Experi-
ences are aimed at meeting individual needs that students
have expressed. Students within the educational situ-
ations must respond to the teacher in order to maximize
student growth potential. Student motivation emerges
as a major factor in curriculum development and delivery.

Evaluation procedures have always been difficult
to perfect. Various methods have strengths and weak-
nesses, most are open to attack, and all elude the con-
sensus of educators. With the individual emphasizing
the objectives, the evaluative procedures center on the

question of how well he dealt with the problem. Rather
than this study getting into the dilemmas of educational
testing, grading, and interpretations, we leave this
for other studies to research.

We can see the influence of educational philoso-
phy by tying together part of this educational process.
The teacher is dictated by their philosophy in establish-
ing course or program objectives, experiences, methods
of delivery, evaluation, and reappraisal of the process.
Therefore, instruction consists of statements and ac-
tions about the above and deals with application, anal-
ysis, synthesis and evaluation of the same.

3. As undergraduates usually do not have a formal know-
   ledge of the philosophy of education, study in the philo-
   sophy area might allow their understanding to expand.
   Silberman (68) mentions that the central task of teacher
   education is to provide teachers with a sense of purpose,
   with a philosophy of education.

4. Teacher education programs should continue to evaluate
   and change if they are going to have a contemporary
   effect on the philosophy of students. Courtney (21)
   supports this when he says that the teacher of the future
   will reflect the changing society of which he is a part.
   Spaziani (71) reinforces with additional support for
   personal delivery methods.

Teacher education is aimed at meeting the demands of public education. Public education is dictated by society. As changes in society cause conflict, educators try to be aware of these changes. Spindler (73) mentions that educators have been subjected to attacks from society and from within concerning change. These symptoms of society in transformation--a transformation that produces conflict, are necessary for growth.

5. The heart of teacher education is the human interaction between the student and the teacher. DeNevi (23) reaffirms this by stating that we need to educate our teachers for the ability to stimulate learning in others. The progressive teacher is one hope for meeting the needs identified by DeNevi. The student is the focus, and the teacher delivery system, based upon philosophy, can help to make a better society.

Suggestions for Further Study

One emphasis of the study was to stimulate the investigation into the inquiry concerning philosophy in education. It was aimed at assisting students, teachers and teacher educators by bringing to their attention one approach to identifying the fact that philosophy has an effect on actions, whether in teaching, administration or in education generally.

The following recommendations are generated for information gained during the process of investigation.

1. This inquiry dealt with Caucasian educators and students operating in a predominately Caucasian environment. Further studies should investigate the philosophical base of educators in a multicultural setting.

2. The <u>teacher's</u> behavior is intimately involved in what he/she values. A future project should investigate the <u>teacher's</u> value clarification.

3. The <u>student's</u> bahavior is intimately involved in what he/she values. A future study should research the <u>student's</u> value clarification.

4. Competencies and accountability have focused upon the psychomotor and cognitive domain. The affective domain should be researched with equal emphasis.

5. Since the instrument (<u>Inventory of Viewpoints on Education</u>) has been utilized for program evaluations with various institutions, an institution-wide philosophical study could be initiated. Therefore, it is recommended that a study be conducted to assess comparisons among educators between various institutions of higher education using the <u>Inventory of Viewpoints on Education</u> instrument.

6. Every study has some limiting parameters such as sample environment, cultural bias, sample size, time restraints,

and prior research, and this study is no exception. Therefore, a similar study sould be made to further test the validity of the reported findings.

BIBLIOGRAPHY

1. Allport, Gordon W. "Values and our Mouth." Teachers College Record. December 1961. Page 218.

2. American Association of Colleges of Teacher Education. A position paper on teacher priorities. Washington, D.C. 1966.

3. Anderson, Robert H. Teaching in a World of Change. Harcourt, Brace and World, Inc. New York. 1966.

4. Bebell, Clifford. Designing Education for the Future. An eight-state project. Denver, Colorado. July 1967.

5. Berkson, I.B. Ethics, Politics, and Education. University of Oregon. Eugene, Oregon. 1968.

6. Berman, Louise M. "From Thinking to Behaving: Assignments Reconsider." University Teachers College. New York. 1967. Pages v-10.

7. Birm, Burl J. "Attitude Changes in Teacher Education Students." Vol. 59. No. 10. July-August. 1966. Pages 443-444.

8. Bork, Helene and Joan W. Burnstyne. "The New Teacher and Interpersonal Relations in the Classroom." Journal of Teacher Education. Vol. 21. No. 3. Fall 1970. Page 487.

9. Bracht, Glenn H. "Experimental Factors Related to Aptitude-Treatment Interactions." Review of Education Research. Vol. 40. No. 5. Washington, D.C. December 1970. Page 627.

10. Brubacher, John Seiler. Philosophies of Education. McGraw-Hill Publishers. New York. 1969.

11. Bruner, Jerome S. Educational Leadership Needed: A Theory of Instruction. A paper distributed in Theory and Practicum II - Section 311-A. Oregon State University. Corvallis, Oregon. Winter 1974.

12. Butts, R. Freeman. "Changing our position on the way to ..." Teachers College Record. March 1969. Page 487.

13. Coladarci, Arthur P. The Preparation of Teachers: An Unstudied Problem in Education. Forward of a book by

Seymore B. Sarason, Kenneth S. Davidson and Burton Blatt. Wiley Publishers. New York. 1962.

14. Combs, Arthur W. Educational Accountability, Beyond Behavioral Objectives. Association for Supervision and Curriculum Development. Washington, D.C. 1972.

15. Combs, Arthur W. Fostering Self-Direction. A paper presented to the Association for Supervision and Curriculum Development. Washington, D.C. 1966.

16. Combs, Arthur W, Ronald L. Avila and William Purkey. Helping Relationships: Basic Concepts for the Helping Professions. Allyn and Bacon. Boston, Massachusetts. 1974.

17. Combs, Arthur W. and others. The Professional Education Teachers. Allyn and Bacon. Boston, Massachusetts. 1974.

18. Conant, James B. The Education of American Teachers. McGraw-Hill Publishers. New York. 1963.

19. Cook, Walter W. and Carroll H. Leeds. "Measuring the Teacher Personality." Educational and Psychological Measurement. Vol. 7. Washington, D.C. 1947. Pages 401-409.

20. Cooper, James M. and David Sadker. "Current Trends in Teacher Education Curriculum." Journal of Teacher Education. Vol. 23. No. 7. Fall 1972. Page 314.

21. Courtney, E. Wayne. Change and the Future. Commencement address at the University of Wisconsin-Stout. Menomonie, Wisconsin. August 11, 1972.

22. Dale, Larry and Bill Kline. Interim Report on Theory and Practice II. Duplicated. Oregon State University. Corvallis, Oregon. 1974.

23. DeNevi, Don. "Toward Planning a New Model for Teacher Education." Peabody Journal of Education. Peabody College for Teachers. Nashville, Tennessee. 1974.

24. Drumheller, Sidney J. Teachers Handbook for a Functional Behavior-based Curriculum. Educational Technology Publications. Englewood Cliffs, New Jersey. 1972.

25. "Education is Change." Goddard College MAT Program. Goddard College. Plainfield, Vermont.

26. Emerging Teacher Education Curriculum Models. The Center for Vocational-Technical Education. Ohio State University. Columbus, Ohio. 1973.

27. Final Report - Professional Vocational Leadership Development Program. Oregon State University. Corvallis, Oregon. September 1974.

28. Full, Harold. Controversy in American Education. The Macmillian Company. New York. 1972.

29. Gallup, George H. "Gallup Poll on Public Attitudes Toward Education." Phi Delta Kappan. Vol. 56. No. 1. Bloomington, Indiana. September 1974.

30. Gardner, John W. Excellence. Harper and Rowe Publishers. New York. 1961.

31. Gardner, John W. "How to Prevent Organizational Dry Rot." Harper's Magazine. October 1965. Pages 13-14.

32. Goldhammer, Keith and Robert E. Taylor. Career Education Prospective and Promise. Merrill Publishing Company. Columbus, Ohio. 1972.

33. Good, Carter V. (Ed.) Dictionary of Education. McGraw-Hill Publishers. New York. 1973.

34. Goodlad, John I. "The School vs. Education." Saturday Review. April 19, 1968. Pages 46-59.

35. Grannis, Joseph C. "The School as a Model of Society." Bulletin #21. Harvard Graduate School of Education. Cambridge, Massachusetts. Fall 1967. Page 15.

36. Haberman, Martin. "Twenty-three Reasons Universities Can't Educate Teachers." Journal of Teacher Education. Vol. 22. No. w. 1971. Page 104.

37. Hamachek, D.E. Encounters with the Self. Holt, Rinehart and Winston. New York. 1971.

38. Hamilton, Phyllis and others. The Education Professions 1973-1974. Personal Development in Vocational Education. National Center for Educational Statistics. Washington, D.C. 1974.

39. Handbook for Students and Cooperating Teachers. Teacher Education Manual. Oregon State University. Corvallis, Oregon.

40. Heilbroner, Robert L. The Human Prospect. W.W. Norton and Company, Inc. New York. 1974.

41. Horton, Lowell. "The Hidden Curriculum of Competency Based Teacher Education. Teacher Education--Trends, Issues, Innovations. Interstate Printers and Publishers. Danville, Illinois. 1974. Pages 359-365.

42. Horton, Lowell. "The Self-Renewing Teacher: Priority for the Seventies." Kansas Studies in Education. Vol. 22. No. 2. Fall 1972. Page 109.

43. Hoyt and Stunkard. Education and Psychological Measurement. Educational Services. Chicago, Illinois. 1952.

44. Hunsaker, Floyd R. A Comparison of Attitudes Between Two Field-Based Teacher Education Programs. Thesis. Oregon State University. Corvallis, Oregon. May 1975.

45. Iannone, Ronald V. "Programmed Unhappiness: When Will Schools of Education Make Teaching a Relevant Art?" Clearinghouse. Vol. 46. No. 2. October 1971. Pages 103-104.

46. Iannone, Ronald V. "Teacher Education, What are the Alternatives?" Clearinghouse. Vol 47. Nol. 4. November 1972. Page 136.

47. Iannone, Ronald V. and John L. Carline. "A Humanistic Approach to Teacher Education." Journal of Teacher Education. Vol. 22. No. 4. Winter 1971. Page 149.

48. King, Edward J. The Education of Teachers. Holt, Reinhart and Winston. London. 1970.

49. Kinzer, Suzanne M. "On Being a Good Teacher Educator: A Changing Conception?" Educational Leadership. Association for Supervision and Curriculum Development. Washington, D.C. 1972.

50. Levine, George. "Does What Philosophers Do Matter At All?" The Chronicle of Higher Education. Washington, D.C. Vol. 11. No. 8. November 1975. Page 15.

51. Mager, Robert F. Developing Attitudes Toward Learning. Fearon Publishers. Belmont, California. 1968.

52. McCluskey, Dorothy. "How do you know a good teacher?"
    National Association for Mental Health. Vol. 16.
    October 1947. Pages 107-109.

53. Mizel, Harold E. "The Impending Instruction Revolution."
    American Society for Engineering Education. 1970.
    Page 9.

54. Morris, Van Cleve. Philosophy and the American School.
    Houghton Mifflin Company. Boston, Massachusetts. 1961.

55. Nolte, Dorothy Lay. "Children Learn What They Live."
    Kaleidoscope: Readings in Education. James M. Mifflin
    Company. New York. 1972. Page 127.

56. Oregon State University Bulletin Catalog 1975-76.
    Oregon State University. Corvallis, Oregon. Spring
    1975.

57. Patterson, C.H. "The Preparation of Humanistic Teachers."
    Intellect. Vol. 101. No. 2. December 1972. Page 195.

58. Peterson, Peter G. "The Class of 1984 ... Where is it
    Going?" Address before the National Conference of
    State Legislators. National Committee for Support of
    Public Schools. Washington, D.C. December 4, 1966.

59. Petry, Larry L. Linguistic Foundations and Cultural
    Diversity for the Teacher Education Program at Oregon
    State University: An Instructional System. Thesis.
    Oregon State University. Corvallis, Oregon. May 1974.

60. "Public Education--A Classic Consumer Fraud." The
    Sunday Oregonian. Portland, Oregon. November 23, 1975.
    Page C-6.

61. Pucinski, Roman C. and Sharlene Perman Hirsh. The
    Courage to Change. Prentice-Hall Publishing. Englewood
    Cliffs, New Jersey. 1971.

62. Randebaugh, Byron F. and James E. Johnson. "What Makes
    Excellence in Teachers?" Clearinghouse. Vol. 45. No. 7.
    March 1971. Page 412.

63. Randhawa, Bikkar S. and Lewis L.W. Fu. "Assessment and
    Effect of Some Classroom Environment Variables."
    Review of Educational Research. Washington, D.C. Vol.
    43. No. 3. Summer 1973.

64. Rogers, Carl R. Freedom to Learn. Merrill Publishing Company. Columbus, Ohio. 1967.

65. Rogers, Carl R. On Becoming a Person. Houghton, Mifflin and Constable. Boston, Massachusetts. 1961.

66. Seman, Phillip W. "Students Filing Consumer Suits." The Chronicle of Higher Education. Washington, D.C. Vol. 11. No. 11. November 1975. Page 1.

67. Shaffer, R.H. "Contribution of Student Personnel Services to the Improvement of Teacher Education." Journal of Student Personnel Association for Teacher Education. Vol. 3. 1964. Page 26.

68. Silberman, Charles. Crisis in the Classroom: The Remaking of American Education. Random House Publishers. New York. 1970.

69. Smith, Charles W. "Schizophrenia in Higher Education." Teacher Education--Trends, Issues, Innovations. The Interstate Printers and Publishers, Inc. Danville, Illinois. 1974. Page 25.

70. Smith, Lucille W. and Philip Kapfer. "Classroom Management to Learning Package Problems." Individualized Instructional Systems for Vocational and Technical Education: A Collection of Readings. Vocational Instructional Systems. Athens, Georgia. 1974.

71. Spaziani, Richard L. The Application of Bloom's Taxonomy to Professional Education Competencies of Selected Vocational Instructors. Thesis. Oregon State University. Corvallis, Oregon. June 1972.

72. Spindler, George D. "Education in a Transforming American Culture." The Harvard Educational Review. Cambridge, Massachusetts. Vol. 25. No. 8. 1955. Pages 145-156.

73. Spindler, George D. The Transmission of American Culture. The Harvard Graduate School of Education. Cambridge, Massachusetts. 1969.

74. Swinney, Richard J. A Study to Develop a Career Education Component for Teacher Education Students. Thesis. Oregon State University. Corvallis, Oregon. July 1975.

75. Taba, Hilda. Curriculum Development, Theory and Practice. Harcourt, Brace and World, Inc. San Francisco, California. 1962.

76. Theory and Practice II Field Experience. Mimeograph. Oregon State University. Corvallis, Oregon. Fall Quarter 1974.

77. "Time for Decisions in Teacher Education." American Association of Colleges for Teacher Education. Washington, D.C. 1973 Yearbook.

78. Titcomp, Brent. "People's Park." Song. Published by All Saints Crusade. 1970.

79. Toffler, Alvin. Future Shock. Bantam Books. New York. 1970.

80. Tuckman, Bruce W. "The Student-Centered Curriculum: A Concept in Curriculum Instruction." Individualized Instruction Systems for Vocational-Technical Education: A Collection of Readings. Vocational Instructional Systems. Athens, Georgia. 1974. Page 11.

81. Van Til, William. "Is Progressive Education Obsolete?" Selected Educational Heresies. Scott, Forseman and Company. Glennview, Illinois. 1969. Page 345.

82. Velie, Lester. "The $32-Billion Misunderstanding." Reader's Digest. Pleasantville, New York. January 1974.

83. Venn, Grant. Man, Education and Work. The American Association of School Administrators. Washington, D.C. 1970.

84. von Hilsheimer, George. "Children, School, and Utopias." From the book--This Book is About Schools. Random House, Inc. New York. 1970. Page 239.

85. Watson, Herbert W. The Relationship Between Self-Actualization and an Individualized Field Centered Undergraduate Teacher Education Program. Thesis. Oregon State University. Corvallis, Oregon. June 1972.

86. Wiggins, Sam R. Battlefields in Teacher Education. George Peabody College for Teachers. Nashville, Tennessee. 1964.

87. Will, Richard Y. "The Education of the Teacher as a Person." Journal of Teacher Education. Vol. 17. No. 4. Winter 1967.

88. Wirsing, Marie E. Teaching and Philosophy: A Synthesis. Houghton Mifflin Company. Boston, Massachusetts. 1972.

89. Wooten, Lutian R. and others. "Trends Affecting Curriculum 1964-1975." Journal of the Association for Supervision and Curriculum Development. Washington, D.C. Vol. 32. No. 4. January 1975. Pages 286-289.

APPENDIX A

INVENTORY OF VIEWPOINTS ON EDUCATION

Form A

INVENTORY OF VIEWPOINTS ON EDUCATION

FORM A

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DIRECTIONS: This inventory consists of a series of pairs of statements of opinions, beliefs, and proposed actions in educational situations. Read each pair carefully. You may not fully agree or disagree with either statement. The choice that you generally accept may represent a more extreme viewpoint than you would propose. Decide which statement represents an emphasis most nearly like yours. Then, on the answer sheet, blacken the letter (a or b) that corresponds to your choice. Some of the statements may seem ambiguous; interpret them for the general situation and in a sense most logical to you. Please react to all items.

1

a. The elements of content in a subject area remain about the same, regardless of course objectives.

b. The objectives for a course determine what should be considered elements of subject matter.

2

a. The teacher should serve as an authority in his subjects. It is his job to bring facts and skills to the student.

b. The teacher should serve as a fellow investigator, though perhaps as a leader in the investigation.

3

a. The subjects of science, math, English, and history are basically more valuable than vocational subjects.

b. The high school has a duty to offer vocational preparation even at the expense of some science, math, English, and history.

4

a. A beginning course must include the same fundamentals regardless of whether it is a terminal course or one preparing for further work in the subject.

b. The content of a course for terminal purposes should be basically different from that of a course preparing for further work.

5

a. Objectives should not be claimed unless it can be shown that they can be achieved.

b. Objectives are something to be striven toward; they derive value independently of students' attainment of them.

6

a. Content most immediately useful to students in solving their problems should be taught first.

b. Content found to be most frequently useful in later learning should be taught first.

7

a. Problem solving is impossible without the possession of certain knowledges and skills; the principal job of the school is to build these basic elements.

b. Problem solving is possible and desirable at all levels of learning because it is the problems that indicate the elements to be taught.

8

a. Objectives require constant re-evaluation against changing conditions.

b. Constant restatement of objectives is often a waste of time; it would be better to spend the time in a more careful study of the content and new scientific developments in it.

9

a. Knowledge of educational psychology is important in determining objectives.

b. Educational psychology is important in selecting teaching methods but not particularly in specifying objectives.

10

a. There should be relatively fixed standards to be attained before issuing a high school diploma.

b. Even minimum standards are not desirable because of the varying needs and abilities of students.

11

a. Facts and skills are either correct or incorrect.
b. What is regarded as correct is determined somewhat by the use that is to be made of facts and skills.

12

a. Objectives serve as general guides to the selection of content, but specific items of content are determined from within the content itself.
b. Objectives function in determining what should be taught and how it should be taught.

13

a. Standards based upon group achievement, even of large groups, are basically unsound; standards must come from a scientific study of the subject matter.
b. Standards must be based on the use to be made of the subject matter.

14

a. Student interest should be exploited in selecting teaching methods but little in content selection.
b. Student interest is a rather large factor in selecting content.

15

a. A comprehensive evaluation program can be a valuable aid to revising both objectives and content.
b. An evaluation program tells only what the student learned, not what he should learn.

16

a. In a good test the answers will be definitely either "right" or "wrong."
b. One "answer key" cannot be used to mark all tests if the materials are at all complicated.

17

a. The score on an evaluative device should in no way reflect the personal opinion of the teacher.
b. There should be subjectivity to evaluation; it is just a question of how much.

18

a. Honest student opinion of achievement is at least as valuable as teacher evaluation because the student can judge in terms of his needs and interests.
b. Even conscientious self-evaluation by the student has questionable value because the student is not in the "expert" position of the teacher.

19

a. Uniform standards of achievement throughout a school are desirable.
b. Uniform standards are neither desirable nor practical because of the individual needs and abilities of the students.

20

a. The most efficient evaluation of student achievement will be in terms of ability to recall important facts and skills.
b. Facts and skills have little meaning and value outside of their use in solving problems.

21

a. Individual differences among students call for variation in teaching methods but not in the basic content and objectives.
b. The same content and objectives cannot apply for all students or even for a large majority of them.

22

a. After the basic skills of reading, writing, and arithmetic have been taught, practically all other content should be organized in terms of problems to be solved.
b. The most efficient way to teach (and learn) is to analyze the basic essentials and teach them, drill them if necessary.

23

a. The elective system allows each student to select a program suited to his needs.
b. The elective system has merit largely because it increases student interest; otherwise it would be just as well to have a carefully planned curriculum for all.

24

a. The main worth of the school's content is in solving life problems.
b. There is some very "impractical" content that should be included in the curriculum.

25

a. A curriculum based on a careful study of the needs of youth twenty years ago would probably be quite different from a curriculum based on a careful study of the needs of youth today.
b. A study of the needs of youth today may reveal new approaches to teaching and new problems to be solved but the fundamentals of subject matter would probably not be changed much.

26

a. The best way to improve teaching is to give teachers more advanced work in their subject fields even to the elimination of many of the "education" courses.
b. Study of ways of teaching and organizing subject matter is more fruitful in improving teaching than increased formal study of subject matter.

27

a. That which is easiest to learn should be taught first.
b. What should be taught first must be determined by the subject matter.

28

a. If artificial incentives, such as marks, contests, etc., aid the student to master the fundamentals they should be employed.
b. Ordinarily, it will not be necessary to employ artificial incentives if the content is worthwhile.

29

a. Content that cannot be shown to be useful rather immediately should be dropped.
b. Much worthwhile content cannot be shown to be useful, at least very directly.

30

a. With most subjects, after a teacher has taught a course several times few changes will be needed in content and organization though new illustrations and problems should be incorporated.

b. Variable needs and conditions call for frequent changes in content and organization in most courses nearly every time they are taught.

31

a. Knowledge has no inherent value; its value is determined by its usefulness.

b. Usefulness is no index of the worth of knowledge; knowledge is either true or false.

32

a. Except for the cost, it would be a good idea to have a different curriculum for almost every student.

b. The school should act as a stabilizing influence by giving students a common background.

33

a. High school objectives in California should be quite similar to those in Maine or Wisconsin.

b. Different localities may require different sets of educational objectives.

34

a. It is inefficient for students to work out "solutions" to problems if the answers are known; the teacher should teach what is correct and make sure that the students learn it.

b. Many important objectives are attained by working out problem solutions even if fewer facts are learned.

35

a. Modernizing a curriculum is mainly a process of incorporating current problems as devices to illustrate the fundamentals.

b. The "essentials" to be taught change with changing conditions.

36

a. Even though perfectly objective methods of evaluating the "intangible" objectives are not available, attempts should be made to evaluate their attainment and they should be factors in marking.

b. It is more justifiable to mark almost entirely on the basis of facts and skills learned.

37

a. A periodic reappraisal of objectives and content is necessary not so much because the basic elements have changed but because our knowledge of them has been refined and extended through scientific discovery.

b. A periodic reappraisal of objectives and content is necessary because the needs of students and society may have changed and altered the purposes served by the school.

38

a. Science functions mainly to uncover knowledge.

b. Science, by opening new avenues to learning, actually aids in the creation of knowledge.

39

a. Objectives must keep close pace with social development.

b. The important objectives of education do not change with changing conditions.

40

a. Authorities on subject matter cannot do a good job of specifying content if they are not aware of the nature of the learners.

b. The selection of course content is a technical job, requiring a subject matter expert; a knowledge of the learner affects method of teaching, however.

41

a. Conscientious adult opinion is an important factor in revising objectives and content for a school system.

b. Revisions of any scope must be the products of careful scientific investigation by experts; public relations should be considered in reviewing community opinion, however.

42

a. Though students lack knowledge of subject matter they do know their needs and interests and therefore should have a significant voice in the selection of what should constitute a course.

b. There are certain basic elements that must be taught; there is little point in student selection of content if they are unfamiliar with the elements.

43

a. It is possible to know something without necessarily being able to make use of it.

b. What the student knows and what use he can make of his knowledge are practically the same thing.

44

a. Amount of content may be reduced if it is found that students are not mastering it, but the standards of attainment should remain the same.

b. Standards must vary with the needs and abilities of the learner.

45

a. Much student investigation of problems tends to lead students to doubt the existence of facts; whatever works is true.

b. Students should question "facts" because what can be considered a fact depends upon the use to which it is put.

46

a. Readiness of the student to learn is a very important factor in deciding what should be taught.

b. Learner readiness is important, but it is a factor in the method of teaching rather than in the selection of content.

47

a. Marks should take into account the relationship between students' abilities and their achievements.

b. Marks should be calculated against rather fixed standards; otherwise they have no meaning.

48

a. Individual differences are best hand'e{ by providing for student selection of content with the guidance of the teacher.

b. Individual differences are better handled by elective subjects; what is included in the electives should be decided by authorities in the field.

49

a. A follow-up of students should have a large part in revising a school's objectives.

b. The basic skills and knowledges do not change over a period of time; a follow-up does not change objectives.

50

a. Problems should be used as the bases for selecting and organizing content.

b. Problems are too numerous and specific to form the bases for organizing content; content must be reduced to fundamental skills and knowledges.

51

a. The main job of the school is to build a foundation of basic skills and knowledges.

b. The school must concern itself with present problems for they determine what should be taught.

52

a. After the skills of communication in a field have been taught, the remaining content should be conceived as a series of hypotheses to be proposed and tested.

b. Most subject matter is composed of elements of skill and knowledge; once these have been mastered it is a matter of applying them to problem situations.

53

a. There is a satisfaction which comes from knowledge for its own sake; the school should build on this kind of satisfaction.

b. There is little value in knowledge outside of the use that can be made of it.

54

a. The only kind of investigation worthy of the name is factual scientific experimentation.

b. There is much in education that should be investigated in a "practical" sense, i.e., does it work?

55

a. Good moral habits should be "drilled into" students without always analyzing the reasons for them.

b. Good moral habits cannot be acquired effectively without an understanding of the reasons for them; if the reasons change, the habits should be changed.

56

a. Teachers should teach students, not subject matter.

b. The former is largely a glib statement; unless the teacher imparts subject matter he has taught nothing.

57

a. It motivates students to allow them to explore subject areas even if they do not discover the essential elements; however, the teacher should make sure that the essentials are pointed out and learned before the subject is left.

b. The importance of exploration is to develop methods and habits of investigation; the facts uncovered are of lesser importance.

58

a. In order to make objectives more explicit and useful it is necessary to state the kinds of behavior that will characterize the student who achieves them.

b. A more useful method of defining objectives is to list the content that must be covered to attain the objectives.

59

a. A carefully prepared textbook provides an excellent basis for organizing and teaching a course.

b. At best, books are never more than references because each class is different.

60

a. Complexity of subject matter determines what should be taught first; simple, elemental units must precede the more complex.

b. Complexity of subject matter is determined from within the student; what is complex for one student may be simple for another.

61

a. Vocational specialization can best be achieved in a vocational school or on the job; the high school should offer a common core of general subjects.

b. The high school must provide for some degree of specialization.

62

a. Psychological factors within the student are the best determiners of the order of instruction.

b. The content itself determines largely what should be taught first; it is the teacher's job to prepare the learner for what is to be taught.

63

a. Students should be encouraged to critically evaluate content against individual and social needs.

b. There is an inherent value to some content that cannot be determined by its use, at least very directly.

64

a. Objectives should be developed by the persons who are to use them, teachers and pupils.

b. Objectives should be derived by careful study by experts.

65

a. Subject matter should be organized around problems, each requiring a different structure of facts for its solution.

b. Most subject matter is built of progressively more complex elements, each related to the previous.

Name ....

Institution ....

What is the highest degree you hold?

Bachelor's .... ☐
Master's .... ☐
Doctor's .... ☐
Working toward Bachelor's .... ☐

What was the major in each degree that you hold?

Bachelor's ....
Master's ....
Doctor's ....
Bachelor's toward which you are working ....

How many years have you taught? ....

At what level has most of your experience been?

Elementary .... ☐
Junior High .... ☐
Senior High .... ☐
College .... ☐
Vocational School .... ☐
Other (list) ....

Are you an administrator (principal, supervisor, etc.)? .... Yes ☐ No ☐

INVENTORY OF VIEWPOINTS ON EDUCATION
ANSWER SHEET—Form A

1.	a	b	16.	a	b	31.	a	b	46.	a	b
2.	a	b	17.	a	b	32.	a	b	47.	a	b
3.	a	b	18.	a	b	33.	a	b	48.	a	b
4.	a	b	19.	a	b	34.	a	b	49.	a	b
5.	a	b	20.	a	b	35.	a	b	50.	a	b
6.	a	b	21.	a	b	36.	a	b	51.	a	b
7.	a	b	22.	a	b	37.	a	b	52.	a	b
8.	a	b	23.	a	b	38.	a	b	53.	a	b
9.	a	b	24.	a	b	39.	a	b	54.	a	b
10.	a	b	25.	a	b	40.	a	b	55.	a	b
11.	a	b	26.	a	b	41.	a	b	56.	a	b
12.	a	b	27.	a	b	42.	a	b	57.	a	b
13.	a	b	28.	a	b	43.	a	b	58.	a	b
14.	a	b	29.	a	b	44.	a	b	59.	a	b
15.	a	b	30.	a	b	45.	a	b	60.	a	b
									61.	a	b
									62.	a	b
									63.	a	b
									64.	a	b
									65.	a	b

APPENDIX B

Experimental Group #1 Pre- and Post- Test Scores

Student I.D. #	Pretest Score	Posttest Score	Differences
1	50	54	+ 14
2	46	47	+ 1
3	31	42	+ 11
4	48	55	+ 7
5	39	40	+ 1
6	47	47	----
7	53	54	+ 1
8	46	48	+ 2
9	44	45	+ 1
10	51	50	− 1
11	49	49	----
12	61	55	− 6
13	49	44	− 5
14	55	57	+ 2
15	60	60	----
16	40	49	+ 9
17	47	51	+ 4
18	42	47	+ 5
19	45	52	+ 7
20	56	62	+ 6
21	48	40	− 8
22	37	49	+ 12
23	56	60	+ 4
24	41	47	+ 6
25	38	52	+ 14
26	50	45	− 5
27	43	47	+ 4
28	41	43	+ 2
29	43	46	+ 3
30	53	47	− 6
31	46	47	+ 1
Unadjusted Means	46.9	49.3	+ 2.4

APPENDIX C

Student I.D. #	Pretest Score	Posttest Score	Differences
1	39	57	+ 18
2	39	33	− 6
3	35	44	+ 9
4	37	49	+ 12
5	34	43	+ 9
6	39	45	+ 6
7	36	43	+ 7
8	37	43	+ 6
9	48	55	+ 7
10	46	47	+ 1
11	40	49	+ 9
12	30	40	+ 10
13	32	42	+ 10
14	37	43	+ 6
15	41	54	+ 13
16	54	38	− 16
17	43	52	+ 9
18	35	39	+ 4
19	38	43	+ 5
20	24	51	+ 27
21	32	42	+ 10
22	34	43	+ 9
23	34	41	+ 7
24	41	41	----
25	41	43	+ 2
26	46	55	+ 9
27	46	45	− 1
28	49	48	− 1
29	43	43	----
30	30	44	+ 14
31	35	44	+ 9
32	44	41	− 3
Unadjusted Means	38.5	44.9	+ 6.3

Experimental Group #2 Pre- and Post- Test Scores

APPENDIX D

Experimental Group #3 Pre- and Post- Test Scores

Student I.D. #	Pretest Score	Posttest Score	Differences
1	33	42	+ 9
2	44	47	+ 3
3	42	54	+ 12
4	42	41	− 1
5	45	47	+ 2
6	41	50	+ 9
7	39	47	+ 8
8	35	41	+ 6
9	48	52	+ 4
Unadjusted Means	41.0	46.7	+ 5.7